CALIFORNIA 2010 ADMINISTRATIVE CODE

California Code of Regulations
Title 24, Part 1

California Building Standards Commission

CALIFORNIA BUILDING STANDARDS COMMISSION
CBSC

CALIFORNIA ADMINISTRATIVE CODE 2010

California Code of Regulations
Title 24, Part 1

California Building Standards Commission

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PREFACE

This document is the 1st of 12 parts of the official triennial compilation and publication of the adoptions, amendments and repeal of administrative regulations to *California Code of Regulations, Title 24,* also referred to as the *California Building Standards Code*. This part is known as the *California Administrative Code,* also known as the *California Building Standards Administrative Code*.

The *California Building Standards Code* is published in its entirety every three years by order of the California legislature, with supplements published in intervening years. The California legislature delegated authority to various state agencies, boards, commissions and departments to create building regulations to implement the State's statutes. These building regulations, or standards, have the same force of law, and take effect 180 days after their publication unless otherwise stipulated. The *California Building Standards Code* applies to occupancies in the State of California as annotated.

A city, county, or city and county may establish more restrictive building standards reasonably necessary because of local climatic, geological or topographical conditions. Findings of the local condition(s) and the adopted local building standard(s) must be filed with the California Building Standards Commission to become effective and may not be effective sooner than the effective date of this edition of the *California Building Standards Code*. Local building standards that were adopted and applicable to previous editions of the *California Building Standards Code* do not apply to this edition without appropriate adoption and the required filing.

Should you find publication (e.g., typographical) errors or inconsistencies in this code or wish to offer comments toward improving its format, please address your comments to:

California Building Standards Commission
2525 Natomas Park Drive, Suite 130
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Web Page: www.bsc.ca.gov

For questions on California state agency amendments, please refer to the contact list on page v.

CALIFORNIA CODE OF REGULATIONS, TITLE 24

California Agency Information Contact List

California Energy Commission

Energy Hotline. . . . . (800) 772-3300
or (916) 654-5106

Building Efficiency Standards
Appliance Efficiency Standards
Compliance Manual/Forms

California State Lands Commission

Marine Oil Terminals . . . . . (562) 499-6317

California State Library

Resources and Information . . . . . (916) 654-0261
Government Publication Section. . . . . (916) 654-0069

Corrections Standards Authority

Local Adult Jail Standards . . . . . (916) 324-1914
Local Juvenile Facility Standards . . . . . (916) 324-1914

Department of Consumer Affairs—Acupuncture Board

Office Standards . . . . . (916) 445-3021

Department of Consumer Affairs—Board of Pharmacy

Pharmacy Standards . . . . . (916) 574-7900

Department of Consumer Affairs—Bureau of Barbering and Cosmetology

Barber and Beauty Shop and. . . . . (916) 574-7570
College Standards . . . . . (800) 952-5210

Department of Consumer Affairs—Bureau of Home Furnishings and Thermal Insulation

Insulation Testing Standards . . . . . (916) 574-2041

Department of Consumer Affairs—Structural Pest Control Board

Structural Standards . . . . . (800) 737-8188
(916) 561-8708

Department of Consumer Affairs—Veterinary Medical Board

Veterinary Hospital Standards. . . . . (916) 263-2610

Department of Food and Agriculture

Meat & Poultry Packing Plant Standards . . . (916) 654-1447
Dairy Standards. . . . . (916) 654-1447

Department of Public Health

Organized Camps Standards . . . . . (916) 449-5661
Public Swimming Pools Standards . . . . . (916) 449-5693
Asbestos Standards . . . . . (510) 620-2874

Department of Housing and Community Development

Residential—Hotels, Motels, Apartments
Single-Family Dwellings . . . . . (916) 445-9471
Permanent Structures in Mobilehome
and Special Occupancy Parks . . . . . (916) 445-9471
Factory-Built Housing, Manufactured
Housing and Commercial Modular . . . . . (916) 445-3338
Mobilehomes—Permits & Inspections
Northern Region. . . . . (916) 255-2501
Southern Region. . . . . (951) 782-4420
Employee Housing Standards . . . . . (916) 445-9471

Department of Water Resources

Gray Water Installations Standards . . . . . (916) 651-9667

Division of the State Architect—Access Compliance

Access Compliance Standards. . . . . (916) 445-8100

Division of the State Architect—Structural Safety

Public Schools Standards . . . . . (916) 445-8100
Essential Services Building Standards . . . . . (916) 445-8100
Community College Standards . . . . . (916) 445-8100

Division of the State Architect—State Historical Building Safety Board

Alternative Building Standards . . . . . (916) 445-8100

Office of Statewide Health Planning and Development

Hospital Standards . . . . . (916) 440-8409
Skilled Nursing Facility Standards . . . . . (916) 440-8409
Clinic Standards . . . . . (916) 440-8409
Permits. . . . . (916) 440-8409

Office of the State Fire Marshal

Code Development and Analysis. . . . . (916) 445-8200
Fire Safety Standards. . . . . (916) 445-8200
Fireplace Standards. . . . . (916) 445-8200
Day-Care Centers Standards. . . . . (916) 445-8200
Exit Standards . . . . . (916) 445-8200

HOW TO DETERMINE WHERE CHANGES HAVE BEEN MADE

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|| This symbol indicates that a change has been made.

> This symbol indicates deletion of language.

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CHAPTER 1

ADMINISTRATIVE REGULATIONS OF THE CALIFORNIA BUILDING STANDARDS COMMISSION

ARTICLE 1-1
GENERAL

1-101. Abbreviations. The following abbreviations shall apply to Title 24, California Code of Regulations:

AGR	Department of Food and Agriculture
BSC	Building Standards Commission
CA	Department of Consumer Affairs
CBC	*California Building Code*
CCR	California Code of Regulations
CEC	*California Electrical Code*
CEC	*California Energy Commission*
CMC	*California Mechanical Code*
CPC	*California Plumbing Code*
COMMISSION	The California Building Standards Commission
CSA	Corrections Standards Authority
DHS	Department of Health Services
DSA-SS	Division of the State Architect-Structural Safety Section
DSA-AC	Division of the State Architect-Access Compliance
DOE	Department of Education
DOT	Department of Transportation
ENFORCING AGENCY	The designated agency, board, commission, department, division, office or individual responsible for the enforcing of building standards.
HCD	Housing and Community Development
NEC®	*National Electrical Code®*
NFPA	National Fire Protection Association
OHP	Office of Historical Preservation
OSHPD	Office of Statewide Health Planning & Development
PUBLIC UTILITY	All entities which are regulated by the California Public Utilities Commission (PUC); or which would otherwise be regulated by the PUC but are exempted by municipal charter.
SBR	State Building Regulations
SFM	Office of the State Fire Marshal
SHB	State Historical Board
SRSC	*State Reference Standard Code*
UBC™	*Uniform Building Code®*
UBC STDS	*Uniform Building Code Standards*
UFC	*Uniform Fire Code*
UHC	*Uniform Housing Code*
UMC	*Uniform Mechanical Code*
UPC	*Uniform Plumbing Code*
YA	Department of Youth Authority

Authority: Government Code Section 11000, and Health and Safety Code Section 18931 (f).

Reference: Government Code Section 11000, and Health and Safety Code Section 18931 (d).

ARTICLE 1-2
DUTIES AND RESPONSIBILITIES OF THE BUILDING STANDARDS COMMISSION AND THE EXECUTIVE DIRECTOR

1-201.

(a) The Commission may hear argument(s), based upon the record of the Proceedings of the Adopting Agency.

(b) **Duties and responsibilities of the executive director.** The Executive Director shall be the Chief Executive of the State Building Standards Commission, and shall be the primary individual responsible for implementing the will of the Commission, and shall have the authority to:

1. Recommend to the Commission, policies under which the office of the Commission will operate.
2. Interpret and implement the policies of the Commission.
3. Provide the administrative direction for the day-to-day work of the Commission.
4. Manage the technical and support staff of the Commission.
5. Represent the Commission to the Legislature.
6. Review and approve or disapprove agencies' public notices of hearings for proposed building standards per Sections 11346.4 and 11346.5 of the government code.
7. Ensure that Agencies comply with Section 18930 of the Health and Safety Code and Sections 11342 through 11446 (as required) of the government code, when adopting building standards, prior to submission to the Commission.
8. Negotiate and execute contractual agreements necessary to carry out the mission of the Commission.
9. Manage the Commission's appeals process.
10. Represent the Commission to all levels of state and local government, and with the private sector.
11. Perform other duties as required by the Commission and state statute(s).

Authority: Health and Safety Code Section 18931.

Reference: Health and Safety Code Sections 18925 and 18931.

ARTICLE 1-3
PUBLIC NOTICES AND HEARING DATES

1-301.

(a) **Public notices.** Agencies, proposing to adopt building standards shall prepare a public notice which shall comply with Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code.

(b) Six copies of the public notices for proposed building standards shall be forwarded to the Building Standards Commission for review and approval. A Building Standards Face Sheet (BSC-1) with original signature shall be submitted with the notices.

(c) Upon approval of the notice of hearing for building standards the Executive Director will forward the notice, within five working days, to the Office of Administrative Law for the sole purpose of publication in the California Administrative Notice Register, and return an approved copy to the submitting agency. If a notice is found to be incomplete or incorrect by Commission staff, the Executive Director shall return it to the submitting agency within five working days with comments.

(d) Any public notice not acted upon within five working days shall be automatically approved and published.

Authority: Health and Safety Code Sections 18931 and 18935.
Reference: Health and Safety Code Sections 18931 and 18935.

1-302. Hearing dates. Agencies planning to conduct hearings relative to building standards shall, prior to giving public notice, acquire the written approval of the Commission as to the time and place of the hearing(s).

Authority: Health and Safety Code Sections 18931 and 18935.
Reference: Health and Safety Code Sections 18931 and 18935.

ARTICLE 1-4
SUBMISSION OF NONEMERGENCY AND EMERGENCY PROPOSED BUILDING STANDARDS TO THE COMMISSION

1-401.

(a) After hearing or close of comment period by the adopting agency, all building standards shall be submitted as proposed building standards to the Commission for approval, in a format as prescribed by the Commission. Each proposed building standards package shall include:

1. Building Standards Face Sheet (BSC-1) with the original signature of a person authorized to certify documents.
2. Copies of the Public Notice, Informative Digest, Initial Statement of Reasons and proposed standards.
3. Finding of Emergency Statement (submitted only with Emergency Regulations).
4. Copies of Department of Finance Fiscal Impact Statement (Std. 399) together with fiscal analysis prepared by the submitting Agency.
5. Copies of the written transcript or recorded minutes of the public hearing.
6. Copies of exhibits submitted at the public hearing.
7. Copies of correspondence received during public comment period.
8. Copies of the Updated Informative Digest and Final Statement of Reasons.
9. Copies of the proposed standards with any post hearing changes indicated, and a memo attesting to the 15-day public availability period.
10. Agencies shall certify when the public comment period was closed, and that the submitted rulemaking is complete.
11. An analysis which shall justify the approval of the building standard (s) in terms of the criteria as set forth in the State Building Standards Law, Part 2.5, Division 13, Section 18930, et seq., of the Health and Safety Code.
12. Any referenced documentation relevant to the hearing as determined by the Executive Director of the Building Standards Commission.
13. The number of copies of the proposed building standards packages to be forwarded to the Commission shall be determined by the Executive Director of the Building Standards Commission.
14. All proposed building standards packages shall be indexed.
15. If other than the Agency Director/ Chief signs a Face Sheet (BSC-1), a delegation order shall be attached to the Face Sheet.
16. If the building standards were filed as an emergency, a certification that the requirements of Government Code Section 11346.1 have been complied with.

(b) The proposed building standards shall be submitted in the strikeout/underline format. If the proposed building standards amend existing building standards, all deletions must be shown in strikeout type and all additions, including punctuation, must be underlined. The provisions of this section may be waived by the Executive Director through written notification to the adopting agency.

Authority: Health and Safety Code Section 18931(f).
Reference: Health and Safety Code Section 18931 (f).

1-402.

(a) **Emergency regulations.** Emergency building standards shall not be effective until approved by the Building Standards Commission and filed with the Secretary of State.

(b) Emergency building standard(s) packages submitted to the Commission prior to public hearing shall include:

1. An original signed Face Sheet (BSC-1)
2. The Finding of Emergency.
3. An analysis which shall justify the approval of the building standard(s) in terms of the criteria as set forth in the State Building Standards Law, Part 2.5, Division 13, Section 18930, et seq., of the Health and Safety Code.
4. The proposed emergency building standards.
5. A delegation order if the Face Sheet (BSC-1) is signed by other than the Agency Director/Chief.
6. Any supporting documentation as determined by the Executive Director.

(c) The number of copies of proposed emergency building standards packages will be determined by the Executive Director.

(d) Agencies adopting emergency building standards following an Agency public hearing shall submit a rulemaking file as prescribed in Section 401 (a).

(e) Following the filing with the Secretary of State, the Commission shall notify the affected Agency in writing of the filing date of the building standards.

(f) The Commission shall forward the required number of copies of the filing order to the Office of Administrative Law for the sole purpose of publication in the California Administrative Notice Register.

Authority: Government Code Sections 11346.1 and 11346.5 and Health and Safety Code Section 18937.

Reference: Government Code Section 11346.1 and 11346.5 and Health and Safety Code Sections 18913 and 18937.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to amend Section 1-402, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

ARTICLE 1-5
PUBLIC PARTICIPATION

1-501. Every state agency with authority to propose or adopt building standards shall adopt regulations to ensure public participation in the development of building standards by July 1, 1995. State agencies' regulations shall establish methods to:

(a) Identify all interested groups or persons affected by agency building standards.

(b) Notify all interested groups and persons that building standards are to be developed, and maintain a listing of such groups or persons, should the Commission request it.

(c) Make available draft proposals to interested groups or persons expressing interest.

(d) Establish a procedure to provide interested groups or persons the opportunity to advise the adopting agency of the impact of the proposed standards. The adopting agency shall submit to the Commission their regulations to provide public participation prior to public hearing.

Authority: Health and Safety Code Section 18934.

Reference: Health and and Safety Code Section 18934.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to amend Section 1-501, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

ARTICLE 1-6
APPEALS PROCEDURE

1-601. Scope of appeals. Appeals to the Commission and the matters which can be appealed are described in Health and Safety Code Section 18945.

Authority: Health and Safety Code Sections 18931, 18945, 18946 and 18949.

Reference: Health and Safety Code Sections 18931, 18945, 18946 and 18949.

HISTORY:

1. (BSC 1/89) Regular order by the California Building Standards Commission to amend Section 1-601, Part 1, Title 24, California Code of Regulations. Filed with the Secretary of State April 1990; effective April 17, 1990. Approved as a regular order by the California Building Standards Commission on April 16, 1990.

1-602. Filing of appeals.

(a) An appeal may be filed by any person, including a state or local agency. Affected individuals, local and/or state agencies may act as appellants and may file appeals relating to conflict, duplication or overlap of any current state code, or any other matter of statewide significance.

(b) The appeal shall be in writing and shall specifically set forth:

1. The specific regulation, rules, interpretation or decision of any state agency respecting the administration of any building standard being appealed.
2. The dates of any act, interpretation or decision of any state agency related to the complaint.
3. The nature of any act, interpretation or decision of any state agency related to the complaint.
4. The reasons for the appeal.
5. Documentation of the official action of the applicable state agency with respect to the agency's final determination on the issue.
6. Identification of witnesses, experts and other representatives of the appellant.

(c) The appeal or complaint shall be filed with the Executive Director at: CALIFORNIA BUILDING STANDARDS COMMISSION, 2525 Natomas Park Drive, Suite 130, Sacramento, California 95833.

(d) A nonrefundable fee of $450.00 shall be submitted with the initial request for appeal. In addition, any and all costs for an administrative law judge or costs related to a hearing before the appeals subcommittee will be the responsibility of the appellants.

(e) **Appeals by affected individuals and local jurisdictions jointly.** When the enforcement of a state building standard is the responsibility of a local jurisdictional authority, the Commission will hear an appeal only with the concurrence of both the affected individual and the responsible local jurisdictional authority.

(f) **Appeals procedures of other state agencies.** Commission policy requires that an appellant obtain a final determination from the state agency in question relating to the issue under appeal before the Commission will hear the appeal. Only where there exists an apparent conflict, duplication or overlap in other available state appeals procedures or within the regulations or code will the appeal be heard without requiring that a final determination be obtained from the state agency.

(g) **Statute of limitations.** Appeals will be accepted by the Commission only within:

1. Six months of when the act, interpretation, decision or practice complained of occurred, or

2. As determined by the Commission if special circumstances are found to exist.

   Exception: Appeals regarding any act, interpretation decision or practice of any State adopting or enforcing agency prior to the adoption of this article will be accepted by the Commission if submitted within the first year following the effective date of this article.

Authority: Health and Safety Code Sections 18931 and 18945.
Reference: Health and Safety Code Sections 18931 and 18945.

1-603. Receipt and processing appeals.

(a) Receipt of any appeal shall be acknowledged in writing by the Executive Director within 30 days of receipt advising the appellant and the state agency of the acceptance or rejection of the appeal as filed. The reply shall also set forth the planned action of the Commission in response to the application together with reasons for the proposed actions.

(b) If the Executive Director determines that additional information is needed in order to decide the matter, the Executive Director may request such additional information and defer action on the matter until such additional information is received. If the Executive Director requests additional information, the appellant shall have 30 days from the date of the Executive Director's request within which to submit the information. If the requested information is not received within 30 days, the Executive Director may treat the appeal as having been abandoned or may, upon written notice to the appellant and the state agency, process the appeal on such information as is available. Upon written request the Executive Director may, for good cause, extend the 30-day period by one additional 30-day period.

(c) The Executive Director and the Chair of the three-member Appeals Committee, appointed by the Chair of the Commission, shall, acting together, recommend to the Commission whether the appeal should be heard by the Appeals Committee or the full Commission. Suggested schedules for such hearings shall also be submitted. The recommendations shall be contained in the consent calendar of the next Commission meeting. The Executive Director shall advise the appellant and the state agency in writing within 15 days of the Commission's determination and the procedures and schedules to be followed for the hearing.

Authority: Health and Safety Code Section 18945.
Reference: Health and Safety Code Sections 18931 and 18946.
HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to amend Section 1-603, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-604. Hearings.

(a) If it is determined by the Commission that the appeal shall be heard by the Appeals Committee, the following provisions shall apply:

1. Time and place of hearing as determined by the Commission shall be noticed to the appellant and the state agency within 15 days of its determination; date of said hearing shall be within 60 days of date of said notice.
2. The Executive Director shall publish the date of hearing to interested parties and may invite experts or other witnesses as necessary for the hearing.
3. The Appeals Committee shall not be bound by the rules of evidence or procedure applicable in the courts. Appellant, appellant's witnesses, and any other interested persons may present testimony, argument and/or documentary material concerning the matter(s) under consideration.
4. The Appeals Committee shall prepare its finding(s) and decision within 30 days after the appeal hearing.
5. The Executive Director shall, in writing, advise the appellant and the state agency of the decision within 15 days and shall advise the Commission of the decision by memorandum at the next Commission meeting.
6. If an appeal is heard by the Appeals Committee, either party may request a reconsideration by the Commission. Said request must be submitted to the Executive Director no less than 30 days after the determination by the Appeals Committee and shall be acted upon by the Commission no later than 60 days after said request is received. Reconsideration by the Commission shall be based upon the record of the appeal hearing and additional information or testimony that is specifically requested by the Commission. Notice of the determination of the Commission upon reconsideration shall be sent to all parties involved within 15 days of the action by the Commission.

(b) If an appeal is not delegated, or if the Commission elects to conduct the hearing, or if the appellant appeals a decision of the Appeals Committee to the Commission, the following procedure will be used:

1. Time and place of the hearing as determined by the Commission shall be noticed to the appellant and the state agency within 15 days; date of said hearing shall be within 60 days of date of notice.
2. The Executive Director shall publish the time, date and location of the hearing to interested parties and invite expert or other witnesses as necessary for the hearing.
3. The hearing shall be conducted at a regularly scheduled or specially designated Commission meeting, under its own rules, accepting evidence as it requires, and chaired by its regular Chairperson. Appellant and other interested parties may present relevant testimony, argument or documentary material as acceptable to the Commission consistent with the requirements of Section 1-602 (b).
4. The Commission shall make a decision on the appeal at an open meeting thereof, provided that the matter may be continued or taken under advisement for decision at a later meeting of the Commission, or re-referred to the Appeals Committee for further consideration and report to the Commission. No Commissioner may cast a vote on the determination of a hearing unless he was present at the hearing and heard the testimony and evidence presented.
5. Notwithstanding the foregoing, the appeal may be withdrawn at any time by the appellant upon written notice to the Executive Director. Upon withdrawal, no

further proceedings as specified above shall take place. The withdrawal of the appeal shall be accepted with or without prejudice, as determined by the Commission.

6. The Executive Director shall, in writing, advise the appellant and the state agency of the decision of the Commission within 15 days from the date of the official Commission decision in the matter.

(c) The Commission may elect to refer the appealing parties to a hearing officer appointed by the Office of Administrative Hearings as described in Health and Safety Code Section 18946.

(d) Action by the Commission on the appeal of a building standards issue within the authority of the Commission shall exhaust the administrative relief of the appellant.

Authority: Health and Safety Code Section 18945.
Reference: Health and Safety Code Sections 18931 and 18946.
HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to amend Section 1-604, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

ARTICLE 1-7
CONFLICT OF INTEREST CODE

1-701. (a) The Political Reform Act, specifically Government Code Section 87306, requires state and local governmental agencies to promulgate and adopt Conflict of Interest Codes. The Fair Political Practices Commission has adopted a regulation, Title 2, California Code of Regulations, Section 18730, containing the terms of standard Conflict of Interest Code, that can be incorporated by reference, and that may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act after public notice and hearings. Therefore, the terms of Title 2, California Code of Regulations, Section 18730, and amendments thereto, duly adopted by the Fair Political Practices Commission, are hereby incorporated by reference and constitute the Conflict of Interest Code of the California Building Standards Commission.

Designated employees shall file statements of economic interest with the Commission. Upon receipt of the statements of the Commission members, the agency shall make and retain a copy and forward the original of these statements to the Fair Political Practices Commission. Statements of other designated employees are retained by the agency; no copies are forwarded to the Fair Political Practices Commission.

(b) Designated Employee and Disclosure Category

DESIGNATED POSITIONS	DISCLOSURE CATEGORY
Chair of the Commission	1
Commissioners	1
Executive Director	1
Deputy Executive Director	1
Staff Services Manager I	2.3
Senior Architect	1
Associate Architect	1
Architectural Associate	1
Codes and Standards Administrator III	1
Associate Construction Analyst	1
Associate Governmental Program Analyst	3
Contracts Analyst (Administrative Staff Service Analyst)	2
Consultants	*

* Consultants shall be included in the list of designated positions and shall disclose pursuant to the disclosure requirements in this conflict-of-interest code subject to the following limitation:

The Executive Director may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements described in this section. Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Executive Director's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict-of interest code.

1-702 Disclosure Categories

(a) Disclosure Category 1:

Individuals holding positions assigned to Disclosure Category 1 must report interests in real property located with the State of California; all investments and business positions in business entities, and income, including gifts, loans and travel payments, from all sources.

(b) Disclosure Category 2:

Individuals holding positions assigned to Disclosure Category 2 must report investments and business positions in business entities, and income, including gifts, loans and travel payments, from sources, of the type that are required to adhere to architectural and structural construction and building standards reviewed and approved by the Commission.

(c) Disclosure Category 3:

Individuals holding positions assigned to Disclosure Category 3 must report investments and business positions in busi-

ness entities, and income, including gifts, loans and travel payments, from sources, of the type to provide services and goods used by the Commission.

Authority: Health and Safety Code Section 18909(f) and Government Code Sections 82019 and 87306.

Reference: Health and Safety Code Section 18909(f) and Government Code Sections 82019 and 87306.

HISTORY:

1. (BSC 2/99) Article 1-7, Conflict of Interest Code. Amend Section 1-701. Approved by the Fair Political Practices Committee on October 29, 1999. Filed with the Secretary of State on December 31, 1999; effective January 30, 2000.
2. (BSC 01/09) Article 1-7, Conflict of Interest Code, and Appendix. Amend Section 1-701, add Section 1-702, and repeal the Appendix. Approved by the Fair Political Practices Commission on October 13, 2009; effective on January 1, 2010.

ARTICLE 1-8
PUBLIC PETITION REGULATIONS

1-801. Public petition. Any member of the public may petition either the Commission, the proposing agency or the adopting agency for the proposal, adoption, amendment or repeal of any state building standard or administrative standard appearing in Title 24 of the California Code of Regulations.

Authority: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-801, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-802. Criteria for public petition. A public petition for the proposal, adoption, amendment or repeal of a state building standard must meet the following criteria:

(a) The subject issue must have statewide significance and must have implications for a whole category of projects or a broad range of project types.

(b) The rationale for the petition must take the form of at least one of the following criteria:

1. The subject regulation conflicts with pertinent statute(s). To substantiate this criterion, the petitioner must cite the subject regulation and the conflicting statute(s), and provide a clear written description of why the two are inconsistent.
2. Compliance with the subject regulation is routinely impossible or onerous. To substantiate this criterion, the petitioner must cite the subject regulation, present written or photographic evidence of the difficulty in complying with it, and clearly show that the problem is common or potentially common to many different projects or project types in many different circumstances. This criterion shall not be used to justify a petition for the repeal or amendment of a regulation that poses difficulty to a single project.
3. The regulation is inefficient or ineffective. To substantiate this criterion, the petitioner must cite the subject regulation, provide clear and concise written or photographic evidence of its ineffectiveness or inefficiency, describe a proposed alternative, and provide clear and convincing written or photographic evidence that it is more efficient or effective.
4. The subject regulation is obsolete. To substantiate this criterion, the petitioner must show at least one of the following facts:
   A. That a material or product specified in the regulation is not available, or
   B. That there is no statute authorizing the subject regulation, or
   C. That significant developments in procedures, materials or other issues affecting the regulation have created a need for amendment or deletion of the regulation; that current state statutes permit amendment or deletion of the regulations; and that the regulation has the effect of prohibiting the use of a material or procedure that is demonstrated to the satisfaction of the submitting agency to accomplish the purpose of the regulation.
5. There is a need for a new regulation. To substantiate this criterion, the petitioner must provide a clear written description of the proposed regulation, explain why it is necessary, and cite the statute(s) that require or authorize the new regulation.

Authority: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-802, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-803. Emergency clause. A petitioner may assert that his or her petition requires immediate action because there is imminent danger to the public health, safety or welfare. To substantiate the existence of a potential danger, the petitioner must include in the petition a written description of the specific facts showing the need for immediate action. If the emergency clause is approved and if the petition is accepted pursuant to Section 1-805 [Agency Duties], the proposing agency or adopting agency shall develop and/or adopt proposed changes.

Authority: Health and Safety Code Sections 18931 and 18937 and Assembly Bill 4082., Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931 and 18937 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-803, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-804. Petition submittal. Public petitions shall be submitted by the petitioner to either the Commission, the proposing agency or the adopting agency.

(a) When submitted to the Commission, within fourteen (14) business days after receiving a petition, the Commission shall determine whether the petition is properly compiled and complete. For the purposes of this section, "properly compiled and complete" means the petition meets the requirements set forth in Sections 1-802 [Criteria for Public Petition] and 1-803 [Emergency Clause].

(b) When submitted to the Commission, within fourteen (14) business days after receiving a petition, the Commission shall return incomplete petitions to petitioners without action but with an itemization of the missing or incomplete items.

(c) When submitted to the Commission, within fourteen (14) business days after receiving a petition, the Commission shall forward complete petitions to the appropriate proposing agency or adopting agency. The proposing agency or adopting agency shall have five (5) business days following receipt of petitions from the Commission to dispute the determination of completeness and/or the Commission's determination of jurisdiction. If the agency determines that the petition is incomplete, it shall, by the close of business on the fifth business day following receipt of the petition, return the petition to the Commission, with an itemization of the missing or incomplete items, and the Commission shall return the petition to the petitioner within twenty-five (25) business days of having originally received the petition without action in accordance with the procedures provided in subparagraph (b) above.

(d) The Commission shall provide written notification to the petitioner that the petition is complete and undergoing proposing agency or adopting agency review, if the five (5) day period described in subparagraph (c) above expires without proposing agency or adopting agency action. This notification must be sent to the petitioner no more than twenty (20) business days after having first received the petition.

(e) The Commission shall maintain records relating to the submittal and disposition of petitions. The Commission shall have no authority to rule on the contents of petitions except to determine whether sufficient information has been provided by the petitioner, unless specifically requested to do so by the proposing agency or adopting agency.

Authority: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082., Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-804, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-805. Agency duties. When the agency whose adoption responsibilities relating to building standards are transferred to the Commission receives a petition, that agency shall submit the petition to the Commission for compliance with Section 1-804 [Submittal]. After receiving a completed petition from the Commission, the proposing agency or adopting agency shall be responsible for the following duties:

(a) The proposing agency or adopting agency may reject a petition, if the proposing agency or adopting agency disagrees with the Commission's determination that a petition is complete, or if the proposing agency or adopting agency believes the petition is in the jurisdiction of a different agency, the proposing agency or adopting agency shall notify the Commission no more than five (5) business days after receiving a petition.

(b) If the proposing agency or adopting agency agrees that it has jurisdiction and that the petition is complete, it shall take one of the following actions, communicating with the petitioner, within the noted time lines:

1. The agency may reject, accept or approve a petition in part and may grant such other relief or take such other action as it may determine to be warranted by the petition and shall notify the petitioner in writing of such action.
2. If the agency denies the petition for cause pursuant to Section 1-806 [Criteria for Denying a Public Petition for Cause], it shall do so in writing within thirty (30) business days after the date of the written notification provided by the Commission pursuant to Subsection 1-804 (d).
3. If the agency accepts the petition, it shall notify the petitioner in writing within thirty (30) business days after the date of the written notification provided by the Commission pursuant to Subsection 1-804 (d). For the purposes of this section, accepting the petition indicates that the agency believes the issue(s) merit proceeding to code development. Code development shall include the public participation criteria in Article 1-5, Part 1, Title 24, California Code of Regulations.
4. If the approved petition contains an emergency clause, the agency shall also rule on the reasons posed in the clause, and if it concurs that an emergency exists, shall schedule code development and adoption procedures on an emergency basis.

Authority: Health and Safety Code Sections 18931, 18949.1, 18949.2, 18949.3, 18949.5 and 18949.6 and Assembly Bill 4082., Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Section 18931 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-805, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-806. Criteria for denying a public petition for cause. The proposing agency or adopting agency may deny a public petition pursuant to Section 1-805 [Agency Duties] for cause using at least one of the following criteria:

(a) The subject regulation is already scheduled for review at the next regular triennial or other scheduled adoption. To substantiate this criterion, the agency shall include in its written denial a schedule for the planned review. Alternatively, the agency may approve a petition but defer its implementation until the next scheduled adoption.

(b) The issues cited by the petitioner are factually incorrect. To substantiate this criterion, the agency shall identify in its written denial the incorrect facts.

(c) The issues cited by the petitioner are not within the State's jurisdiction. To substantiate this criterion, the agency shall

show in its written denial why the issues are outside its jurisdiction.

(d) The issues cited by the petitioner have been raised and answered through another petition or during the previous rulemaking. To substantiate this criterion, the agency shall include with its written denial a copy of the previous petition and its response or the pertinent rulemaking file information.

Note: If new facts or substantiating data, pertinent to a petition, are provided, this criterion shall not be grounds for denying a petition.

(e) Resolving the issues raised by the petitioner would compromise the agency's ability to carry out its legal mandate. To substantiate this criterion, the agency shall include with its denial the specific ways in which its legal mandate would be compromised.

Authority: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082., Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931 and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-806, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-807. Appeal. Any person may request reconsideration of any part or all of a decision of any agency on any petition submitted. Any such request shall be submitted in accordance with these public petition procedures and shall include the reason or reasons why an agency should reconsider its previous decision. Such request for reconsideration must be submitted no later than sixty (60) days after the date of the decision involved. The agency's reconsideration of any matter relating to a petition shall be subject to the provisions of Section 1-806 [Criteria for Denying a Public Petition for Cause].

Authority: Health and Safety Code Sections 18931, 18945, and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931, 18945, and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-807, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-808. Appeal to the commission.

(a) A petitioner may appeal, to the Commission, the final decision of a state agency when reconsideration is denied pursuant to Section 1-807 [Appeal]. When the petitioner appeals the decision of a state agency, it shall only be based on the criteria that the petition does not meet the requirements of Section 1-806 [Criteria for Denying a Public Petition for Cause].

(b) Appeals to the Commission shall meet the same requirements of Section 1-807 [Appeal].

(c) Should the Commission determine that the appeal does not meet the requirements of Section 1-806 [Criteria for Denying a Public Petition for Cause], the Commission shall direct the agency to accept and approve the petition.

Authority: Health and Safety Code Sections 18931, 18945, and 18949.6 and Assembly Bill 4082., Chapter 1289, Statutes of 1990.

Reference: Health and Safety Code Sections 18931, 18945, and 18949.6 and Assembly Bill 4082, Chapter 1289, Statutes of 1990.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-808, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26, 1995. Publication date April 24, 1995.

1-809. Substitution of or supplementation by agency procedures.

(a) These regulations shall not apply when an agency notifies the Commission that a petition process is mandated by specific statutes in addition to Government Code Section 11347.1, and/or that it has adopted its own regulations or procedures complying with Government Code Section 11347.1, and that it has notified the public of the existence of these statutes, regulations or procedures. Notification to the Commission shall consist of a written copy of such statutes, regulations or procedures and a description of the methods used to make the public aware of their existence. Upon such notification, the Commission shall exclude the agency from compliance with these regulations. If the Commission receives a petition pertaining to an excluded agency's jurisdiction, the Commission shall forward the petition without undertaking any of the duties contained in Sections 1-803 [Emergency Clause] and 1-804 [Submittal] directly to the agency and shall notify the petitioner of that fact.

When an agency notifies the Commission of existing public petition regulations or statutes, those public petition regulations or processes must be at least as effective as the public petition regulations in Article 1-8.

(b) These regulations are not intended to be the sole means by which the proposing agency or adopting agencies and the interested public can raise, discuss and resolve issues pertaining to building standards. Agency procedures such as public participation meetings, advisory committees, written and verbal correspondence between members of the public and agency personnel, and other methods are considered alternatives that may be chosen by a member of the public instead of or in addition to the public petition procedures described in these regulations.

Authority: Health and Safety Code Sections 18931 and 18949.6, Assembly Bill 4082., Chapter 1289, Statutes of 1990 and Government Code Section 11347.1.

Reference: Health and Safety Code Sections 18931 and 18949.6, Assembly Bill 4082, Chapter 1289, Statutes of 1990 and Government Code Section 11347.1.

HISTORY:

1. (BSC 2/93) Regular order by the California Building Standards Commission to adopt Section 1-809, Part 1, Title 24, California Code of Regulations. Approved by Office of Administrative Law on January 27, 1995; filed at the Secretary of State on January 27, 1995; effective 30 days thereafter, which will be February 26,1995. Publication date April 24, 1995.

ARTICLE 1-9
CODE ADOPTION PROCESS

1-900. Definitions. The following definitions govern the interpretation of this article:

(a) "Challenge" means a written public comment received during a written comment period and directed at a proposed change or a code advisory committee recommendation or the procedures followed by the Commission in proposing or adopting the action.

(b) "Code advisory committee" means an advisory panel or body appointed to advise the Commission with respect to building standards.

(c) "Code change" means a proposed change to a building standard as defined by Health and Safety Code Section 18909.

(d) "Code change submittal" means a proposed code change and its justification submitted to the Commission by a proposing agency.

(e) "Commission" means the California Building Standards Commission.

(f) "Executive Director" means the Executive Director of the California Building Standards Commission.

(g) "Justification" means an initial statement of reason and the information needed to complete a notice of proposed action, including a determination as to the effect of the code change on housing costs.

(h) "Proposing agency" means a state agency having authority and responsibility to propose a building standard for adoption by the Commission.

(i) "Special code advisory committee" means an ad hoc committee established by the Commission, when necessary, to advise the Commission on a subject in the code needing extensive revision or on a complex subject which needs to be regulated or to perform a review of a proposed code change that warrants special technical review.

(j) "Technical review" means a review of a proposed code change and its justification conducted pursuant to Health and Safety Code Section 18930 (c), (d), (e), (f) to ensure that a code change is justified in terms of criteria of Health and Safety Code Section 18930 (a), the nine-point criteria.

Authority: Health and Safety Code Sections 18929.1, 18949.6 and 18931 (f).
Reference: Health and Safety Code Sections 18927, 18929-18932, 18934, 18935, 18936, 18949.1, 18949.2, 18949.3, 18949.5 and 18949.6.

1-901. Procedure for code adoption process.

(a) **Purpose.** This article establishes basic minimum procedural requirements for an annual code adoption cycle for proposing agencies to ensure adequate public participation in the development of building standards, to ensure adequate technical review and adequate time for technical review by code advisory committees and to ensure adequate notice to the public of compiled code change submittals prior to adoption by the Commission.

(b) **Code change submittal-proposing agency.** The Commission shall notify a proposing agency of the deadline for acceptance of code change submittals a minimum of 180 days prior to the deadline. A proposing agency shall submit a code change submittal for the Commission's adoption on or before the deadline for acceptance specified in the notice.

(c) **Prenotice technical review.** Prior to conducting the rulemaking proceeding required by the Administrative Procedure Act, the Commission shall assign a code change submittal received on or before the deadline to one or more code advisory committees specifically knowledgeable in the building standard being proposed for change and schedule the submittal for a noticed public hearing to ensure adequate opportunity for public participation and technical review.

1. **Code advisory committee reviews.** A code advisory committee shall conduct a public hearing to perform a technical review of all code change submittals assigned to it by the Commission. A code advisory committee meeting shall be scheduled by the Commission and shall be open to the public.
2. **Code advisory committee meetings.** The location and date of a code advisory committee meeting shall be noticed by the Commission in accordance with Government Code Sections 11120 through 11132, the Bagley-Keene Open Meeting Act.
3. **Code advisory committee recommendations.** A code advisory committee shall make a recommendation on each code change submittal. A recommendation shall include a substantiating reason based on Health and Safety Code Section 18930. The recommendation shall be one of the following:

   A. **Approve.** Approval of a proposed code change as submitted. The proposed code change is justified in terms of criteria of Health and Safety Code Section 18930.

   B. **Disapprove.** A proposed code change does not meet one or more specified criteria of Health and Safety Code Section 18930.

   C. **Further study required.** A proposed code change has merit but does not meet one or more specified criteria of Health and Safety Code Section 18930. The proposed code change requires further study by the proposing agency. The proposing agency should submit the proposed code change in the next code adoption cycle after further study.

   D. **Approve as amended.** Approval as modified by the proposing agency director or written authorized representative. Modifications are justified in terms of Health and Safety Code Section 18930. An amended justification consistent with the approval as amended recommendation shall be submitted to the Commission by the proposing agency within 10 working days of the date of the committee's recommendation. The failure to submit an amended justification consistent with the approval recommendation within that time is cause for disapproval.

   E. **Withdrawal.** A proposed code change is out of the code adoption cycle. Only the proposing agency may withdraw a proposed code change.
4. **Code advisory committee reports.** After the deadline for acceptance of code change submittals and following the code advisory committee meetings, the Commission shall prepare an itemized monograph, including the code change submittals, the code advisory committee recommendations and the reasons for the recommendations. This monograph of code change

submittals shall be made available to the public for comment as the Commission's proposed rulemaking action in accordance with Article 1-3 of this part.

(d) **Public written comment period.** Anyone wishing to contest a recommendation of the code advisory committee(s) and/or comment on a proposed code change in the monograph may submit a challenge to the Commission during the written comment period established by the notice of proposed action. Upon written request received, no later than 15 days prior to the close of the written comment period, a public hearing pursuant to Government Code Section 11346.8 shall be held by the Commission on the proposed code changes, its justification and code advisory recommendations at which time statements, arguments, or comments, either oral or in writing, or both, shall be permitted.

1. A challenge shall refer to a specific recommendation or proposed code change and clearly indicate what is being contested. The challenge shall specify the action desired: approve, disapprove, return for further study or approve as amended. A challenge shall specify a concise substantiating reason for the challenge.
2. Following the close of the comment period and/or public hearing, the Commission shall make available to the public upon request a monograph of challenges received at the Commission office by the close of the written comment period and/or comments received at the public hearing.
3. The Commission shall consider the challenges contained in the monograph.
4. No new issues will be raised before the Commission that were not printed in the monograph of challenges.
5. Items not challenged but affected as a result of an action on another item may also be considered at the Commission meeting to eliminate conflict, duplication or overlap.
6. **Commission action.** The Commission shall take one of the following actions on each item. All amendments to code change submittals as submitted require the approval of the proposing agency. Proposing agencies may withdraw their code change submittals at any time.

A. **Challenges.**

(1) The Commission approves a challenge. The challenge includes a substantiating reason.

(2) The Commission disapproves a challenge. The Commission explains a reason for disapproval.

B. **Code advisory committee recommendations.**

(1) The Commission approves a recommendation. The recommendation includes a substantiating reason.

(2) The Commission disapproves a recommendation. The Commission explains a reason for disapproval.

C. **Code change submittal.**

(1) **Approve.** The Commission approves a proposed code change as submitted. The change is justified in terms of Health and Safety Code Section 18930.

(2) **Disapprove.** The Commission disapproves a proposed code change as not justified in terms of Health and Safety Code Section 18930.

(3) **Further study required.** The Commission finds that a proposed code change has merit but does not meet specified criteria of Health and Safety Code Section 18930. The change requires further study and justification by the proposing agency. The proposed code change may be submitted in the next code adoption cycle with further study and justification.

(4) **Approve as amended.** The Commission approves a proposed code change as modified by the proposing agency director or written authorized representative. No modification shall be made that materially alters a requirement, right, responsibility, condition or prescription in the text made available for comment in accordance with Article 1-3 of this part. The proposing agency shall justify the modification pursuant to Health and Safety Code Section 18930 in an amended justification consistent with the approval action submitted to the Commission within 10 working days. Failure to submit the amended justification within that time is cause for disapproval.

(5) **Withdrawal.** The proposed code change is out of the code adoption cycle. Only the proposing agency may withdraw a proposed code change.

Authority: Health and Safety Code Sections 18929.1, 18949.6 and 18931(f).
Reference: Health and Safety Code Sections 18927, 18929 through 18932, 18934, 18935, 18936, 18949.1, 18949.2, 18949.3, 18949.5 and 18949.6.

1-902. Code advisory committees.

(a) **Standing code advisory committees.** The Commission shall establish the following standing code advisory committees.

1. Accessibility
2. Plumbing, Electrical, Mechanical and Energy
3. Building, Fire and Other Regulations
4. Structural Design/Lateral Forces
5. Health Facilities
6. Green Building

(b) **Special code advisory committee.** The Commission may establish one or more special code advisory committees when it determines that a subject in the code needs to be extensively revised or that a complex subject which needs to be regulated is not covered or that the content of a proposed code change warrants special technical review.

(c) **Quorum.** A majority of the members of the "code advisory committee(s)" shall constitute a quorum for the transaction of business. A majority of the members present shall constitute a quorum for determining the outcome of a vote.

(d) **Members.** The code advisory committees shall be limited to a maximum of nine members, appointed by the Com-

mission for one triennial code adoption cycle (three years). The Commission can extend the term beyond three years if deemed necessary, and members shall hold appointments at the pleasure of the Commission. The appointments shall be made from organizations specifically knowledgeable in the building standards being proposed. Members shall be selected based on the following representations:

1. **Accessibility.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative(s)
   B. Voting Member(s)
      (1) Disability Access Advocate Knowledgeable in Visually Impaired
      (2) Disability Access Advocate Knowledgeable in Hearing Impaired
      (3) Disability Access Advocate Knowledgeable in Mobility Impaired
      (4) Disability Access Advocate Knowledgeable in Environmental Health Network or Other Cognitively Impaired
      (5) Local Government Building Official
      (6) Construction Industry
      (7) Architect
      (8) Fire Official
      (9) Public Member
2. **Plumbing, electrical mechanical and energy.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative(s)
   B. Voting Member(s)
      (1) Local Government Building Official
      (2) Environmental/Energy Organization
      (3) Construction Industry
      (4) Architect
      (5) Fire Official
      (6) Public Member
      (7) Energy Consultant
      (8) Mechanical Engineer
      (9) Electrical Engineer
3. **Building, fire and other.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative(s)
   B. Voting Member(s)
      (1) Local Government Building Official
      (2) Registered Fire Protection Engineer
      (3) Construction Industry
      (4) Architect
      (5) Commercial Building Industry
      (6) Fire Official
      (7) Disability Access Advocate
4. **Structural design/lateral forces.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative
   B. Voting Member(s)
      (1) Three (3) Structural Engineers
      (2) Architect
      (3) General Contractor
      (4) Local Government Building Official
      (5) Public Member
5. **Health facilities.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative(s)
   B. Voting Member(s)
      (1) Acute Care Hospital Representative
      (2) Skilled Nursing Facility Representative
      (3) Architect
      (4) General Contractor
      (5) Mechanical Engineer
      (6) Electrical Engineer
      (7) Fire Protection Engineer
      (8) Local Government Building Official
      (9) Primary Care or Specialty Clinic Representative
6. **Green building.** The Commission shall solicit nominations from:
   A. Ex-Officio Member(s)
      (1) State Agency Representative(s)
   B. Voting Member(s)
      (1) Residential Construction Industry Representative
      (2) Commercial Building Industry Representatives
      (3) Architect
      (4) Environmental Organization Representative
      (5) Local Government Building Official
      (6) Public Member, e.g., energy/building performance specialist
      (7) Fire Official
      (8) Mechanical Engineer
      (9) Electrical Engineer

Authority: Health and Safety Code Sections 18909(c), 18929, 18930.5, 18949.6 and 18931(f).

Reference: Health and Safety Code Sections 18927, 18929, 18930.5, 18931 (f), 18934, 18936 and 18949.6.

HISTORY:

1. (BSC 2/92) Regular order by the California Building Standards Commission to adopt Section 1-901, Part 1, Title 24, California Code of Regulations. Filed with the Secretary of State February 10, 1994; effective March 12, 1994. Approved by the Office of Administrative Law on February 10, 1994.
2. (BSC 02/08) Article 1-9, Code Adoption Process. Amend Section 1-902. Effective June 21, 2009.

ARTICLE 1-10
CITY, COUNTY, AND CITY AND COUNTY BUILDING PERMIT FEES

1-1000. Purpose. This article establishes regulations for implementation of Senate Bill 1473 (Stats. 2008, c. 719), effective on January 1, 2009. The bill added Health and Safety Code §§18931.6 and 18931.7, to require a surcharge on building permits in order to provide funds, upon appropriation, for the California Building Standards Commission, Department of Housing and Community Development and Office of the State Fire Marshal to use in carrying out the provisions of California Building Standards Law and of State Housing Law relating to building standards, with emphasis placed on the adoption, publication and educational efforts associated with green building standards. The fees are to be collected by cities, counties, and cities and counties and transmitted to the California Building Standards Commission. The fees are based on building permit valuation.

1-1001.Definitions. The words defined in this article shall have the meaning stated therein throughout California Code of Regulations, Title 24, Part 1, Chapter 1, Article 1-10.

Building Standards Administration Special Revolving Fund (the Fund) means the fund established in the State Treasury to receive funds submitted by the Commission pursuant to the provisions of this article.

The Commission means the California Building Standards Commission.

The Department means the Department of Housing and Community Development.

Fees, appropriate fractions thereof mean fee increments for permit values less than one-hundred thousand dollars ($100,000) as described in §1-1002.

The Office means the Office of the State Fire Marshal.

1-1002.Fee assessment.

(a) Fees shall be levied on building permits required for all disciplines covered by Title 24, including, but not limited to, building, electrical, mechanical and plumbing, and for which a valuation is made.

(b) Fees are assessed at a rate of $4 per $100,000 of permit valuation, but not less than one dollar, with appropriate fractions thereof shown in the following table:

PERMIT VALUATION	FEE
$1 – 25,000	$1
$25,001 – 50,000	$2
$50,001 – 75,000	$3
$75,001 – 100,000	$4
Every $25,000 or fraction thereof above $100,000	Add $1

1. Cities, counties, and cities and counties may retain up to ten percent (10%) of the fees for related administrative costs, code enforcement, and education as permitted by Health and Safety Code §18931.6.
2. Cities, counties, and cities and counties may exempt from fee assessment permits for which no valuation is made.

(c) The Commission may reduce the rate of the fee by regulation upon determination that a lesser fee is sufficient to carry out the programs of the Commission, the Department and the Office. The Commission may establish a termination date or duration for the fee reduction period.

1-1003.Fee collection.

(a) Cities, counties, and cities and counties shall submit fees each quarter, commencing with the quarter beginning January 1 and ending March 31, 2009, due on the fifteenth day of the following month.

1. Each quarter, a city, county, and city and county shall submit a Fee Report Form (BSC-2), Contact Information Form (BSC-3), and a check made payable to the California Building Standards Commission, with the fees collected for that quarter.

   Note: The form templates are available for downloading at the Commission's website at http://www.bsc.ca.gov/proc_rsltn/pr_tmplts.html.

(b) The Commission shall deposit the moneys collected into the Building Standards Administration Special Fund for use, upon appropriation, by the Commission, the Department, and the Office for use as specified in §1-1000.

Authority: Health and Safety Code Sections 18909(c), 18929, 18930.5, 18931.6 and 18931.7

Reference: Health and Safety Code Sections 18930.5, 18931.6 and 18931.7

HISTORY:

1. (BSC 02/08) Add new Article 1-10, City, County, and City and County Building Permit Fees. Effective on June 21, 2009.

CHAPTER 2

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

ARTICLE 2-1
GREEN BUILDING STANDARDS

2-101. Scope. The Department of Housing and Community (HCD) shall develop and propose for adoption to the California Building Standards Commission green building standards related to methods, materials or processes not under the authority of another state agency. HCD also may review and comment on proposals and proposed standards developed by other agencies in order to reduce or eliminate ambiguities or conflicts with HCD's residential standards or authority. The green building standards developed and proposed by HCD would be applicable for residential occupancies including, but not limited to, hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. The administrative procedures for developing and proposing those standards shall be consistent with this article.

2-102. Development of standards.

(a) In developing green building standards, the Department of Housing and Community Development shall consult with state entities appropriate for specific standards including, but not limited to, the following state agencies:

1. The California Department of Resource Recycling and Recovery
2. The California Energy Resources Conservation and Development Commission
3. The California Air Resources Board
4. The California Department of Water Resources
5. The California Department of Transportation
6. The California Department of General Services
7. The California Department of Public Health
8. Office of the State Fire Marshal

(b) HCD also shall consult with representatives from each of the following:

1. Environmental advocacy groups
2. Interested city, county, or city and county government and code enforcement entities
3. The building construction and design industry
4. Interested public parties

(c) HCD may consult with and seek input from the entities and representatives identified in subsections (a) and (b) either by written comment or in a meeting format and shall consider all input provided during the development of the green building standards which is relevant to specific standards. HCD shall provide written responses to formal comments received during the public comment period for any proposed green building standard.

Authority: Health and Safety Code Sections 17921, 17922 and 19990.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17990 and 19960 through 19997.

HISTORY NOTE APPENDIX

1. (HCD 05/09) Adoption of administrative provisions for green building code development in Part 1. Effective on February 13, 2010.

CHAPTER 3

ADMINISTRATIVE REGULATIONS FOR THE OFFICE OF THE STATE FIRE MARSHAL (SFM)

(RESERVED)

CHAPTER 4

ADMINISTRATIVE REGULATIONS FOR THE DIVISION OF THE STATE ARCHITECT-STRUCTURAL SAFETY (DSA-SS)

ARTICLE 1
ESSENTIAL SERVICES BUILDINGS

4-201. Purpose. Essential services buildings constructed pursuant to these rules and regulations shall be designed and constructed to resist gravity forces, to minimize fire hazards and to resist, insofar as practical, the forces generated by winds and major earthquakes of the intensity and severity of the strongest anticipated at the building site without catastrophic collapse, but may experience some repairable architectural or structural damage. An essential services building as designed and constructed shall be capable of providing essential services to the public after a disaster. In addition, the equipment and other accessories which are necessary for the continued functioning of the essential services operation shall be anchored and braced to resist earthquake forces.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-202. Scope. These regulations apply to the administrative procedures concerning the construction, reconstruction, alteration of or addition to any essential services building under the jurisdiction of a city, city and county, county (including special fire districts) or the State of California.

When the enforcement agency is the Division of the State Architect (DSA) all parts of the *California Building Standards Code*, as contained in Title 24 of the California Code of Regulations and adopted by that agency designate the building regulations which shall apply to an essential services building. The term "essential services building" shall include all buildings, structures, appurtenances and related systems or facilities as defined in Section 4-207.

These rules and regulations establish reasonable standards and minimum requirements for the design and construction of an essential services building. An essential services building shall also be designed and constructed to conform to the regulations adopted by the California State Fire Marshal in Title 24, CCR, for the particular occupancy concerned.

When the enforcement agency is a local agency, the locally adopted editions of the model codes and the administrative regulations contained in Part 1 (Sections 4-201 through 4-222 and 4-243 through 4-249) Title 24, California Code of Regulations (CCR) designate the building regulations which shall apply to an essential services building. The term "essential services building" shall include all buildings, structures, appurtenances and related systems or facilities as defined in Section 4-207.

If the building standards and regulations adopted by the city, city and county or county agency responsible for building safety are more restrictive than those adopted in the applicable sections of Title 24, CCR, then the local building standards and regulations shall govern within its jurisdiction.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-203. Interpretation. No regulation shall be construed to deprive the enforcing agency of its right to exercise the powers conferred upon it by law or limit the enforcing agency in such enforcement as is necessary to secure the safety of construction as required in the Essential Services Seismic Safety Act (see "Act," Section 4-207.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-204. Delegation of authority. Any powers, duties and responsibilities pursuant to carrying out the provisions of the Essential Services Buildings Seismic Safety Act for the State Architect may be delegated by the State Architect to the Chief Structural Engineer, Division of the State Architect, subject to the direction of the State Architect.

Those powers, duties and responsibilities so delegated may include the observation of the implementation and administration of the Act, the adoption in consultation with local jurisdictions of the regulations necessary for carrying out the provisions of the Act, providing advice and assistance to local jurisdictions in matters concerning the Act or these regulations and acting as an appeals agency relative to the administration of the Act.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16022.

4-205. Application of building standards. Building standards are set forth in Parts 2, 3, 4, 5, 6, 7 and 12 of Title 24, CCR, and have been adopted as a basis for the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not addressed in these regulations, it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The Division of the State Architect or local enforcement agency must be satisfied that the degree of safety achieved is equivalent to that achieved by the standards contained in Title 24, CCR. The enforcement agency review and approval of the innovative design or construction techniques shall precede the submission of plans and specifications utilizing these techniques.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-206. Approval of new essential services buildings. Plans and specifications shall be submitted to the appropriate enforcement agency for every new owned or leased essential services building before the plans are adopted by the governing board, authority, owner, corporation or other agency proposing to construct any essential services building.

Before any agency may convert an existing building into an essential services building, that agency shall submit plans and

specifications for the alteration of the building to the appropriate enforcement agency for approval. The plans shall provide for the alterations necessary for compliance with the requirements of these rules and regulations.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16011.

4-207. Definitions. The words defined in this section shall have the meaning stated therein throughout the rules and regulations contained in Part I (Administrative), Title 24, CCR.

ACT shall mean the Essential Services Buildings Seismic Safety Act of 1986, Sections 16000-16023, inclusive, of the Health and Safety Code.

ADDITION shall mean an increase in floor area or volume of enclosed space which is physically attached to an existing building by connections which are required for transmitting vertical or horizontal loads between the addition and the existing structure. The area exemption in Section 16010 of the Act does not apply to additions to essential services buildings when the total area of the existing building and the addition exceeds 2,000 square feet. An "addition" which is not required to be physically attached either for its own support or for support of the existing building shall be separated as required by Part 2, Title 24, CCR, and shall be deemed to be the construction of a new essential services building.

ALTERATION shall mean changes within an existing building as defined in Part 2, Title 24, CCR. Alterations to existing essential services buildings shall conform to the requirements of Title 24, CCR. Major alterations will be permitted, provided the entire essential services building as modified, including the structural alterations or additions, conform to the requirements of Title 24, CCR, if the area of the existing building, including additions, exceeds 2,000 square feet.

APPROVED PLANS AND SPECIFICATIONS shall mean plans, specifications, addenda and change orders which have been duly approved by the appropriate enforcement agency pursuant to Sections 16013 and 16016 of the Health and Safety Code and which are identified by a stamp bearing the name of the enforcement agency, the identification number, the date and the signature of the qualified reviewer as required in Section 16011 of the Act.

COMPLYING BUILDING shall mean a building which has been constructed or reconstructed in accordance with these rules and regulations.

DIVISION OF THE STATE ARCHITECT, or **DIVISION** or the initials **DSA** shall mean the Division of the State Architect in the Department of General Services, State of California.

ENFORCEMENT AGENCY shall mean the Division of the State Architect for state-owned or state-leased buildings and shall mean the enforcement agency of any city, county or city and county having jurisdiction over locally owned or locally leased essential services facilities.

ESSENTIAL SERVICES BUILDING means any building, or any building a portion of which is used or designed to be used as a fire station, police station, emergency operations center, California Highway Patrol office, sheriff's office or emergency communication dispatch center.

EQUIPMENT shall mean all new or replacement equipment installed in any new or existing owned or leased building which is required for the functioning of the essential services operation. The installation of such equipment shall meet the support, bracing and anchorage requirements of Title 24, CCR. The area exemption in Section 16010 of the Act does not apply to the anchorage or bracing of equipment necessary to the operation of the essential services function.

FIRE STATION shall mean any building that contains the operational facilities, fire suppression, alarm and communications equipment necessary to respond to fire emergencies.

MAINTENANCE shall mean and include ordinary upkeep or repair work such as replacement in kind, repainting, replastering and reroofing.

NEW ESSENTIAL SERVICES BUILDING shall mean any newly erected essential services building or any existing building converted to essential services use subsequent to the effective date of the act regardless of whether the building is owned or leased by the public agency. Existing buildings housing essential services facilities owned or leased by the state, a city, a city and county or a county prior to the effective date of the act are exempt from these regulations except for the installation of new or replacement equipment. When a portion of a building is to be utilized for an essential services operation, the area so utilized and the utilities systems and components servicing the area shall be constructed according to these rules and regulations and shall be separated or protected from damage due to failures of other portions of the structure to the extent determined by the enforcement agency to insure continued functioning after an earthquake or other disaster. Ancillary buildings and facilities related to the essential services building function may be exempt from these regulations if the enforcement agency determines that such buildings and facilities are not necessary to the functioning of the essential services operation after an earthquake or other disaster.

NONSTRUCTURAL ALTERATIONS shall mean only such alterations which do not affect the safety of the essential services building and do not change, in any manner, its structural elements.

OWNER for the purposes of these regulations shall mean the public agency responsible for the essential services functions performed under its authority within an essential services building. The owner is responsible for applying for and obtaining the approvals and certifications required by these regulations.

PLANS as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross-sections, interior elevations, exterior elevations and details which are used in conjunction with the project specifications and which are necessary to accomplish construction in conformance with the requirements of the act.

POLICE STATION shall mean any building that contains the operational facilities and the alarm and communications equipment necessary to respond to police emergencies. This definition shall include the offices of local police departments, county sheriffs, California Highway Patrol and all offices nec-

essary to the functioning of the essential services operation after an earthquake or other disaster.

PROJECT INSPECTOR shall mean any individual duly approved by the enforcement agency as the on-site inspector for a particular project. The project inspector shall be employed and paid by the owner and shall act under the general direction of the architect or registered engineer in general responsible charge of the project and under the supervision of the enforcement agency. The project inspector shall be responsible for inspecting all work included in the construction contract, except for work that must be inspected by an approved special inspector. (See Section 4-211 (c) for special inspection.)

RECONSTRUCTION is the repair of damage to an existing complying essential services building or an alteration of an existing noncomplying building to bring it into conformance with the safety standards established by these regulations for essential services buildings.

REGISTERED ENGINEER as used in these regulations shall mean a structural engineer, civil engineer, mechanical engineer or electrical engineer holding a valid certificate under Chapter 7, Division 3, of the *California Business and Professions Code*.

SPECIFICATIONS as used in these regulations shall mean the written document which is used in conjunction with the project plans to establish the job conditions, the quality and quantity of construction materials used in the project and the quality of workmanship required to accomplish the construction in conformance with the provisions of the act.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16003, 16011, 16018 and 16019.

4-208. Application for approval of drawings and specifications.

(a) Before adopting plans and specifications, the agency responsible for the essential services function shall submit an application to the appropriate enforcing agency for written approval of said plans and specifications except where the new construction is a Type V or Type II-N one-story structure which contains 2000 square feet or less of floor area and is not located in a special studies zone as defined in Section 2622 of the Public Resources Code.

(b) An architect, structural engineer or civil engineer may act as the agent for the essential services agency when filing the application for approval of plans and specifications.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16010, 16011 and 16015.

4-209. Designation of responsibilities.

(a) **General responsible charge.** For every essential services building project there shall be an architect, structural engineer or civil engineer in general responsible charge of plans, specifications and observation of construction, except that plans, specifications and observation of construction may be under the responsible charge of a registered mechanical or electrical engineer for work involving only those respective branches of engineering. A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.

(b) **Delegation of responsibility.** The architect, structural engineer or civil engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ, or retain other architects, structural engineers or civil engineers. Registered mechanical and electrical engineers may be delegated responsibility for the mechanical and electrical portions of the work, respectively.

(c) **Evidence of responsibility.** The stamp and signature of the architect or registered engineer on a plan, specification or other document shall be deemed evidence that full responsibility is assumed by the signator for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work.

(d) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observations of the work of construction, provided such persons are architects or registered engineers who themselves are qualified under these regulations to assume the responsibility assigned.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16011, 16012 and 16015.

4-210. Plans, specifications, computations and other data.

(a) **General.** When an application is filed, it shall be accompanied by the required number of complete sets of the plans and specifications, the complete structural design calculations, site data and a fee as established by the enforcement agency.

(b) **Plans.** Plans shall show the use or occupancy of all parts of the essential services buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the act and these regulations. The drawings shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several buildings, the plans for each shall be drawn independently except that details common to all need not be repeated. Submitted plans and specifications, which are obviously incomplete or incorrect, shall be returned to the architect or registered engineer in general responsible charge with a request for compliance with these regulations before checking is begun or resumed by the enforcement agency.

(c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into the permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans and described in the specifications.

(d) **Design computations.** Computations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that calculations for individual structural members can be readily interpreted. The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indi-

cating the manner in which the proposed essential services building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, CCR. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in the computations and noted on the plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

(e) **Site data.** Site data for all essential services buildings covered by these regulations shall include a soil investigation report providing information on subsurface site work and laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundation to be used and an allowable design value for the soil bearing capacity. For all essential services building sites not exempted from the provisions of the act, a geologic and earthquake hazard report including an evaluation of both known and potentially active local and regional fault systems, slope stability, liquefaction potential and other hazards shall be prepared by competent persons and submitted with the application, plans and specifications. All or parts of the geologic and earthquake hazard investigation and report may be waived by the enforcement agency when in the judgment of the enforcement agency those requirements are unnecessary and would not be beneficial to public safety.

(f) **Signatures required.** All plans and specifications submitted for approval shall bear the stamp and signature of the architect or professional engineer in general responsible charge of design. When responsibility for a portion of the work has been delegated, the plans and specifications covering that portion of design shall also bear the stamp and signature of the responsible registered engineer or architect.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Sections 16009, 16011, 16012, 16013 and 16014.

4-211. Observation and inspection of construction.

(a) **Observation by architect or registered engineer.** The Act provides that the observation of the work of construction, reconstruction, alteration or addition shall be under the general responsible charge of an architect, structural engineer, civil engineer or, under certain conditions, a registered mechanical or electrical engineer for work involving only those respective branches of engineering. A geotechnical engineer shall provide the observation for placement of fills and shall submit a verified report attesting to the compliance of the engineered fill.

(b) **Inspection by project inspector.** The owner must provide for and require competent, adequate and continuous inspection of all construction work by a project inspector approved for each individual project by the enforcement agency. The project inspector so approved shall cooperate with the architect or registered engineer in general responsible charge of the observation of the work of construction to ensure compliance with the approved drawings and specifications. The project inspector shall request interpretations and clarifications of the approved contract drawings and specifications when necessary from the responsible architect or registered engineer.

For every project there shall be a project inspector who shall have personal knowledge as defined in Section 16021 of the Health and Safety Code of all work done on the project or its parts. On large projects adequate inspection may require the employment of one or more approved assistant inspectors. The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his/her duties and responsibilities under Sections 4-214 and 4-219 of these regulations. The project inspector shall, under the direction of the architect or engineer, be responsible for monitoring the work of the special inspectors and testing laboratories to ensure that the special inspection and testing program is satisfactorily completed.

No work shall be carried out except under the inspection of the project inspector approved by the enforcement agency. The project inspector shall have had at least three years equivalent experience in construction work of a type similar to that for which he/she is proposed as inspector, shall have a thorough knowledge of building materials, and shall be able to read and interpret plans and specifications.

The cost of project inspection shall be paid for by the owner (see "Project Inspector" definition in Section 4-207).

(c) **Special inspection.** Special inspection by inspectors specially approved by the enforcement agency may be required for masonry construction, glued laminated lumber fabrication, wood framing using timber connectors, concrete batching, shotcrete, prestressed concrete, structural steel fabrication, high-strength steel bolt installations, welding, pile driving, electrical work or mechanical work. The cost of all special inspectors required by this section shall be paid for by the owner.

The project inspector may perform special inspections if the project inspector has been specially approved for such purposes and has the time available to complete the special inspections in addition to project inspection work.

The detailed inspection of all work covered by this section is the responsibility of the project inspector when special inspection is not provided. The enforcement agency may require special inspection for shop fabrication procedures that preclude the complete inspection of the work after assembly. The enforcement agency may require special inspection at the site in addition to those listed above if found necessary because of the special use of material or methods of construction.

Approved special inspectors shall submit verified reports as required by Section 4-214, for the special work covered. Special inspectors shall periodically submit reports of inspections to the enforcement agency, the architect, the registered engineer responsible for the observation of structural work and the project inspector. Construction work that the special inspector finds not to be in compliance with the approved plans and specifications, and which is not immediately corrected upon notifying the contractor, shall be reported immediately to the project inspector, the enforcement agency, the architect and the registered engineer responsible for observation of the structural work.

Authority: Health and Safety Code Sections 16017 and 16022.

Reference: Health and Safety Code Sections 16015, 16017, 16020 and 16021.

4-212. Supervision of construction by the enforcement agency. During the construction, reconstruction, repair, alteration of or addition to any essential services building, the enforcement agency as provided in the Act, shall make such site visits and observations as in its judgment is necessary or proper for enforcement of the Act and the protection of the safety of the occupants of the building and the public. If at any time as the work progresses it is found that modifications or changes are necessary to achieve compliance with building standards, the enforcement agency shall direct the architect or registered engineer in general responsible charge to prepare and submit documents covering such modifications or changes for the review and approval of the enforcement agency.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Sections 16001, 16009 and 16020.

4-213. Tests.

(a) **General.** Tests of materials are required as set forth in the approved plans and specifications and in Part 2, Title 24, CCR. Where job conditions warrant, the architect or registered engineer may waive certain tests with the approval of the enforcement agency. A list of all required tests of materials and of all required special inspections shall be prepared and submitted by the architect, structural engineer, or civil engineer in general responsible charge of the project at the time the plans and specifications are stamped for identification by the enforcement agency.

(b) **Test sampling.** Test samples or specimens of material for testing may be taken by the architect or registered engineer, the architect's or engineer's representative, the project inspector or a representative of the testing agency. In no case shall the contractor, his employee or a vendor select the samples or specimens.

(c) **Test reports.** One copy of all test reports shall be forwarded by the testing agency to the enforcement agency, the architect, the registered engineer responsible for observation of the structural work and the project inspector. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved plans and specifications. In the case of masonry or concrete, test reports shall show the specified design strength. Test reports shall also state whether or not the material or materials tested comply with the requirements of the approved plans and specifications.

(d) **Verification of test reports.** Each testing agency shall submit to the enforcement agency a verified report, covering all tests and inspections which were required to be performed as of the date that work on the project is suspended or the services of the testing laboratory are terminated, and at the completion of the project, covering all of required tests and inspections. The verified report shall be signed, under penalty of perjury, by the professional engineer charged with engineering managerial responsibility for the laboratory. The verified report shall indicate that all tests and inspections were made as required by the approved plans and specifications, and shall list any noncompliant tests or inspections that have not been resolved by the date of the verified report. In the event that not all required tests or inspections were made by the laboratory making this verified report, those tests and inspections not made shall be listed on the verified report.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Sections 16009, 16020 and 16021.

4-214. Verified reports. Sections 16020 and 16021 of the Act require that from time to time as the work of construction progresses, the architect or registered engineer in charge of observation of the work, each architect or registered engineer delegated responsibility for observation of a portion of the work, the project inspector, approved special inspectors and the contractor shall each make and sign under penalty of perjury, a duly verified report to the enforcement agency upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statement of fact as shall be required.

The term "personal knowledge" as applied to an architect or registered engineer means the personal knowledge that is obtained from periodic visits of reasonable frequency to the project site for the purpose of general observation of the work, and that is obtained from the reporting of others on the progress of the work, testing of materials, inspection and superintendence of the work. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to an inspector means the actual personal knowledge that is obtained from the inspector's personal continuous inspection of the work in all stages of its progress. For work performed away from the site, the project inspector may obtain personal knowledge from the reporting of testing or special inspection of materials and workmanship for compliance with approved plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to the contractor means the personal knowledge gained from constructing the building. The exercise of reasonable diligence to obtain the facts is required.

See Article 2, Section 4-240 and Article 3, Section 4-249 for the reporting requirements to state and local enforcement agencies, respectively.

Authority: Health and Safety Code Sections 16020, 16021 and 16022.

Reference: Health and Safety Code Sections 16020 and 16021.

4-215. Changes in the approved drawings and specifications.

(a) **General.** All work shall be executed in accordance with the approved plans and specifications except where documents authorizing changes have been submitted by the responsible architect or registered engineer to the enforcement agency for review and approval. These documents shall describe the authorized changes, show the increase or decrease in the contract cost involved and shall contain the signatures of the responsible architect or registered engineer and the owner and shall bear the approval stamp of the enforcement agency.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16011, 16013 and 16015.

4-216. Final certification of compliance. The certification of compliance for the essential services building shall be issued by the enforcement agency when the project has been completed in accordance with the requirements as to safety of design and construction with Sections 16000-16023 of the Health and Safety Code (Essential Services Buildings Seismic Safety Act) and with the requirements of these regulations. The certification of compliance will be evidenced by a letter or a certificate of occupancy each of which shall contain a statement that the building design and review and the work of construction have been completed in accordance with the requirements of Sections 16000 through 16023 of the Health and Safety Code and of Part 1, Title 24, CCR. The certificate of compliance will be directed to the owner of the essential services building.

Local enforcement agencies shall forward one copy of the certification of compliance to the DSA Headquarters Office in Sacramento.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009 and 16022.

4-217. Duties of the architect and registered engineers.

(a) **General.** The architect or registered engineer is responsible to the owner and to the enforcement agency to see that the completed work conforms in every material respect to these regulations and the approved plans and specifications. The architect or registered engineer may, if so authorized, act as agent for the owner in completing and submitting the application to the enforcement agency.

The architect or registered engineer, in no way, is relieved of any responsibility by the activities of the enforcement agency in the performance of its duties.

(b) **General responsible charge.** The architect or registered engineer in general responsible charge shall advise the owner in regard to filing of the application for approval of plans, the selection of a project inspector and the selection of a testing laboratory. The architect or registered engineer shall prepare the plans, specifications, design computations and other data and shall prepare documents authorizing changes in the approved drawings and specifications when so directed by the owner or as required by conditions on the project. The architect or registered engineer shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations and shall provide the project inspector and testing agency with a complete set of stamped plans, specifications and documents authorizing changes.

The enforcement agency directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

(c) **Architect or engineer verified reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications and shall submit verified reports to the enforcement agency as required in Section 4-214. The architect or registered engineer in general responsible charge shall be responsible for the timely submittal of the required verified reports from the project inspector, the contractor and any other architects or engineers who have been delegated responsibility for observation of the work.

(d) **Testing program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing of materials consistent with the needs of the particular project and shall issue specific instructions to the testing agency. The architect or registered engineer shall also notify the enforcement agency as to the disposition of materials noted on laboratory reports as not conforming to the approved plans and specifications.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16015 and 16020.

4-218. Duties of the mechanical and electrical engineers. The architect, structural engineer or civil engineer in general responsible charge retains overall responsibility for the mechanical and electrical portions of the work when the design responsibility for that work has been delegated and the plans have been prepared by registered mechanical and electrical engineers.

Where plans, specifications and estimates for alterations or repairs only involve mechanical or electrical work, said plans, specifications and estimates may be prepared and the work of construction observed by a registered mechanical or electrical engineer, respectively, who shall be in general responsible charge.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-217 when assuming general responsible charge and shall submit verified reports as required in Section 4-214. When accepting delegated responsibility, the mechanical or electrical engineer shall comply with the requirements of Sections 4-209 and 4-210 insofar as these may relate to the delegated work.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16015.

4-219. Duties of the project inspector.

(a) **General.** The project inspector shall act under the general direction of the architect or registered engineer and under the supervision of the enforcement agency.

(b) **Duties.** The general duties of the project inspector in fulfilling project inspection responsibilities are as follows:

1. **Continuous inspection requirements.** The project inspector must have actual personal knowledge obtained by personal and continuous inspection of the work of construction in all stages of its progress that the requirements of the approved plans and specifications are being executed.

   Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or masonry work which can be inspected only as it is placed, shall require the constant presence of the project inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the project inspector is not present. In any case, the project inspector must personally inspect every part of the work. In no case shall the project inspector have

or assume any duties which will prevent him or her from providing continuous inspection.

The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, from the inspections performed by special inspectors or approved assistant inspectors and from the reporting of others on testing and inspection of materials and workmanship for compliance with the plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts shall be required.

2. **Relations with the architect or engineer.** The project inspector shall work under the general direction of the architect or registered engineer. Any uncertainties in the inspector's comprehension of the plans and specifications shall be reported promptly to the architect or registered engineer for his/her interpretation and instructions. In no case shall the instructions of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and documents authorizing changes.
3. **Job file.** The project inspector shall keep a file of approved plans and specifications (including all approved documents authorizing changes) on the job at all times.
4. **Construction procedure records.** The project inspector shall keep a record of certain construction procedures including, but not limited to the following:

   A. Concrete pouring operations. The records show the time and date of placing concrete and the time and date of removal of forms in each portion of the structure.

   B. Welding operations. The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.

   C. Penetration under the last ten (10) blows for each pile when piles are driven for foundations. All such records of construction procedures shall be kept on the job until the completion of the work. These records shall be made a part of the permanent records of the owner.
5. **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to the contractor's attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer and to the enforcement agency.

   Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.
6. **Verified reports.** The project inspector shall submit to the enforcement agency verified reports as required in Section 4-214.

(c) **Violations.** Failure, refusal or neglect on the part of the project inspector to notify the contractor of any work that does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing any such violation to the architect or registered engineer, to the owner and to the enforcement agency shall constitute a violation of the Act and shall be cause for the enforcement agency to take action, which may result in withdrawal of the inspector's approval.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Sections 16017 and 16021.

4-220. Duties of the contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the architect, registered engineer, project inspector or the enforcement agency in the performance of their duties.

(b) **Performance of the work.** The contractor shall study carefully the approved plans and specifications and shall plan his schedule of operations well ahead of time. If at any time it is discovered the work is being done that is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the project inspector, for interpretation or correction. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done that is not in conformity with the approved plans, specifications and change orders, and standards.

The contractor must notify the project inspector, in advance, of the commencement of construction of each and every aspect of the work.

(c) **Verified reports.** The contractor shall make and submit to the enforcement agency from time to time, verified reports as required in Section 4-214.

If work on the building is being done by independent contractors having contracts with the owner, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16021.

4-221. Records. DSA shall maintain a record of the approved plans, specifications, addenda, change orders and letters of certification for state-owned or state-leased essential services buildings which have been certified as complying with the provisions of the Act. DSA shall also maintain a record of the letters of compliance for essential services buildings built under the jurisdiction of local enforcement agencies which have been submitted to DSA by those agencies.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16022.

4-222. Advisory board.

(a) **General.** The State Architect may appoint an advisory board whose duty it is to serve in an advisory capacity to DSA in connection with administrative matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review to which appeal can be made by owners, architects, engineers or other interested parties in case of disagreement with the interpretation by the local enforcement agencies and/or local appeals board of the Essential Services Buildings Seismic Safety Act or the regulations adopted pursuant thereto. For state agencies, the Advisory Board shall act as an appeals board for disagreements with the rulings, decisions, interpretations or acts of DSA.

(b) **Membership.** The said board shall consist of nine members appointed by the State Architect and four ex-officio members who are: State Architect, the Chief Structural Engineer of DSA, the California State Fire Marshal, the Executive Director of the Building Standards Commission and the Chairman of the Seismic Safety Commission. The ex-officio board members may appoint alternates to serve on the board as their representatives. Of the appointive members, one shall be an architect, one shall be a structural engineer, one shall be a civil engineer, one shall be a mechanical engineer or an electrical engineer, one shall be a representative of the League of California Cities, one shall be a representative of the County Supervisors Association, one shall be a representative of the California Building Officials, one shall be a representative of the California Fire Chiefs Association and one shall be a representative of a law enforcement agency. The appointive members shall serve at the pleasure of the State Architect. The State Architect will select appointive members from nominations solicited from the California Council, American Institute of Architects, the Structural Engineers Association of California, the Consulting Engineers and Land Surveyors Association of California, the California Building Officials, the League of California Cities, the County Supervisors Association, the California Peace Officers Association and from the California Fire Chiefs Association. The State Architect may also appoint additional ex-officio members. Ex-officio members are not entitled to vote in board actions.

(c) **Meetings.** The board shall elect its own chairperson and vice-chairperson and shall convene upon the call of the chairperson or the State Architect whenever it may be necessary in the chairperson's or State Architect's judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon the instruction of the board designate subcommittees to study and report back to the board on any technical subject or matter for which an independent study is desired or regarding appeals which are made to the board from interpretations of the enforcement agencies. The board members will be reimbursed for their reasonable expenses in attending meetings but shall receive no compensation for their services.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16022.

ARTICLE 2
STATE BUILDINGS

4-223. General. The provisions of Article 1 and Article 2 of these regulations shall apply to state-owned or state-leased essential services buildings. Article 2 requirements do not apply to essential services buildings under the jurisdiction of local enforcement agencies.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-224. Application for DSA approval of drawings and specifications.

(a) The written approval of drawings and specifications shall consist of a letter issued by DSA when the procedures of Section 4-229 of these regulations are completed.

(b) The agency responsible for the essential services function shall submit an application, for the approval of drawings and specifications to DSA. A separate application shall be submitted for each essential services building or group of buildings on each site. Applications shall be submitted to DSA on Form DSA-1, Application for Approval of Plans and Specifications. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

(c) The application shall contain a project name and location of the essential services building or buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work (see Section 4-209), the estimated cost of the project and all such other information as is requested on Form DSA-1 Application for Approval of Plans and Specifications.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16001 and 16011.

4-225. Designation of responsibility. In addition to the requirements of Section 4-209, Article 1 of these regulations, the following provisions shall apply;

(a) **Delegation of responsibility.** The architect, structural engineer or civil engineer in general responsible charge shall employ or retain, under his/her supervision, registered mechanical and electrical engineers to design and observe the construction of the mechanical and electrical portions of the work when these elements are significant to the safety of the building or its occupants or the continuing functioning of the building. The requirement for observation of construction of the mechanical and electrical portions of the work by the mechanical and electrical engineers may be waived where the mechanical and electrical elements are not considered to be significant to the safety of the building or its occupants or its continuing functioning and when special mechanical and electrical inspection in accordance with Section 4-211 is provided.

No delegation to or employment or retention of others shall be construed as relieving the architect, structural engineer or civil engineer in general responsible charge of his/her rights, duties and responsibilities under Section 16015 of the Act and Section 4-217 of these regulations.

(b) **Assumption of responsibility.** The architect, structural engineer or civil engineer who submits for approval plans and specifications for any project or any portion of any project

which have been prepared by others shall assume responsibility for the safety of design of the completed construction and for the interpretation of and any necessary amplification of the plans and specifications of the project. He/she shall stamp and sign all plans submitted for approval to indicate his/her assumption of responsibility or may in lieu thereof, stamp and sign, and submit plans prepared under his/her own charge. (See Section 4-210 for other signatures.) When an architect, structural engineer or civil engineer accepts the responsibility for completion of a project or a portion of a project relinquished by another, that architect, structural engineer or civil engineer thereby assumes responsibility as follows:

1. If the relinquishment occurs prior to the completion of the design documents, all responsibility shall be assumed. [See Section 4-225 (c) for the procedure.]
2. If the relinquishment occurs after the design drawings and specifications have been completed and approved by the enforcement agency, the assuming architect or registered engineer shall be responsible for the construction of the project in accordance with the design of the relinquishing architect or engineer. The assuming architect or registered engineer shall assume responsibility for the interpretation of and any necessary amplification of the plans and specifications and shall stamp and sign any such documents prepared for that purpose.

(c) **Acceptance of responsibility.** The assumption of general responsible charge or of delegated responsibility shall be clearly outlined, accepted and approved by the parties concerned including the owner. The enforcement agency shall be notified when any change is made in the individuals in general responsible charge or delegated responsible charge.

Form DSA-1, Application for Approval of Plans and Specifications, provides for the delegation of responsibility, but for unusual cases, or for changes in responsibility taking place after the plans have been submitted for approval, the delegation of responsibility, acceptances and approvals thereof, shall be submitted in letter form, which shall include an indication that the owner has been notified.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16011 and 16015.

4-226. Alternates in general responsible charge or delegated responsible charge. Alternates may be named on Form DSA-1, Application for Approval of Plans and Specifications, or in letter form. Letter forms shall be submitted to DSA prior to performance of work by the alternate and shall include an indication that the owner has been notified.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16015.

4-227. Estimate of cost. Estimates of cost shall be based on the cost of construction prevailing at the time the plans and specifications for the project are submitted to DSA. The estimated cost of a project shall be increased as necessary to include the estimated cost of every alternate building or portion thereof shown on the plans and specifications as if each alternate building and portion were to be constructed separately and simultaneously.

When a contract amount, or the cumulative total of two or more contract amounts, exceeds the estimated cost by more than 30 percent, the estimated cost shall be revised. An additional fee based on the contract amount shall be paid before proceeding with the work. When the actual cost of constructing all the work shown on the approved plans is less than 70 percent of the estimated cost, a refund of overpaid fees may be claimed. (See Section 4-232 for actual cost.)

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009 and 16011.

4-228. Procedure for approval of application and voidance of application.

(a) **General.** After DSA has completed its review of the documents submitted with the application, the checked prints of the plans and specifications with the requests for corrections and/or additional information noted thereon shall be returned to the responsible architect or registered engineer. When plans and/or specifications require extensive corrections, a corrected set of prints of the plans and specifications shall be submitted for review if requested by DSA.

When the requested corrections have been made and/or the additional information as requested has been provided by the responsible architect or registered engineer, an employee representative of the architect or registered engineer shall return the check set of plans and specifications along with the original plan tracings, the corrected specification pages and specification master cover sheet to DSA for backchecking. The backcheck is a comparison of the corrected plans and specifications with the check set of plans and specifications and shall be accomplished either by a conference at the DSA office between the architect or registered engineer or his/her employee representative and the checking engineer or by mail in the case of minor corrections to which all parties have agreed.

Changes in plans and specifications, other than changes necessary for correction, made after submission for approval shall be brought to the attention of DSA in writing or by submission of revised plans identifying those changes clearly at the time of back-checking. Failure to give such notice may result in the voidance of any subsequent approval given to the plans and specifications.

All requested corrections shall be made, additional requested information furnished or original designs justified and a list of materials to be tested and special inspections to be made shall be supplied to DSA at the time of backcheck. When DSA deems that the corrected plans and specifications comply with these regulations and all parts of Title 24, CCR, that pertain to essential services building construction, DSA shall place its stamp of identification on the reproducible sheets of drawings and master cover sheet of the specifications. This stamp is affixed for purposes of identification only and shall not be construed as authorization to let the construction contracts.

One set of prints of the stamped plans and specifications shall be submitted to DSA. The submittal of the stamped prints of the plans and specifications is required before DSA will issue the written notice of approval of the application.

(b) **Approval of the application.** DSA shall issue to the owner of the essential services building a letter approving the application for the project upon receipt of the stamped copies of the approved plans and specifications. This letter shall con-

stitute the approval of drawings and specifications as required by Section 16016 of the Health and Safety Code. No contract for construction shall be let or approved by the owner of the essential services building and no monies shall be spent for construction work on an essential services building project until this approval in writing has been had and obtained.

DSA will retain one set of the stamped plans and specifications and other pertinent project information in its files as a permanent record of the compliance of the approved project documents.

(c) **Voidance of the application.** Any change, erasure, alteration or modification of any plans or specifications bearing the identification stamp of DSA may result in voidance of the approval of the application. However, the "written approval of plans" may be extended by DSA to include revised plans and specifications after documents are submitted for review and approved. (See Section 4-233 for revised plans and Section 4-215 for addenda and change orders.)

The procedures leading to written approval of plans shall be carried to conclusion without suspension or unnecessary delay. The application shall be void where either (1) prints from corrected plans or corrected original plans are not filed for backcheck and the backcheck is not completed within six months after the date of return of the checked plans to the architect or registered engineer, or (2) prints of the stamped plans and one set of the stamped specifications are not submitted to DSA files within two months after the date shown on the stamp of identification.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009, 16011 and 16013.

4-229. Deferred approvals. Where a portion of the construction cannot be adequately detailed on the approved plans because of variations in product design and manufacture, the approval of plans for such portion, when specifically accepted by the enforcement agency, may be deferred until the material suppliers are selected provided the following conditions are met:

(a) The project plans clearly indicate that a deferred approval by the enforcement agency prior to the fabrication and installation is required for the indicated portions of the work.

(b) The project plans and specifications adequately describe the performance and loading criteria for such work.

(c) An architect or registered engineer stamps and signs the plans and specifications for the deferred approval items. The architect or engineer in general responsible charge of the design of the project shall submit the plans and specifications for the deferred approval item to the enforcement agency, with notation indicating that the deferred approval documents have been found to be in general conformance with the design of the building.

(d) Deferred approval shall not apply to the requirements of Section 4-210 (b), (c) and (d) with regard to the vertical and lateral load resisting systems and elements of the building. The plans, details, specifications and computations for the structural portions of the building shall provide sufficient information to permit a complete review when the project is submitted.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009, 16011, 16012, 16013 and 16014.

4-230. Withdrawal of application. If a request is made by the owner of an essential services building for cancellation of the application and return of the plans and specifications, together with the fee paid, it will be granted only when the review of plans and specifications has not actually started. If the review of the plans and specifications has started, 30 percent of the paid fee will be refunded or applied to a new application for the same project.

No refund will be allowed for projects upon which only the minimum fee has been paid. No refund will be allowed after a contract has been let for any portion of the work except as provided in Section 4-228.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16009.

4-231. Fees. The filing fee required by DSA to accompany the submittal of project plans and specifications for essential services buildings shall be one and one-half percent (1.5%) of the first $1,000,000 of estimated cost and one and one-quarter percent (1.25%) of the excess of the estimated cost over $1,000,000 except that the minimum filing fee for any project shall be $250.

The words "filing fee" mean the fee which must accompany the application and the words "further fee" mean the fee which shall be paid to DSA if the actual cost exceeds the estimated cost by more than 5 percent.

The application for an essential services building is considered received when it, accompanied by the plans and specifications, structural design computations, site data and filing fee has been received by DSA and an application number has been assigned.

An Essential Services Building Account is hereby established in the Architecture Public Fund for the purpose of crediting the application fees paid by state agencies into the state treasury.

Authority: Health and Safety Code Sections 16022 and 16023.
Reference: Health and Safety Code Sections 16006, 16007 and 16009.

4-232. Project cost. For purposes of determining fees, both the estimated and actual costs of the project shall be the total outlay for all work included in the approved plans and specifications (exclusive of fees paid, but not recovered, for architectural engineering, inspection and testing services) regardless of whether the funds are provided by the state, local government authorities or agencies, or by private groups or individuals. In the event a building is converted to essential services building use, the cost shall include the value of the building. If work is done in portions, the actual cost shall be determined at the completion of each contract.

The estimated cost and the fee based thereon shall not be amended after plan check has started except as provided by Section 4-227 or for a permissible increase in the scope of the project. The scope of the project shall not be amended after bids for all or part of the project are opened. No portion of the fee can be returned after checking has started except as provided by Sections 4-227 and 4-230.

Actual project cost shall include all items which are normally considered to be contractor's operation costs such as owner furnished labor and materials, bond insurance and use of owner's facilities and shall not be reduced by chargebacks such as those for testing, inspection or overrun of contract time. All fees and/or reimbursable charges paid the construction managers shall be included in the actual cost of construction. When the contract for the work includes items not otherwise subject to the approval of DSA and not included in the approved plans and specifications, the actual cost shall include this work unless such costs are segregated bid items or by separately priced items of change orders, or by certified copy of a subcontractor's bid. Such segregation shall not be made by contract price breakdown or estimates.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Sections 16009 and 16011.

4-233. Revisions of plans and specifications.

(a) **General.** No additional fee is charged upon submission of revisions to the approved plans and specifications, provided that the entire matter is actually one transaction having to do with the same essential services building and the revisions do not require substantial review for safety of design. If the original plans are abandoned and the plans and specifications submitted in lieu thereof are in fact for a new project rather than an identical building or where a modified set of plans is for an essentially different structural concept, it is necessary that a new application be filed and fee paid. This is regardless of the fact that the building may have the same name, be of the same general size and be situated at the same location as the essential services building for which the original application was submitted.

(b) **Addenda.** Changes or alterations of the approved plans or specifications prior to letting a construction contract for the work involved shall be made by means of addenda. Addenda shall be stamped and signed by the architect or registered engineer in general responsible charge of preparation of the plans and specifications, and by the architect or registered engineer delegated responsibility for the portion affected by the addenda. Addenda shall be submitted to DSA for review and approval and as such become part of the approved contract documents.

(c) **Change orders.** Changes or alterations of the approved plans or specifications after a contract for the work has been let shall be made by means of change orders. Change orders shall state the reason for the change, indicate the change in contract cost, if any, and shall be accompanied by supplementary drawings and calculations where necessary. All change orders shall be stamped and signed by the architect or registered engineer in general responsible charge of the work of construction of the project, and by the architect or registered engineer delegated responsibility for observation of the portion of the work of construction affected by the change order, and shall bear the signature of the authorized representative of the owner. Change orders shall be submitted to DSA for review and approval and as such become part of the approved contract documents.

To avoid unnecessary delays in the completion of the work, the enforcement agency, at its discretion, may extend tentative verbal approval of proposed change order items upon receipt of sufficient information from the architect or registered engineer in general responsible charge to permit the enforcement agency to make a reasonable judgment on those items. At the earliest possible date subsequent to the tentative approval, the architect or registered engineer in general responsible charge shall submit to the enforcement agency for approval a formal completed change order covering those items given tentative verbal approval.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16009.

4-234. Billing for further fees. The owner shall be billed for further fees upon completion of the project or portion thereof if fee is due. Claims for refunds of five dollars or less due to errors in cost reporting or fee computation shall be made within six months from the date of filing.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16009.

4-235. Time of beginning construction and partial construction. Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced, and no contract shall be let until the owner has applied for and obtained from DSA the required written approval of plans and specifications. Construction of all work shown in the approved plans and specifications shall be commenced within one year after the approval of the application; otherwise the approval of the part not commenced shall be void unless DSA has been notified and an extension of the approval has been granted. DSA may require that the plans and specifications be revised to meet its current regulations before a renewal of the voided approval is granted. Renewal shall not be granted after a period of four years beyond the date of the application approval.

State agencies may complete all work or proceed with construction of any part of the work included in the approved plans and specifications with the intent of completing the work later.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. DSA shall be notified whenever work is being carried on and failure to give such notice may result in voidance of the approval of the plans and specifications.

An uncompleted building shall not be construed as having been constructed under the provisions of the Essential Services Building Seismic Safety Act.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16016.

4-236. Notice of start of construction. The architect or registered engineer responsible for the project shall give DSA written notification before construction is to be started. As soon as a contract has been let, the architect or registered engineer shall furnish to DSA on Form DSA-102, Contract Information, the name of the contractor, the contract price and the date of starting of construction. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

Authority: Health and Safety Code Section 16022.

Reference: Health and Safety Code Section 16016.

4-237. Notice of suspension of construction. DSA shall be notified by the project inspector when (1) the construction is suspended for more than two weeks or (2) the construction is suspended or abandoned for any reason for a continuous period of one year following its commencement at which time the approval of DSA becomes void. DSA may reinstate the approval upon the request of the owner.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16009.

4-237.1 Stop work order.

(a) Whenever DSA finds any construction work being performed in a manner contrary to the provisions of this code and which would compromise the structural integrity of the building, the Department of General Services, State of California, is authorized to issue a stop work order.

(b) The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

(c) Any person who continues working the cited work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16017.5.

4-238. Application for approval of project inspectors, assistant inspectors and special inspectors. For each essential services building project, an Inspector's Qualification Record, Form DSA-5, shall be submitted for the proposed project inspector, a proposed assistant inspector, and may be required by DSA to be submitted for a proposed special inspector. The proposed project inspector and any proposed assistant inspector shall be interviewed by the architect or registered engineer in general responsible charge of the project to determine his/her qualifications. The architect or registered engineer shall recommend to DSA the approval of the inspector based upon his/her determination of the competency of the candidate to perform the inspection work.

Form DSA-5 for the proposed inspector, with the signatures of the architect or registered engineer and the owner, shall be submitted to DSA for review and approval. In addition to the information supplied on the qualification record, DSA may require a personal interview with the proposed inspector which may include oral and written examinations concerning inspection and testing procedures.

The submittal of the Inspector's Qualification Record for the project inspector shall be made a minimum of 10 days prior to the start of construction on the project. The submittal of the Inspector's Qualification Record for an assistant inspector, or when required for a special inspector, shall be made a minimum of 10 days prior to the use of the assistant inspector or special inspector on the project. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

Authority: Health and Safety Code Sections 16017 and 16022.
Reference: Health and Safety Code Sections 16017 and 16021.

4-239. Tests. In addition to the requirements of Section 4-213, Article 1 of these regulations, the following provisions shall apply:

(a) **Performance of tests.** The owner, with the recommendation of the architect or registered engineer shall select a qualified testing laboratory to conduct the tests. Sampling, preparation of samples and tests shall be in accordance with the standards as provided in the approved plans and specifications and in the applicable building regulations. Where a sample has failed to pass the required tests, the architect or registered engineer, subject to the approval of the enforcement agency, may permit retest of the sampled material.

(b) **Payments.** The owner shall pay for all tests. When in the opinion of the architect or registered engineer additional tests are required because of the manner in which the contractor executes his work, such tests shall be paid for by the owner but the amount paid may be collected from the contractor. Examples of such tests are: Tests of materials substituted for previously approved materials, retests made necessary by the failure of materials to comply with the requirements of the specifications and load tests necessary because certain portions of the structure have not fully met specification or plan requirements.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009, 16020 and 16021.

4-240. Required filing of verified reports. Project inspectors, approved special inspectors and contractors shall file verified reports on Form DSA-6. Architects and engineers shall file verified reports on Form DSA-6A/E. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

Verified reports shall be filed with DSA as follows:

(a) By each contractor having a contract with the owner, at the completion of the contract.

(b) By the architect, registered engineers, project inspector and approved special inspectors at the completion of the essential services building.

(c) By the architect, registered engineers, project inspector and contractor at the suspension of all work for a period of more than one month.

(d) By the architect, registered engineer, project inspector, approved special inspector or contractor whose services in connection with the project have been terminated for any reason.

(e) At any time a verified report is requested by DSA.

Authority: Health and Safety Code Sections 16020, 16021 and 16022.
Reference: Health and Safety Code Sections 16020, 16021 and 16022.

4-241. Project inspector's semimonthly reports. In addition to the verified reports required in Section 4-214, the project inspector shall make semimonthly reports of the progress of construction to the architect or registered engineer in general responsible charge. A copy of each such report shall be sent to the owner, the architect or engineer in general responsible charge and DSA. Semimonthly reports shall state the name, location and owner of the essential services building and shall

contain the application number and file number of the project for identification purposes. The reports shall include a list of official visitors to the project and whom they represent, a brief statement of the work done, instructions received from the architect or registered engineer during the period covered by the report and pertinent information regarding any unusual conditions or questions that may have arisen at the job. Forms are not provided by DSA for semimonthly reports. Failure to comply with this section will be cause for withdrawal of the approval of the project inspector.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16017.

4-242. Notifications by the project inspector. The project inspector shall notify DSA at the following times:

(a) When construction work on the project is started, or restarted, if previously suspended per Item (d) below.

(b) At least 48 hours in advance of the time when foundation trenches will be complete and ready for footing forms.

(c) At least 48 hours in advance of the first placement of foundation concrete and 24 hours in advance of any subsequent and significant concrete placement.

(d) When all work on the project is suspended for a period of more than two weeks.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16017.

ARTICLE 3
LOCAL BUILDINGS

4-243. General.

(a) The provisions of Article 1 and Article 3 of these regulations shall apply to essential services buildings owned or leased by a city, city and county or county or a special fire district within these jurisdictions. The Division of the State Architect shall observe the implementation and administration of the provisions of the Essential Services Buildings Seismic Safety Act and these regulations pertaining to local jurisdictions under the authority granted in the Act.

(b) Local jurisdictions shall establish such administrative procedures as they deem necessary and proper for the enforcement of the provisions of the Act so long as those procedures do not conflict with the requirements of Articles 1 and 3 of these regulations. The enforcement of these regulations is the responsibility of an authorized official of the local enforcement agency.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16001.

4-244. Approval of drawings and specifications.

(a) The required written approval of drawings and specifications may consist of either a building permit or other document as established by the enforcing agency.

(b) Written notification by the local enforcement agency to DSA shall be required when the written approval of the drawings and specifications is issued by the local enforcement agency. The written notification shall contain a project name and location for the essential services building, the name of the architect or registered engineer in general responsible charge of the work, the estimated cost of the project, the name of the qualified plan reviewer (the licensed architect or registered engineer responsible for the design review) and if available the name of the project inspector. The written notification shall also include a statement signed by an official of the enforcement agency that the plans and specifications and the review thereof has been accomplished in compliance with the provisions of the Act and of these regulations.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16001 and 16011.

4-245. Voidance of application. Any change, erasure, alteration or modification of any plans or specifications bearing the identification or approval stamp of the enforcement agency may result in voidance of the approval of the application. However, the "written approval of the plans" may be extended by the enforcement agency to include revised plans and specifications after documents are submitted for review and approved.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Sections 16009, 16011 and 16013.

4-246. Time of beginning of construction and partial construction. Construction work whether for a new essential services building, or for a reconstruction, alteration or addition project for an essential services building, shall not be commenced nor shall any contract be let until the owner has applied for and obtained from the enforcement agency the required written approval of plans and specifications.

All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications. The enforcement agency shall be notified whenever work is being carried on and failure to give such notice may result in voidance of the approval of the plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of the Essential Services Buildings Seismic Safety Act.

Authority: Health and Safety Code Section 16002.
Reference: Health and Safety Code Section 16016.

4-247. Notice of start of construction. The architect or registered engineer responsible for the project shall give written notification to the enforcement agency before construction is to be started. The architect or registered engineer shall furnish the name of the contractor, the contract price and the date of starting of construction.

Authority: Health and Safety Code Section 16022.
Reference: Health and Safety Code Section 16016.

4-248. Approval of the project inspector, assistant inspector and special inspectors by the enforcement agency.

(a) The enforcement agency shall review, for each individual project, the qualifications of the project inspector, any assistant inspector, and special inspectors proposed for an essential services buildings projects to determine the inspector's competency to do the inspection required for that particular project. The qualification review shall include, for the project inspector and any assistant inspector, an appraisal of the candidate's education and experience and a personal interview which may

include a written examination if deemed appropriate by the enforcement agency.

(b) The approval of the project inspector by the enforcement agency shall include information to the project inspector of the "personal knowledge" provisions of the Act and of the additional requirement that the project inspector shall not assume other duties which would preclude the inspector from obtaining personal knowledge required of all work of construction.

(c) Representatives of the enforcement agency shall from time to time visit the construction site to observe the work of construction and to monitor the performance of the project inspector. The construction work is subject to any inspections required by the enforcement agency.

Authority: Health and Safety Code Sections 16017 and 16022.
Reference: Health and Safety Code Sections 16017 and 16021.

4-249. Verified reports. The verified reports required by the Act to be filed by any architects, engineers, inspectors and contractors having responsibility for all or any portion of the construction work of the project shall be filed on a form prescribed by the enforcement agency. Original manual signatures of the architect, engineer, inspector and contractor are required on the verified report. Refer to Section 4-214 of these regulations for verified report requirements.

Authority: Health and Safety Code Sections 16020, 16021 and 16022.
Reference: Health and Safety Code Sections 16020 and 16021.

GROUP 1

SAFETY OF CONSTRUCTION OF PUBLIC SCHOOLS

ARTICLE 1
GENERAL PROVISIONS

4-301. Purpose. School buildings constructed pursuant to these regulations are expected to resist earthquake forces generated by major earthquakes of the intensity and severity of the strongest experienced in California without catastrophic collapse, but may experience some reparable architectural or structural damage.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17280 and 81130, inclusive.
HISTORY:

1. Repealer of Group 1, Articles 1-6 (§§ 1-80) and new Group 1, Articles 1-5 (§§ 1-6, 8, 10, 10.5, 11-14, 16-26, 26.1, 26.2, 26.5-26.9, 27-40, 50, 51, 60, 61, 62, 80 and Appendix), filed 11-1-66; effective thirtieth day thereafter (Register 66, No. 38). For history of former sections see Registers 53, Nos. 15, 18; 54, No. 24; 55, No. 12; 56, No. 10; 59, No. 14; 60, Nos. 8, 16; 61, No. 19; 64, No. 13.
2. Amendment filed 6-29-76 as an emergency; designated effective 7-1-76 (Register 76, No. 27).
3. Certificate of Compliance filed 10-15-76 (Register 76, No. 42).
4. Amendment of NOTE filed 6-19-79; effective thirtieth day thereafter (Register 79, No. 25).
5. Repealer filed 9-24-82 by OAL pursuant to Government Code Section 11349.7 (j); effective thirtieth day thereafter (Register 82, No. 39).
6. *Repealer of Group 1 (Articles 1-5, Sections 2-80, not consecutive) and new Group 1 (Articles 1-9, Sections 1-55, not consecutive and Appendix) filed 9-8-83; effective 9-15-83 pursuant to Government Code Section 11346.2 (d) (Register 83, No. 40). For prior history, see Registers 79, No. 25; 77, No. 40; 76, No. 42; 76, No. 27; and 74, No. 38.
7. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-301, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-302. Scope.

(a) **General.** Part 2, Title 24, California Code of Regulations (C.C.R.) designates the structural building regulations that shall apply to the design, construction, reconstruction, rehabilitation, alteration of or addition to any school building as defined in Sections 17283 and 81131 of the Education Code. The term "school building" shall include all buildings, structures, appurtenances and related systems or facilities as defined in Section 4-314.

These regulations establish reasonable standards and minimum requirements for the structural integrity of public school buildings to resist, insofar as practicable, the forces of gravity, wind and earthquake for the protection of life and property.

The design and construction of the mechanical and electrical systems in school buildings shall conform to the applicable building regulations in Title 24, C.C.R.

Further, the design and construction of school buildings shall comply with the regulations adopted by the Division of the State Architect/Access Compliance (DSA-AC) and the Office of the California State Fire Marshal for the particular occupancies concerned. (See Title 24, C.C.R.)

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17280 and 81130.

(b) **Short term temporary buildings.** Installation of temporary school buildings, used or designed to be used for school purposes following disasters such as earthquakes, fires and floods or during modernization projects, for which repairs are in progress, require approval by DSA. DSA has determined that compliance with the strict letter of the regulations is impractical in these circumstances. The modifications to the regulations granted by DSA are as indicated here and are recorded and entered in the files of DSA in accordance with Section 4-304.

DSA may grant "Temporary Certification" to temporary buildings that meet all the requirements of regulations with the following modifications to the regulations and limitations:

1. "Temporary Certification" is for 24 months.
2. The building is a one-story relocatable building no greater than 2,160 square feet in area.
3. Documentation is provided indicating that the building was designed and constructed according to the 1976 or later edition of the *Uniform Building Code* published by the International Conference of Building Officials. The date of construction of each building module shall be provided.
4. Quality control procedures acceptable to DSA for the construction of the building to ensure compliance with the approved plans and specifications are provided.
5. A report is provided to show that the building has not sustained structural deterioration, been modified without enforcing agency approval and has anchorage and bracing of overhead nonstructural elements that are acceptable to DSA.
6. A foundation system is provided that has been accepted by DSA.
7. All construction, except for the building superstructure, is to be inspected by a DSA-certified project inspector for conformance with the drawings provided by the architect. The inspector will submit a completed checklist for each campus and will submit said checklist with the final verified report.
8. The architect or structural engineer in general responsible charge shall prepare site plans. DSA may make such review of the site plans and other submitted documents as in its judgment is necessary for the enforcement of these regulations.

Temporary buildings or structures such as sheds, canopies and fences used for the protection of the public around and in

* The reorganization of Group 1 is printed as a repealer and adoption for clarity.

conjunction with construction work may be erected by special application for approval from DSA for a limited period of time.

Temporary buildings or structures are subject to the regulations indicated in Section 4-302 (a), except as modified by DSA.

When the construction has been completed in accordance with this section, DSA will issue a temporary certificate of compliance in accordance with Section 4-339. Temporary buildings or structures shall be completely removed upon the expiration of the time limit stated in the temporary certification letter approving the special application for approval.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Section 17292.

HISTORY:

1. Editorial correction of printing error (Register 83, No. 45).
2. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-302, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.
3. (DSA/SS 2/95) Regular order by the Division of the State Architect/Structural Safety Section to amend Section 4-302 (b). Filed with the Secretary of State on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

4-303. Delegation of authority. All powers, duties, responsibilities pursuant to carrying out the provisions of the Field Act vested by law in the Department of General Services have been delegated by the Department to the State Architect.

Authority: Education Code Sections 17310 and 81142.

Reference: Government Code Section 14607.

4-304. Alternate materials and methods of construction and modifications. The provisions of these regulations are not intended to prevent the use of any material or method of construction not specifically prescribed by these regulations, provided any alternate has been approved and its use authorized by DSA.

DSA may approve any such alternate, provided DSA finds that the proposed design is satisfactory and complies with the provisions of these regulations and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in these regulations in suitability, strength, effectiveness, fire resistance, durability, safety and sanitation.

DSA shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting acceptance of an alternate shall be recorded and entered in the files of DSA.

When there are practical difficulties involved in carrying out the provisions of these regulations, DSA may grant modifications for individual cases. DSA shall first find that a special individual reason makes the strict letter of these regulations impractical and that the modification is in conformance with the intent and purpose of these regulations and that such modification does not lessen any fire protection requirements or any degree of structural integrity. The details of any action granting modifications shall be recorded and entered in the files of DSA.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280 and 81130.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-304, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-305. Application of building standards. Building standards applicable to public school buildings are set forth in Parts 2, 3, 4, 5, 6, 7 and 12, Title 24, C.C.R., and have been adopted as minimum design and construction standards upon which to base the approval of plans and specifications. These regulations shall not be construed to prevent the use of higher design standards nor to restrict the use of new or innovative design or construction techniques.

Where the designer desires to use innovative design or construction techniques not addressed in these regulations it shall be necessary to submit for review and approval information including computations, test data and recommendations covering the design in question. The designer shall confer with DSA concerning the applicability of these innovative design or construction techniques to school building construction prior to the submittal of plans and specifications.

DSA must be satisfied that the degree of safety achieved by these innovative design and construction techniques is at least equivalent to that achieved by the regulations. This requirement shall apply to all buildings proposed for public school use for educational purposes as defined in these regulations. The proposed use of archaic building materials and structural systems such as those desired to be retained in buildings which have been designated as historically important shall be included in this provision. The determination of the equivalency of the degree of safety shall be the responsibility of DSA.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280 and 81130.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-305, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-306. Approval of new school buildings, rehabilitation of school buildings and additions to school buildings. Plans and specifications for any new school building or the rehabilitation of or addition to any school building, regardless of cost, shall be submitted to DSA for approval in accordance with Section 4-315.

All new construction work which is part of an addition project shall comply with currently effective regulations. Existing school buildings for which an addition project is proposed shall be retrofitted as required by Section 4-309 (c).

Before the board may award a contract or commence construction work for the rehabilitation of a structure already owned (including those pre-1933 buildings not retrofitted or subsequently abandoned for school use under the provisions of the Garrison Act), or an existing building which has been purchased or leased, into a school building, the board shall submit application and plans of the building to DSA for approval. The plans shall provide for the retrofit necessary for full compliance with the requirements of currently effective regulations.

Refer to Section 4-307 for rehabilitation of an existing nonconforming building for use as a school building.

Prior to submittal of project application for the structural rehabilitation of an existing school building, the owner shall submit to DSA a pre-application for the rehabilitation project, fees in accordance with Section 4-326, and an Evaluation and Design Criteria Report for approval. The report shall propose the methodologies for evaluation and design, and determination of acceptance criteria for nonconforming construction, and shall propose the material testing and condition assessment requirements for the rehabilitation. The approved Evaluation and Design Criteria Report establishes the criteria for the evaluation and design to be used by the project design professionals and the material testing and condition assessment requirements.

The relocation or moving of an existing school building within the same school district or from one school district to another regardless of cost requires approval by DSA. (See Section 4-314.)

The provisions of this section shall not apply to a "temporary-use building." (See Section 4-314 for definitions of "new school building" and "temporary-use building.")

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280 and 81130.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-306, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-307. Rehabilitation of an existing nonconforming building for use as a school building.

(a) An existing nonconforming building rehabilitated for use as a school building is considered, for the purpose of the application of Title 24, to be a new school building. Plans and specifications for rehabilitation of any existing nonconforming building, or portion thereof, for use as a school building shall provide for the retrofit necessary for compliance with the health and safety standards contained in Title 24, C. C. R., currently effective edition. Existing materials or systems not specifically prescribed in current safety standards are permitted to be evaluated for equivalency and approved in accordance with Section 4-304. The seismic evaluation and retrofit design shall comply with the provisions of Sections 3417 through 3423, Part 2, Title 24, C. C. R.

(b) A site, which is currently not an existing school site, on which one or more existing nonconforming buildings are rehabilitated for use as school building(s) is considered to be a new school site for the purpose of the application of Title 24. Any building on a new school site which is not rehabilitated and approved as a school building shall not be used for school purposes and shall be subject to the provisions of Section 4-310.

(c) Prior to submittal of a project application for the structural rehabilitation of an existing nonconforming building, the owner shall submit to DSA a pre-application for the rehabilitation project, fees in accordance with Section 4-326, and an Evaluation and Design Criteria Report for approval. The report shall propose the methodologies for evaluation and design, and determination of acceptance criteria for nonconforming construction; and shall propose the material testing and condition assessment requirements for the rehabilitation. The approved Evaluation and Design Criteria Report establishes the criteria for the evaluation and design to be used by the project design professionals, and the material testing and condition assessment requirements.

4-308. Reconstruction or alterations projects not in excess of $25,000 in cost. Projects involving only reconstruction or alterations whose estimated costs do not exceed $25,000 do not require approval by DSA, but such approval can be obtained at the request of the school board and by compliance with these regulations. The cost of work classified as maintenance as defined in Section 4-314 shall not be considered for purposes of this section. The regulations of the Division of the State Architect/Access Compliance and of the California State Fire Marshal may apply to any project, including maintenance, regardless of cost. See Section 4-302.

In authorizing and completing the design and construction of projects with an estimated cost below $25,000 as described in this section, the school board assumes responsibility for employing an architect or a registered engineer to prepare the plans and specifications and for adequate inspection of the materials and work of construction to ensure compliance with the currently effective provisions of Title 24, C.C.R.

The dollar amount cited in this section shall be increased on an annual basis, according to an inflationary index governing construction costs that is selected and recognized by the Division of the State Architect. This annually adjusted dollar amount shall be published by DSA and made available to school boards and the public.

School construction projects shall not be subdivided for the purpose of evading the cost limitations of this section.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17295, 81130 and 81133.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-308, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.
2. (DSA/SS 9/96) 1996 Annual Code Adoption Cycle will amend Section 4-308, of Part 1, Title 24, C.C.R. Filed with the Secretary of State on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

4-309. Reconstruction or alteration projects in excess of $25,000 in cost.

(a) **General.** Plans and specifications for any reconstruction or alteration project exceeding $25,000 in cost shall be submitted to DSA for approval in accordance with Section 4-315, except as provided within this section. The cost of work classified as maintenance as defined in Section 4-314 shall not be considered for purposes of this section. When the estimated cost of a reconstruction or alteration project exceeds $25,000 but does not exceed $100,000, and a licensed structural engineer determines that the project does not include any work of a structural nature, approval of the project plans and specifications by DSA is not required, provided the following three items are completed:

1. The structural engineer shall submit a written statement to DSA, indicating that the project does not contain any work of a structural nature.
2. The design professional in general responsible charge of the project shall certify, in writing, that the plans and specifications for the project meet any applicable fire and life-safety standards, and do not specify any work of construction that is regulated by the accessibility standards of Title 24. This certification shall be submitted to DSA, and shall bear the stamp and signature of the design professional.
3. Within 10 days of the completion of the project, a DSA-certified project inspector shall sign and submit a verified report on Form DSA-999 to DSA, indicating that the project was completed in conformance with the plans and specifications.

The dollar amount cited in this section shall be increased on an annual basis, according to an inflationary index governing construction costs that is selected and recognized by the Division of the State Architect. This annually adjusted dollar amount shall be published by DSA and made available to school boards and the public.

School construction projects shall not be subdivided for the purpose of evading the cost limitations of this section.

All new construction work, which is part of a reconstruction or alteration project shall comply with currently effective regulations.

Exception: Fire damage repair may be accomplished utilizing the approved plans and specifications for the original construction work. All regulations and standards in effect at the time of approval shall be complied with except that the testing and inspection requirements of current regulations shall apply to the reconstruction work. Minor modifications to the original approved plans may be made, subject to the approval of DSA, provided that they do not reduce the structural capacity of the building.

Structural modifications to the existing structural system not exceeding the limits defined in Section 4-309 (c) 2 are permitted to be evaluated and designed in compliance with the wind and seismic provisions contained in Part 2, Title 24 that are applicable to new buildings. Alternatively, the seismic provisions for voluntary lateral-force resisting system modifications contained in Section 3417.11, Part 2, Title 24, are permitted to be used, and wind forces are permitted to be determined in accordance with the Simplified Procedure in Section 6.4 of ASCE 7.

(b) **Existing noncomplying, nonstructural elements.** Existing noncomplying, nonstructural elements discovered during the design or construction of a reconstruction, alteration or addition to an existing complying school building and directly affected by the work of construction shall be corrected to comply with the bracing and anchorage requirements of currently effective regulations.

(c) **Required structural rehabilitation.** Existing school buildings for which a reconstruction, alteration or addition project is proposed shall be evaluated, and retrofitted as required to comply with currently effective regulations applicable to the rehabilitation of structural systems per Section 4-306, including wind and seismic force requirements, when either of the following conditions occur:

1. When the cost of the reconstruction, alteration, or addition project exceeds $25,000 and 50 percent of the replacement value of the existing building. Maintenance work and air-conditioning equipment and insulation materials costs need not be included in the percentage of replacement value calculation. For the purposes of this section, the cost of the reconstruction, alteration or addition project shall not include the cost of structural rehabilitation.
2. When the cost of the reconstruction, alterations or addition project exceeds $25,000 but does not exceed 50 percent of the replacement value of the existing building and the proposed modifications, either:

   A. Increase the effective seismic weight or wind force in any story by more than 10 percent, or;

   B. Decrease the design capacity of any existing structural component by more than 5 percent, unless the component has the capacity to resist the retrofit design forces.

If the base shear capacity has been increased since the original construction, the percent change in base shear is permitted to be calculated relative to the increased capacity.

(d) **Voluntary lateral force resisting system modifications.** Alterations to existing structural components or additions of new structural components that do not exceed the limitations of Section 4-309(c)2 and are initiated for the purpose of increasing the strength or stiffness of the lateral force resisting system of an existing structure are permitted to be evaluated and designed in accordance with Section 3417.11 of Part 2, Title 24, for voluntary lateral-force resisting system modifications.

(e) When structural damage due to an earthquake is repaired, all portions of the structure associated to this damage shall be retrofitted to comply with currently effective regulations.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17295, 81130 and 81133.

HISTORY:

1. New section filed 2-28-86; effective 30th day thereafter (Register 86, No. 9).
2. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-309, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-310. School garages, warehouses, storage and similar buildings, dwellings for employees and miscellaneous structures. The Act does not apply to buildings or structures constructed by a school district for the purpose of, and used solely for housing, buses and minor mechanical equipment or for nonschool use where such buildings or structures do not provide facilities for either pupils or teachers and are not intended to be entered by them as such for school purposes. Similarly, the Act does not apply to dwellings for employees or to district-wide administrative buildings on sites separate from school sites, which are not to be used or entered by pupils or teachers, for school purposes.

DSA approval for accessibility is required in accordance with Section 5-101. Approvals from other agencies may also be required. Such buildings or structures shall not be used for school purposes. It shall be the responsibility of the school board to take all necessary measures and precautions to prevent such use and to prevent injuries to pupils or teachers on school grounds as a result of collapse of such buildings or structures. Any such building excluded from the provisions of these regulations shall be posted with a sign pursuant to Sections 17368 and 81165 of the Education Code.

In authorizing and completing the design and construction of district-owned buildings as described in this section, the school board assumes responsibility for employing appropriately licensed architects or registered engineers to prepare the plans and specifications and for adequate inspection of the materials and work of construction to ensure compliance with the provisions of Parts 2, 3, 4, 5, 6, 7 and 12, Title 24, C.C.R., as adopted by the Building Standards Commission.

For these cases DSA requires that a resolution be passed by the school board stating that the building or structure shall not be used for school purposes and that no pupils or teachers, as such, will be permitted to use or enter the said building for said purposes or be subjected to a hazard resulting from its collapse. A copy of the resolution shall be submitted to DSA.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17368, 81130 and 81165.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-310, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-311. Condemnation. DSA has no authority under the Act to order the closing of any school building. However, if requested by the school district or on DSA's own volition, DSA shall examine and report on the safety of structural aspects of any school building that appear to be deficient. The report shall state in writing to the school board whether or not the investigated structural aspects of the building are in compliance with the code in effect at the time of construction, and shall also state whether or not the building is safe for school use. (See Sections 4-345 and 4-346.)

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17311 and 81143.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-311, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-312. Demolition. Demolition is the entire razing or destruction of a school building or a school building unit. It is not necessary to secure the approval of DSA for such demolition. It is the responsibility of the school board to notify DSA of such demolition.

Approval by DSA is required for any partial demolition of existing buildings or any demolition which is part of a reconstruction, rehabilitation, alteration or addition.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17310 and 81142.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-312, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 2
DEFINITIONS

4-313. General. The words defined in Section 4-314 shall have the meaning stated therein throughout the regulations contained in Part 1, Section 4-300, et. seq, Title 24, C.C.R.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17283, 81130, 81131 and 81529.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-313, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-314. Definitions.

ACT shall mean the Field Act, Sections 17280-17316 and 81130-81147, inclusive of the Education Code.

ADDITION as that term is used in these regulations shall mean an increase in floor area or volume of enclosed space that is structurally attached to an existing certified building by connections which are required for transmitting vertical or horizontal loads between the addition and the existing structure. An addition which is not required to be structurally attached either for its own support or for support of the existing building shall be separated as required by Part 2, Title 24, C.C.R., and shall be deemed to be the construction of a new school building as that term is used in Sections 17280 and 81130 of the Act.

ALTERATION is a change within or to an existing building. The relocation or moving of an existing certified school building is considered to be an alteration requiring filing of the plans and specifications with, and certification by, DSA.

APPROVED PLANS AND SPECIFICATIONS as used in these regulations shall mean plans, specifications, addenda, change orders and other documents which have been duly approved by DSA pursuant to Sections 17295 and 81133 of the Education Code. The plans and specifications shall be identified by a stamp bearing the name "Division of the State Architect," the application number, initials of the plan reviewers and date of stamping. The written approval as required by Section 17297, Education Code, shall not be issued until a copy of plans and specifications bearing DSA's identification stamp is on file at the Division of the State Architect.

ARCHITECT shall mean a certified architect holding a valid license under Chapter 3, Division 3, of the *California Business and Professions Code*.

CERTIFIED BUILDING shall mean a building which was constructed or reconstructed in accordance with Article 3 or 7 commencing with Sections 17280 and 81130, respectively, of the Education Code and with the regulations in effect at the time of their certification.

DIVISION OF THE STATE ARCHITECT or **DIVISION,** or initials **DSA,** shall mean the Division of the State Architect

in the Department of General Services, State of California. Approval, disapproval, orders and certificates of compliance shall be issued directly by the State Architect who shall act for the Department of General Services in carrying out the provisions of the Act.

GARRISON ACT (1939), Sections 17280–17316 and 81160–81192 of the Education Code, as amended, prescribes the actions to be taken by school board members to preclude personal liability for the continued use of unsafe school buildings.

GEOTECHNICAL ENGINEER shall mean a professional engineer holding a certificate to use the title geotechnical engineer, soil engineer or soils engineer under the law regulating the practice of civil engineering comprising Chapter 7 of Division 3, of the *California Business and Professions Code*.

INSPECTOR shall mean any person duly approved by DSA to perform construction inspection for a particular project. (See Sections 4-333 and 4-342.)

MAINTENANCE shall mean and include ordinary upkeep or repair work such as replacements in kind, repainting, replastering and reroofing. Reroofing shall be limited to one additional application and shall include an examination of the structural elements of the roof, walls, ceilings and all other elements which may have suffered deterioration from moisture resulting from roof leaks. Maintenance shall not include work, other than repainting, on structural framing nor include the replacement of large mechanical, electrical or plumbing units or systems.

NEW SCHOOL BUILDING shall mean any newly erected school building and/or existing owned, leased or purchased building converted to school use and certified by DSA.

NONCONFORMING BUILDING is a building that has not been certified by DSA as a school building.

NONSTRUCTURAL ALTERATIONS shall mean only such alterations as do not affect the structural safety of the school building and that do not change, in any manner, its structural elements.

OFFSITE LOCATION is a building designated by the governing board to be used for less than full-time instruction in educational programs which require such offsite facilities in order to fulfill the objectives of the programs. Such designated buildings shall not be located on, or adjacent to, a school site and its primary use shall be for other than public school purposes. The designation of off-site location is subject to review by DSA. (See Education Code Section 81529.)

PLANS as used in these regulations shall mean the drawings associated with the project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, ceiling plans, roof plans, cross sections, interior elevations, exterior elevations and details.

PROFESSIONAL ENGINEER as used in these regulations shall mean an engineer holding a valid certificate under Chapter 7, Division 3, of the *California Business and Professions Code*, in that branch of engineering which is applicable.

PUPILS as used in these regulations shall mean persons who are performing a required activity or entering a building by virtue of being a pupil enrolled in an elementary or secondary school district or a community college district.

RECONSTRUCTION is the repair of damage to an existing certified school building.

REGISTERED ENGINEER as used in these regulations shall mean a structural engineer or a professional engineer as defined in this section.

REHABILITATION is the retrofitting of an existing nonconforming building or a school building conforming to earlier code requirements to bring the building, or portion thereof, into conformance with the safety standards of the currently effective regulations, Parts 2, 3, 4, 5, 6, 7, 8, 9 and 12, Title 24, C. C. R.

RELOCATABLE BUILDING is any building with an integral floor structure which is capable of being readily moved. (See Education Code Section 17350.) Relocatable buildings that are to be placed on substandard foundations not complying with the requirements of Part 2, Title 24, C.C.R., require a statement from the school district stating that the durability requirements for those foundations may be waived and acknowledging the temporary nature of the foundations.

RELOCATION shall mean the physical moving of any certified building either as a single unit or in parts form its original location to a new location on the same campus or on a different campus. Relocation of a building requires the approval of DSA.

RETROFIT is the construction of any new element or system, or the alteration of any existing element or system required for the rehabilitation of the building.

SCHOOL BOARD shall mean and include district Boards of Trustees, city Boards of Education and other appropriate authorities for which any school building used or designed to be used for elementary or secondary school or community college purposes is to be constructed, reconstructed, altered or added to by the state, or by any county, city, city and county, or other political subdivision, or by any school or community college district of any kind or character within the state, or by the United States government, or any agency thereof.

SCHOOL BUILDING as defined in Sections 17283 and 81130.5 of the act is interpreted to include all structure and utility systems or facilities necessary to the complete functioning of the structures, used or designed to be used for instructional purposes, or intended to be entered by pupils or teachers for school purposes, or structures operated as school units, the failure of which would endanger pupils or teachers on school grounds or in school buildings. (See Section 4-310 for teacher residences.) "School Building" is also defined to include dwellings, including utility systems or facilities necessary to the complete functioning of the dwellings, used by pupils, teachers and school employees, that are part of a campus where the primary use is for school purposes.

The following are not considered to be school buildings but may be submitted separately or may be included in the plans and specifications for a school building project and will be checked under the provisions of the Act if submitted by the school district: one-story buildings not over 250 square feet in area when used exclusively as accessory facilities to athletic

fields (equipment storage, toilets, snack bars, ticket booths, etc.); greenhouses, barns and materials or equipment storage sheds, used exclusively for plant or animal production or protection and not used for classroom instruction (small groups of pupils and teachers may enter these structures for short periods of time); lighting poles less than 35 feet above the grade, antenna towers less than 35 feet above the grade or less than 25 feet above a building roof line, retaining walls less than 4 feet above the top of foundations and not supporting a surcharge, concrete or masonry fences less than 6 feet above adjacent grade, ballwalls or yard walls less than 6 feet above adjacent grade, signs, scoreboards or solid-clad fences less than 8 feet above adjacent grade, bleachers and grandstands five rows of seats or less above grade; playground equipment; flagpoles less than 35 feet above grade; open-mesh fences and baseball backstops; trailer coaches; and "temporary-use" buildings as defined below.

Buildings and other structures constructed by students that upon completion of construction will not be used for school purposes and will not be entered by pupils or teachers are not considered school buildings and shall not be checked under the provisions of the Act. These student-constructed buildings shall not remain at the school site more than 90 days following completion, unless the building meets all the requirements of Section 4-310. "School Building" in a complex operated by the state for correctional or forestry purposes shall include only those structures used or designed to be used for elementary or secondary school instruction or community college instruction. Living units, dining areas, administration buildings or structures used for support services in such correctional or forestry complexes shall not be considered school buildings for purposes of Field Act requirements.

STRUCTURAL ENGINEER as used in these regulations shall mean a professional engineer holding a valid certificate to use the title structural engineer under the law regulating the practice of civil engineering comprising Chapter 7 of Division 3 of the Business and Professions Code, relating to professional engineers.

TEACHERS as used in these regulations shall mean persons who are performing a required activity or entering a building by virtue of being teachers employed by an elementary or secondary school district or a community college district.

TEMPORARY-USE BUILDING is any community college building for which the intended use by the school district at the time of entering into a lease contract or agreement is not for more than three years from the date of first occupancy.

TRAILER COACH is a building that conforms to the requirements of Part 2 (commencing with Section 18000) of Division 13 of the Health and Safety Code and is not expanded or fitted together to form a unit greater than 16 feet in width and is used for special education purposes for not more than 12 students at one time.

Exception: Trailer coaches may be used for not more than 20 students at a time for driver training purposes.

WAIVER OF DURABILITY refers to a waiver, as may be requested by the school district, of certain durability requirements of Part 2, Title 24 for foundations of relocatable buildings.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17283, 17405, 81130, 81131 and 81529.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-314, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 3
APPROVAL OF DRAWINGS AND SPECIFICATIONS

4-315. Application for approval of drawings and specifications.

(a) **General.** Before awarding a contract or commencing with construction of a school building project, the school board shall submit an application to the Division of the State Architect and obtain written approval of the plans and specifications for any of the following:

1. The construction of any new school building, or rehabilitation of or addition to any existing school building. School building is defined in Section 4-314.
2. The reconstruction or alteration of an existing school building if the estimated cost exceeds $25,000. (See Section 4-308 and 4-309.)
3. The lease or purchase of any relocatable building except where occupied as a temporary-use building.

   Exception: The school board may award a contract and commence construction of a "relocatable building" of a type previously approved by DSA under emergency conditions and with concurrence by DSA. These structures shall not be placed on a school site until the plans and specifications for the site work have been approved by DSA.
4. The extension of a lease for a "temporary-use" building for more than three years from the date of first occupancy.
5. The rehabilitation of a nonschool building to use as a "school building." (See Sections 4-306 and 4-307.)

It is not necessary to secure approval for maintenance work on school buildings, in accordance with Sections 4-308 and 4-309. See Section 4-314 for the definition of "maintenance."

(b) **Filing.** A separate application shall be submitted to DSA for each school building or group of school buildings on each school site. In the event that a number of school buildings, on various and separate sites, are to be constructed from the same plans and specifications, only one application shall be required, provided that all buildings are constructed at the same time and within the same school district. The application shall be submitted on Form DSA-1, Application for Approval of Plans and Specifications. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices. The application shall contain a project name for the school building or group of buildings, the name of the architect or registered engineer in general responsible charge of the work, the names of the architects or registered engineers who have been delegated responsibility for portions of the work

(see Section 4-316), the estimated cost of the project and all such other information as is requested thereon.

(c) **Delayed filing.** In case the plans and specifications for the reconstruction or alteration of any school building have not been submitted to DSA under the assumption that the cost will not exceed $25,000, the school board shall, if the bids which are received indicate that the cost will be in excess of $25,000, delay letting a contract until such time as the plans and specifications have been submitted and the approval by DSA obtained. The contract or contracts, when made, shall be based on the duly approved plans and specifications.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17297, 17302, 81133 and 81138.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-315, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-316. Designation of responsibilities.

(a) **General responsible charge.** For every project there shall be an architect or structural engineer in general responsible charge of the preparation of the plans, specifications and observation of the work of construction, except that where plans, specifications or work of construction for alterations or repairs do not involve architectural or structural changes said plans, specifications and observation of the work of construction may be under the responsible charge of a professional engineer qualified to perform services and registered in that branch of engineering applicable to the work.

A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of general responsible charge may be made for the parts.

(b) **Delegation of responsibility.** The architect or structural engineer in general responsible charge may delegate responsibility for any portion of the work to, or may employ or retain, other architects or registered engineers. No delegation to, or employment or retention of others shall be construed as relieving the architect or structural engineer in general responsible charge of his or her rights, duties and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344 of these regulations. Whenever an engineer or architect has accepted delegation for the design of portions of the plans and specifications, that same engineer or architect shall observe the construction of the same portions of the design.

Subject to the provisions of the immediately precedent sentence, the architect or structural engineer in general responsible charge shall employ or retain, under his or her supervision, professional engineers registered in the applicable branches of engineering to design and observe the construction, including the making of verified reports (see Section 4-336), of the mechanical and electrical portions of the work, but this requirement for observation of construction may be waived when special mechanical and electrical inspection is provided in accordance with Section 4-333 (c), where the elements of the mechanical and electrical portions of the work will not be significant to the safety of the building or its occupants.

(c) **Assumption of responsibility.** The architect or registered engineer who submits for approval plans and specifications for any project or portion of a project which have been prepared by others shall assume responsibility for the safety of design of the completed construction and for the interpretation of and any necessary amplification of the plans and specifications of the project. The responsible architect or engineer shall stamp and sign all original tracings or all copies of plans submitted for approval to indicate his or her assumption of responsibility or may in lieu thereof stamp and sign and submit plans prepared under his or her own charge. [See Section 4-317 (h) for other signatures.]

When an architect or registered engineer accepts the responsibility for completion of a project or portion of a project started by another, that architect or registered engineer thereby assumes responsibility as follows:

1. If the change in responsibility occurs prior to the completion of the design documents, all responsibility shall be assumed. (See first paragraph of this subsection for procedure.)
2. If the change in responsibility occurs after the design drawings and specifications have been completed and approved by DSA, the assuming architect or registered engineer shall be responsible for the construction of the project in accordance with the design of the previous architect or engineer. The assuming architect or registered engineer shall assume responsibility for the interpretation of and any necessary amplification of the plans and specifications and shall stamp and sign any such documents prepared for that purpose.

(d) **Acceptance of responsibility.** The assumption of general responsible charge or of delegated responsibility shall be clearly outlined, accepted and approved by the parties concerned, including the school board. Form DSA-1, Application for Approval of Plans and Specifications, provides for the common conditions of delegation of responsibility; but for unusual cases, or for changes in responsibility taking place after the plans have been submitted for approval, the delegation of responsibility, acceptances and approvals thereof, shall be submitted in letter form, which shall include an indication that the school board has been notified.

(e) **Evidence of responsibility.** The stamp and signature of the architect or registered engineer on a plan, specification or other document shall be deemed evidence that full responsibility is assumed by the signatory for the work shown thereon, including also those portions of the accompanying computations, specifications or plans which pertain to such work, unless express notice of disclaimer of responsibility is given in writing to DSA prior to the approval of the plans and specifications.

(f) **Alternates.** The applicant, or the architect or registered engineer having general or delegated responsibility, may name one or more persons to act as alternate(s) for the design and/or observation of the work of construction, provided such persons are architects or registered engineers who themselves are quali-

fied under these rules and regulations to assume the responsibility assigned.

Alternates may be named on Form DSA-1, Application for Approval of Plans and Specifications, or in letter form. Letter forms shall be submitted prior to performance of work by the alternate and shall include an indication that the school board has been notified.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17302 and 81138.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-316, Part l, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-317. Plans, specifications, calculations and other data.

(a) **General.** When an application for approval of plans and specifications is filed, it shall be accompanied by three complete sets of the plans and specifications, a copy of the structural design calculations, the site data and a fee payment calculated on the estimated cost. The three complete sets of plans and specifications include the set required by Section 5-103 of Title 24, Part 1, California Code of Regulations. (See Section 4-320.)

Exception: An application for projects using the collaborative process for project review per Education Code Section 17319 or 81133.1 shall be accompanied by the filing fees per Sections 4-320 and 5-104. The deadline for submittal of completed plans, specifications and supporting documentation shall be determined by DSA in consultation with the applicant, and shall not exceed 18 months from the application date. Failure to comply with the established deadline may result in voidance of the application.

Plans and specifications which when submitted are determined by DSA to be incomplete or incorrect, shall be returned to the architect or engineer in general responsible charge with a request for compliance with these regulations before checking is started by DSA.

(b) **Plans.** Plans shall designate the use or occupancy of all parts of the school buildings and shall give such other information as may be required to indicate the nature of the work proposed and to show compliance with the act and these regulations. The plans shall be legible and sufficiently detailed and cross-referenced to show clearly the pertinent features of the construction, and shall have sufficient dimensions to be readily interpreted. Where a project includes several school buildings, the plans for each shall be drawn independently except that details common to all need not be repeated.

The architect or engineer in general responsible charge or the professional engineer delegated responsibility for the design of the structural system of the project shall design and detail the anchorage and bracing of nonstructural elements. The details for the bracing and anchorage of nonstructural elements shall be shown on the drawings adjacent to the nonstructural elements to which they apply.

(c) **Specifications.** Specifications shall completely set forth the requirements for the various types of materials that will enter into permanent construction and shall describe the methods not covered in the technical regulations which are to be used to obtain the required quality of the work shown on the plans as described in the specifications.

Due to the difficulty of anticipating every unsatisfactory condition that might be found in existing construction where addition, alteration, rehabilitation or reconstruction work is proposed, the following clause or one of similar meaning shall be included in the specifications:

> "Should any existing conditions such as deterioration or noncomplying construction be discovered which is not covered by the DSA approved documents wherein the finished work will not comply with Title 24, California Code of Regulations, a change order, or a separate set of plans and specifications, detailing and specifying the required repair work shall be submitted to and approved by DSA before proceeding with the repair work."

(d) **Design calculations.** Calculations, stress diagrams and other pertinent data shall accompany the plans and specifications and shall be sufficiently complete so that capacities for individual structural members and their connections can be verified without additional calculations. All assumptions used in the calculations and their bases shall be stated. The calculations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed school building will resist vertical loads and horizontal forces.

The calculations shall be sufficiently complete to establish that the structure will resist the loads and forces prescribed in Part 2, Title 24, C.C.R. Assumed safe bearing pressures on soils and specified strengths of concrete shall be given in calculations and noted on plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

(e) **Site data.** Site data for all school sites shall include a geotechnical engineering report including subsurface site work, laboratory testing, an evaluation of site soil conditions, a recommendation for the type of foundations to be used and an allowable design value for the soil-bearing capacity.

A geologic and earthquake hazard report shall be submitted with the application for all new school sites, and for all construction on existing school sites located in a Seismic Hazard Zone, an Alquist-Priolo Earthquake Fault Zone, or in a seismic hazard zone designated in the Safety Element of a Local General Plan. DSA may require a geologic and earthquake hazard study for any construction on a school site outside of the boundaries of any geologic hazard zone where a potential geologic hazard has been previously identified.

Reports shall be prepared, and signed by a California-certified engineering geologist and a California-registered geotechnical engineer. Geologic hazard reports shall include an evaluation of the potential for damage due to flooding.

No school building shall be constructed, rehabilitated, reconstructed or relocated within 50 feet of the trace of an active fault, which has experienced surface displacement within Holocene time (approximately 11,000 years).

(f) **Estimates of cost.** Estimates of cost shall be based on the cost prevailing at the time the plans and specifications are sub-

mitted to DSA. The estimated cost of a project shall be increased as necessary to include the estimated cost of every alternate building or portion thereof shown on the plans or specifications as if each alternate building and portion were to be constructed separately and simultaneously.

For projects using the collaborative process for project review per Education Code Section 17319 or 81133.1, the estimated cost of the project shall be based on the cost prevailing at the time that the application is submitted. Upon submittal of complete plans and specifications, DSA may require the applicant to revise the estimated cost based on prevailing costs at that time. If the estimated cost has increased, the applicant shall submit additional filing fees based on the revised estimated cost.

When a contract amount, or the cumulative total of two or more contract amounts, exceeds the estimated cost by more than 30 percent, the estimated cost may be revised. An additional fee, if required, based on the revised estimated cost of the revision shall be paid before proceeding with the work. When the actual cost of constructing all the work shown on the approved plans is less than 70 percent of the estimated cost, a refund of overpaid fees may be claimed. (See Section 4-322 for actual cost and Section 4-325 for billing for further fees.)

(g) **Deferred approvals.** Only where a portion of the construction cannot be adequately detailed on the approved plans because of variations in product design and/or manufacturer, the approval of plans for such portion, when specifically accepted by DSA, may be deferred until the material suppliers are selected, provided the following conditions are met:

1. The project plans clearly indicate that a deferred approval by DSA is required for the indicated portions of the work prior to fabrication and installation.
2. The project plans and specifications adequately describe the performance and loading criteria for such work.
3. A California licensed architect or California registered engineer stamps and signs the plans and specifications for the deferred approval item. The architect or engineer in general responsible charge of the design of the project shall submit the plans and specifications for the deferred approval item to DSA, with notation indicating that the deferred approval documents have been found to be in general conformance with the design of the building.
4. Fabrication of deferred approval items shall not begin without first obtaining the approval of plans and specifications by DSA.

(h) **Signatures required.** The original signature sheet for the specifications and all original tracings for plans, submitted for approval shall bear the stamp and signature of the architect or professional engineer in general responsible charge of the design of the project.

When responsibility for a portion of the work has been delegated, the original tracings for plans and the original cover sheet for the specifications covering that portion of the design shall bear the signature and stamp of the responsible professional engineer or architect to whom the work has been delegated as well as that of the architect or engineer in general responsible charge. As an option, the architect or engineer in general responsible charge may sign the documents with notation indicating that the documents have been coordinated with the design documents and found to be in general conformance with the design.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17299, 17212, 17212.5, 81135, 81033 and 81033.5.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-317, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-318. Procedure for approval of application and voidance of application.

(a) **General.** After DSA has completed its check of the documents submitted with the application, the checked prints of the plans and specifications, with the items marked for corrections and/or requests for additional information noted thereon, shall be returned to the responsible architect or registered engineer. When plans and/or specifications require extensive corrections, a corrected set of prints of the plans and specifications shall be submitted for review if requested by DSA.

When the requested corrections have been made and/or the additional information has been provided by the responsible architect or registered engineer, an employee representative of the architect or registered engineer shall return the check set of plans and specifications along with the original plan tracings, the corrected specification pages and specification master cover sheet to DSA for backchecking. The backcheck is a comparison of the corrected plans and specifications with the check set of plans and specifications and shall be accomplished by either a conference between a knowledgeable employee representative or the architect or registered engineer in general responsible charge and the checking engineer, or by mail in the case of minor corrections to which all parties have agreed.

Changes in plans and specifications, other than changes necessary for correction, made after submission for approval, shall be brought to the attention of DSA in writing or by submission of revised plans identifying those changes clearly at the time of back-checking. Failure to give such notice may result in the voidance of any subsequent approval given to the plans and specifications.

All requested corrections shall be made, additional requested information furnished or original design justified prior to or at the time of the backcheck. When DSA deems that the corrected plans and specifications comply with these regulations and those parts of Title 24, CCR, that pertain to public school construction, DSA shall place its stamp on the reproducible sheets of drawings and master cover sheet of the specifications. The stamped drawings and specifications will be temporarily retained by DSA so that a record set can be created. DSA may charge a fee to the school district to recover the costs of creating the record set.

(b) **Approval of application.** DSA shall issue to the school district a letter approving the application for the project within five working days of stamping the approved plans and specifications. This letter shall constitute the "written approval of the

plans, as to safety of design and construction" required by Sections 17297 and 81134, Education Code, before letting a contract for any construction. (See Section 4-330 for construction time limitations.)

(c) **Voidance of application.** Any change, erasure, alteration or modification of any plans or specification bearing the stamp of DSA may result in voidance of the approval of the application. However, the "written approval of plans" may be extended by DSA to include revised plans and specifications after documents are submitted for review and approved. (See Section 4-323 for revised plans and Section 4-338 for addenda and change orders.)

The procedures leading to written approval of plans shall be carried to conclusion without suspension or unnecessary delay. At the discretion of DSA, the entire application may be voided where either (1) prints from corrected plans or corrected original plans are not filed for backcheck within 6 months after the date of return of checked plans to the architect or engineer, or (2) at the discretion of DSA, any remaining unapproved increment(s) of the application may be voided when more than six months have elapsed since the last approval of an increment has been issued, and subsequent incremental plans and specifications have not been received by DSA for checking.

For voided applications, upon request by the school district, 30 percent of the paid fee will be refunded; however, no refund will be allowed for projects upon which only the minimum fee has been paid, or upon which only an increment was voided.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17297, 17307, 81133, 81134 and 81140.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-318, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-319. Withdrawal of application. If a request is made by the school board for the cancellation or withdrawal of the application and return of the plans and specifications, together with the paid fee, it will be granted only when the check of plans and specifications has not actually started. If the checking of plans and specifications has started, 30 percent of the paid fee will be refunded or applied to a new application for the same project.

No refund will be allowed for projects upon which only the minimum fee has been paid. No refund will be allowed after a contract has been let for any portion of the work except as provided by Section 4-317(f).

For projects using the collaborative process for project review per Education Code Section 17319 or 81133.1, if the project is voided by DSA or a request by the applicant is made to withdraw the application prior to submittal of completed plans and specifications, filing fees minus costs incurred by DSA will be refunded.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17300, 81133 and 81136.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-3 19, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 4
FEES

4-320. Fees. The fees required by Sections 17300 and 81136 of the Education Code shall be in accordance with Section 4-321.1. The fee schedule in effect at the time of filing shall apply throughout the duration of such application. A list of prior fee schedules is available upon request from DSA. The words "filing fee" mean the fee which shall accompany the application, or as corrected pursuant to Section 4-317(f), and the words "further fee" mean the fee which shall be paid to DSA if the actual cost exceeds the estimated cost by more than 5 percent. The application is considered to be received when it, accompanied by the plans and specifications, structural design computations, other required documents and filing fee, has been received by DSA, and the application number assigned.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17300 and 81133.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-320, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-321. Fee Schedule 11. The filing fee for projects shall be 0.7 percent of the first $1,000,000 of estimated cost and 0.5 percent on the excess of the estimated cost over $1,000,000, except that the minimum fee in any case shall be $250.00.

If the actual cost exceeds the estimated cost by more than 5 percent, the further fee for such projects shall be equal to the difference between the filing fee paid and the amount computed under Fee Schedule 11 on the actual cost, the actual cost being determined according to Section 4-322.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17300 and 81133.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-32 1.1, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.
2. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-321.2, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-322. Project cost. For purposes of determining fees, both the estimated and actual costs of the project shall be the total outlay for all work included in the approved plans and specifications (exclusive of fees paid, but not recovered, for architectural, engineering, inspection and testing services) regardless of whether the funds are provided by the school district, by other public or private agencies or by individuals. The cost shall include any moving or relocation. In the event a building is converted to school use (see Section 4-306) the cost shall include the current replacement cost of the building. The current replacement cost shall be computed by multiplying an appropriate square foot cost by the total square foot area of the building being converted to school use. If work is done in por-

tions the actual cost shall be determined at the completion of each contract. (See Section 4-325.)

The estimated cost and the fee based thereon shall not be amended after plan check has started except as provided by Section 4-317(f) or for permissible increase in scope of project. The scope of a project shall not be amended after bids for all or part of the project are opened. No portion of the fee can be returned after checking has been started except as provided by Sections 4-317(f) and 4-319.

Actual cost shall include all items which are normally considered to be contractor's operation costs such as district-furnished labor and materials, bond, insurance and use of district facilities, and shall not be reduced by charge-backs such as those for testing, inspection or overrun of contract time. All fees and/or reimbursable charges paid to construction managers shall be included in the actual cost of construction. When the contract for the work includes items not otherwise subject to the approval of DSA and not included in the approved plans and specifications the actual cost shall include this work unless such costs are segregated by separate bid items or by separately priced items of change orders, or by a certified copy of a subcontractor's bid. Such segregation shall not be made by contract price breakdown or estimates. An hourly fee may be charged to the school district for the review of bid alternates.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17300 and 81133.
HISTORY:

1. Editorial correction of printing error (Register 83, No. 45).
2. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-322, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-323. Revisions of plans and specifications. Revisions are changes to the DSA approved plans or specifications made after DSA approval but prior to bid.

No additional fee is charged upon submission of revisions to the approved plans and specifications, provided that the entire matter is actually one transaction having to do with the same school building and the revisions do not require substantial checking for safety of design. If the original plans are abandoned and the plans and specifications submitted in lieu thereof are in fact for a new project rather than for an identical building, or where a modified set of plans is for an essentially different structural concept, it is necessary that a new application be filed and fee paid. This is regardless of the fact that the school building may have the same name, be of the same general size, and be situated at the same location as the school building for which the original application was made.

An hourly fee may be charged to the school district for the review of substantial revisions to approved plans and specifications.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17300 and 81133.

4-324. Examples and explanations of fee computation.

(a) **Filing fee to accompany application.**

Filing Fee under Schedule 11		
Estimated Cost $8,000		
0.7% × $8,000	=	$ 56.00
Filing Fee is the minimum charge		$250.00
Filing Fee under Schedule 11		
Estimated Cost: $925,000.00		
0.7% × $925,000	=	$6,475.00
Filing Fee under Schedule 11		
Estimated Cost: $1,260,000.00		
0.7% × $1,000,000	=	$7,000.00
0.5% × $260,000		1,300.00
		$8,300.00
Corrected Estimate under Schedule 11		
Estimated Cost on Application: $925,000.00		
0.7% × $925,000	=	$ 6,475.00
1st Contract		$700,000.00
2nd Contract		525.000.00
		$1,225,000.00
(Exceeds $925,000 by more than 30%)		
Corrected Estimated Cost: $1,225,000.00*		
0.7% × $1,000,000	=	$7,000.00
0.5% × 225,000	=	1,125.00
		8,125.00
Fee previously paid		$6,475.00
Corrected filing fee due		$1,875.00

(b) **Further fees where the actual cost exceeds the estimated or corrected estimated cost by more than 5 percent.**

Further Fee under Schedule 11		
Corrected Estimated Cost: $1,225,000*		
Actual Cost $1,352,740.50		
0.7% × $1,000,000.00	=	$7,000.00
0.5% × 352,740.50	=	1.763.70
		$8,763.70
Filing Fee Paid		
0.7% × $1,000,000	=	$7,000.00
0.5% × 225,000	=	1,125.00
		$8,125.00
Further Fee	=	$ 638.70

*The corrected estimated cost could be more than the sum of contracts if all work called for on plans is not yet under contract.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17300 and 81133.
HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-324, Part 1,Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-325. Billing for further fees. The district shall be billed for further fees upon completion of the project or portion thereof if fee is due. Claims for refunds of $5.00 or less due to errors in cost reporting or fee computation shall be made within six months from date of billing.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17300 and 81133.

4-326. Fees for approval of an evaluation and design criteria report for rehabilitation of an existing nonconforming building for use as a school building. A retainer fee of $2,000.00 shall be required with submittal of the pre-application for a rehabilitation project in accordance with Section 4-307(c). Fees incurred in excess of the retainer fee for DSA review of the Evaluation and Design Criteria Report shall be based on the established hourly billing rate of the Department. Prior to approval of the Evaluation and Design Criteria Report, any additional fees incurred by DSA shall be fully paid. Any

unused portion of the retainer fees shall be returned to the owner.

Authority: Education Code Sections 17310.
Reference: Education Code Sections 17280.5.
HISTORY:

1. (DSA/SS (EF 02/03) Emergency adoption/approval of administrative and procedural requirements for the adaptive reuse of existing buildings for public school use; CCR Title 24, Part 1. Approved as emergency by the California Building Standards Commission on May 14, 2003, and filed with the Secretary of State on May 15, 2003. Effective May 15, 2003.

ARTICLE 5
CERTIFICATION OF CONSTRUCTION

4-330. Time of beginning construction and partial construction. Construction work, whether for a new school building, reconstruction, rehabilitation, alteration or addition, shall not be commenced, and no contract shall be let until the school board has applied for and obtained from DSA written approval of plans and specifications. Construction shall be commenced within one year after the approval of the application, otherwise the approval may be voided. DSA may require that the plans and specifications be revised to meet its current regulations before a renewal of the voided approval is granted.

Renewal shall not be granted after a period of four years beyond the initial date of the application approval, except for projects suspended pursuant to the Department of Finance Budget Letter No. 08-33 dated December 18, 2008 (Interim Loans for General Obligation and Lease Revenue Bond Projects), which are eligible for extension of approval beyond fours years from the initial date of the application approval.

A written request for extension of approval must be made by the school board to DSA and shall include evidence that the project suspension is pursuant to the Department of Finance Budget Letter No. 08-33 dated December 18, 2008. This extension of approval shall be granted by DSA for up to one additional year, not to exceed five years from the initial date of the application approval.

The school board may complete all work or proceed with the construction of any part of the work included in the approved plans and specifications with the intent of completing the work later. All work done and materials used and installed must be in accordance with and in conformity to the approved plans and specifications.

An uncompleted building shall not be considered as having been constructed under the provisions of Article 3 or 7 commencing with Sections 17280 and 81130 of the Education Code, respectively. Section 17372 of the Education Code restricts the use of such a building.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17280, 17372 and 81130.

4-331. Notice to DSA at start of construction. The architect or registered engineer responsible for the project shall submit the following documents to DSA within five days of awarding a contract for construction:

(a) Form DSA-102: Contact Information Form, and

(b) Form DSA-5: Project Inspector Qualification Record [see Section 4-341(d)].

DSA forms are available at any DSA regional office, or on the internet at www.dgs.ca.gov/dsa.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17280, 17295, 81130 and 81133.
HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-331, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-332. Notice of suspension of construction.

(a) When construction is suspended for more than two weeks, the project inspector shall notify DSA [see Section 4-336(c)4].

(b) If all construction is suspended or abandoned for any reason for a continuous period of one year following its commencement, the approval of DSA shall become void. DSA may reinstate the approval on the request of the school board.

Authority: Education Code Sections 17310 and 81142.
Reference: Education Code Sections 17310 and 81142.
HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-332, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-333. Observation and inspection of construction.

(a) **Observation by architect or registered engineer.** The Act requires that the observation of the work of construction, reconstruction, rehabilitation, alteration or addition shall be under the general responsible charge of an architect, structural engineer, or under certain conditions a professional engineer registered in that branch of engineering applicable to the work. (See Section 4-316.)

A geotechnical engineer, or his or her qualified representative shall perform special inspection of the placement and compaction of fills. The geotechnical engineer shall submit verified reports in accordance with Section 4-336 and Title 24, Part 2, Section 1704A.7.1.

(b) **Inspection by project inspector.** The school board must provide for and require competent, adequate and continuous inspection by an inspector satisfactory to the architect or registered engineer in general responsible charge of observation of the work of construction, to any architect or registered engineer delegated responsibility for a portion of the work, and to DSA.

1. The cost of project inspection shall be paid for by the school board. An inspector shall not have any current employment relationship with any entity that is a contracting party for the construction.
2. Inspectors are prohibited from any activities involving the actual performance of construction, or the scheduling, coordination or supervision of construction contractors for the project.
3. For every project there shall be a project inspector who shall have personal knowledge as defined in Sections 17309 and 81141 of the Education Code of all work done on the project or its parts as defined in Section 4-316. No work shall be carried on except under the inspection of an inspector approved by DSA. On large

projects adequate inspection may require the employment of one or more approved assistant inspectors in accordance with Section 4-333(e). The employment of special inspectors or assistant inspectors shall not be construed as relieving the project inspector of his or her duties and responsibilities under Sections 17309 and 81141 of the Education Code and Sections 4-336 and 4-342 of these regulations.

4. The inspector shall be capable of performing all essential functions of the job.
5. The project inspector and any assistant inspector must be approved by DSA for each individual project. An inspector shall not be less than 25 years of age. Prior to being eligible for approval, any project inspector or any assistant inspector shall establish, to the satisfaction of DSA that he or she:

   A. is appropriately certified by DSA per Section 4-333(c).

   B. has adequate knowledge and experience to perform the required duties for the project. He or she shall have at least three years experience in inspection or construction work on building projects of a type similar to the project, and

   C. will provide sufficient time on the project to fulfill all inspection responsibilities required by this code.
6. An approved project inspector may be removed and replaced if the work performed is not in conformance with accepted inspection standards, as determined by the school district and the project architect and engineer with the concurrence of DSA. An approved project inspector may also be removed by DSA if the inspection work performed is not in conformance with accepted standards; see Section 4-342.

(c) **Project inspector certification.** An inspector becomes DSA-certified by successfully completing a written examination administered by DSA. The examination measures the applicant's ability to read and comprehend construction plans as well as the construction, inspection and testing requirements of the *California Building Standards Code*. Examinations are given in four classes.

1. A Class 1 certified inspector may be approved to inspect any project.
2. A Class 2 certified inspector may be approved to inspect any project, except a project containing one or more new, large structures or additions with a primary lateral force resisting system of steel, masonry or concrete.
3. A Class 3 certified inspector may be approved to inspect projects containing alterations to approved buildings, site placement of relocatable buildings and construction of minor structures.
4. A Class 4 certified inspector may be approved to inspect projects containing site placement of relocatable buildings and associated site work.

DSA may charge an examination fee to recover reasonable fees and costs.

An applicant for the certification examination or an inspector possessing a valid certificate issued by the Office, shall file name, mailing address or telephone number changes with the DSA headquarters office within 10 working days of that change. The information filed shall include the new and former name, mailing address or telephone number.

Certification will be valid for a period of four years unless revoked in accordance with Section 3-342(c) or upgraded by achieving certification in a broader class. Certification may be renewed by attending DSA training classes and passing a recertification examination.

(d) **Special inspection.**

1. Special inspection by inspectors specially approved by DSA may be required on certain types of construction work as described in Title 24, Part 2, Chapter 17A.
2. DSA may require special inspectors for types of construction in addition to those listed in Chapter 17A of Title 24, Part 2 if found necessary because of the special use of materials or methods of construction.
3. DSA may require special inspectors for any off-site fabrication procedures that preclude the complete inspection of the work after assembly.
4. Special inspectors shall be in the direct employ of the school district or a testing facility acceptable to DSA (See Section 4-335).
5. Special inspectors may be required to be approved by DSA for each individual project prior to performing inspections. Application for approval of a special inspector shall be made on an Inspector's Qualification Form (Form DSA-5) and submitted to DSA for review.
6. A special inspector shall not be less than 25 years of age, shall have had at least three years experience in construction work or inspection responsibilities on one or more projects similar to the project for which the inspector is applying, shall have a thorough knowledge of the building materials of his or her specialty, and shall be able to read and interpret plans and specifications. DSA may require evidence of the proposed inspector's knowledge and experience by successful completion of a written and/or oral examination by the applicant before approval is granted. DSA may charge a fee to administer such examinations. DSA will maintain a list of special inspectors who have successfully completed an examination by DSA, and continued eligibility to remain on that list will be dependent on demonstrated acceptable performance of duties assigned and/or attendance at continuing education classes.
7. The project inspector may perform special inspections if the project inspector has been specially approved by DSA for such purpose and has the time available to complete the special inspections in addition to project inspection work.
8. The detailed inspection of all work covered by this section is the responsibility of the project inspector when a special inspector is not provided (see Section 4-342).
9. Where responsibility for observation of construction for mechanical work and electrical work is not delegated to professional engineers registered in these particular branches of engineering [see Section 4-316(b)],

special mechanical and electrical inspection shall be provided.

10. Construction work that the special inspector finds not to be in compliance with the DSA approved plans and specifications, and which is not immediately corrected upon notifying the contractor, shall be reported immediately to the project inspector, DSA, the architect, the structural engineer and the school district.
11. Special inspectors shall submit reports within 14 days of the date of the inspection to the school district, DSA, the design professional in general responsible charge, the structural engineer delegated responsibility for design and construction observation of structural portions of the project (when such delegation has been made) and the project inspector. Reports of special inspections performed on-site shall be submitted to the project inspector on the day the inspections were performed. Reports shall include all special inspections made regardless of whether such inspections indicate that the work is satisfactory or unsatisfactory.
12. Special inspection reports shall include a description of all sampling of materials performed and/or witnessed. Reports shall clearly state whether the work was inspected in accordance with the requirements of the DSA approved documents for the project. Reports shall also clearly state whether the work inspected met the requirements of the DSA approved documents.
13. All special inspectors shall submit verified reports as required by Section 4-336 for the special work covered.
14. The costs of all special inspection required by this subsection shall be paid for by the school board, but if so specified in the contract documents the amount paid may be collected from the contractor by the school board.
15. The acceptance or approval of special inspectors may be withdrawn by DSA if the special inspector fails to comply with any part of this code or the standards referenced on the approved plans and specifications.

(e) **Assistant Inspectors.** Assistant inspectors are approved by DSA to assist the project inspectors with the inspection of one or more aspects of the construction. Assistant inspectors must work under the supervision of a Class 1 certified project inspector.

1. On large projects DSA may require the employment of assistant inspectors when the project inspector is not able to provide continuous inspection of all aspects of the construction in a timely manner. When assistant inspectors are required by DSA the project inspector shall remain on-site providing supervision of all assistants during all construction.
2. All assistant inspectors must be approved by DSA prior to performing any inspection work in accordance with Section 4-341(d). Prior to being approved by DSA as an assistant inspector the individual must satisfy all of the following requirements:

   A. Be certified as a Class 1, Class 2, Class 3 or Class 4 inspector in accordance with Section 4-333(c).

   B. Define the type(s) of construction that the assistant will be assigned to inspect,

   C. Document at least three years of experience in the types of construction that the assistant will inspect. Experience must be obtained in construction or inspection of buildings similar to the buildings for which the individual is applying,

3. The assistant inspector shall establish, to the satisfaction of DSA that he or she meets all of the requirements established in Section 4-333(b)5.
4. Failure of the assistant inspector to perform any of the duties specified in this code may be cause for DSA to take action as outlined in Section 4-342(c).

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17309, 17311, 81130, 81139, 31141 and 81143.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-333, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.
2. (DSA/SS 2/95) Regular order by the Division of the State Architect/Structural Safety Section to amend Section 4-333. Filed with the Secretary of State on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

4-334. Supervision by the Division of the State Architect. During construction, reconstruction, rehabilitation, repair, alteration of, or addition to any school building, DSA, as provided by the Act, shall make such site visits as in its judgment are necessary for proper enforcement of the Act and the protection of the safety of the pupils, the teachers and the public. If at any time as the work progresses, prior to the issuance of the certification of compliance it is found that modifications or changes are necessary to secure safety or to comply with code requirements, DSA shall notify the responsible architect, or responsible structural engineer and school district, of the necessity for such modifications or changes.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17311 and 81143.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-334, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-334.1. Stop work order.

(a) Whenever DSA finds any construction work being performed in a manner contrary to the provisions of this code and that would compromise the structural integrity of the building, the Department of General Services, State of California, is authorized to issue a stop work order.

(b) The stop work order shall be in writing and shall be given to the owner of the property involved, or the owner's agent, or the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

(c) Any person who continues working on the cited work after having been served with a stop work order, except such

work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17307.5 and 81133.5.

4-335. Tests.

(a) **General.** Tests of materials are required as set forth in these regulations. Whenever there is insufficient evidence of compliance with any of the provisions of this code or evidence that any material or construction does not conform to the requirements of this code, DSA may require tests as proof of compliance to be made at no expense to DSA. Test methods shall be as specified by this code or by other recognized and accepted test standards. If there are no recognized and accepted test methods for the proposed alternate, the architect or engineer shall submit written test procedures for review and acceptance by DSA.

The school board shall, with the advice of the architect or structural engineer, select a testing facility acceptable to DSA to conduct all required tests for the project, and special inspections which are contracted to the testing facility. The testing facility shall be directly employed by the school board and not be in the employ of any other agency or individual.

All tests shall be made by a facility acceptable to DSA as described in Section 4-335(b). Where job conditions warrant, the architect or registered engineer may waive certain tests with the approval of DSA (see Section 4-338 for the process of obtaining DSA approval for changes to approved plans and specifications). A copy of the list of structural tests and inspections prepared by the responsible architect or structural engineer and acceptable to DSA shall be provided to the designated testing facility and the project inspector prior to the start of construction.

(b) **Acceptable testing facilities.** Facilities conducting any testing, sampling, protection, handling, transporting or storage of samples shall be accepted by DSA. A testing facility may apply for DSA acceptance by submitting Form DSA-100, Application for Acceptance of Testing/Inspection Facility, along with supporting documentation to DSA. To qualify for acceptance a testing facility shall:

1. Comply with the requirements of ASTM E 329-07.
2. Conduct all testing and inspection operations under the engineering management of a California registered civil engineer with at least five years of experience in the testing and inspection of building materials.
3. An acceptable testing facility shall have management, laboratory and field supervisory personnel with at least five years experience in the inspection and testing of the work and materials of construction.
4. An acceptable testing facility shall have adequate facilities, equipment, personnel expertise and technical references to permit the performance of special inspections and testing in compliance with applicable regulations and standards.

DSA will evaluate the testing facility to verify that requirements are met and that engineering managerial and supervisory staff are familiar with Title 24 requirements pertinent to materials testing and special inspection.

A letter of acceptance by DSA shall be issued to the testing facility and shall state that the testing facility has demonstrated that it has met the criteria established by DSA for performance of the special inspection of work and testing of materials. Names of accepted testing facilities shall be posted on the DSA website.

(c) **Duration of testing facility acceptance.** Acceptance will remain valid for a period of four years unless approval is withdrawn for failure to comply with the requirements of this code including but not limited to:

1. making changes in management or supervisory personnel, equipment, facility location or other key factors without prior approval of DSA,
2. reporting that materials and/or workmanship meet the requirements of DSA approved documents when they do not,
3. failing to sample, handle and/or test materials as required,
4. providing special inspectors to a project that do not meet the qualification requirements,
5. failing to adequately supervise special inspectors assigned by the lab to the project, or
6. failing to comply with any of the other requirements of this code or the DSA approved documents for a project.

(d) **Fees for testing laboratory evaluation.** DSA may charge a fee to cover the costs of evaluating and re-evaluating the testing facility. DSA reserves the right to visit and observe testing facilities.

(e) **Performance of tests.** Test samples or specimens of material for testing shall be taken by a representative of the testing facility. The project inspector may, if qualified and other duties permit, be authorized in writing by DSA to sample test specimens. In general samples are selected at random; however, if there is reason to believe that specific materials may be defective, sample locations may be selected by the project inspector, architect, structural engineer or DSA representative. In no case shall the contractor or vendor select the sample or specimens.

Sampling, handling, transporation, preparation of samples and testing shall be in accordance with the standards as provided for in the approved plans, specifications and in the applicable building regulations.

Where a sample has failed to pass the required tests the architect or engineer, subject to the approval of DSA, may permit retest of the sampled material.

(f) **Payments.** The school board shall pay for all tests, but if so specified the amount or a portion thereof may be collected from the contractor by the school board. When in the opinion of the architect or registered engineer, additional tests are required because of the manner in which the contractor executes his or her work, such tests shall be paid for by the schoolboard, but if so specified the amount paid may be collected from the contractor by the school board. Examples of such tests are: tests of material substituted for previously accepted materials, retests made necessary by the failure of

material to comply with the requirements of the specifications, and load tests necessary because certain portions of the structure have not fully met specification or plan requirements.

(g) **Test reports.** One copy of all test reports shall be forwarded to DSA, the architect, the structural engineer and the project inspector by the testing facility within 14 days of the date of the test. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these regulations and with the approved plans and specifications. In the case of materials such as masonry, concrete or steel, test reports shall show the specified design strength. All reports of test results shall also definitely state whether or not the material or materials tested comply with requirements of the plans and specifications. Reports of test results of materials not found to be in compliance with the requirements of the plans and specifications shall be forwarded immediately to DSA, the architect, the structural engineer and the project inspector.

(h) **Verification of test reports.** Each testing facility shall submit to DSA at the completion of the testing program or when required by DSA a verified report covering all of the tests and inspections that were required to be made by that facility. Such report shall be furnished any time that work on the project is suspended, or services of the testing lab are terminated, covering the tests up to that time.

The verified report shall be signed, under penalty of perjury, by the California registered civil engineer charged with engineering managerial responsibility for the testing facility. The verified report shall indicate that all tests and inspections were made as required by the approved plans and specifications, and shall list any noncompliant tests or inspections that have not been resolved by the date of the verified report. In the event that not all required tests or inspections were made by the laboratory making this verified report, those tests or inspections not made shall be listed on the verified report.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17309 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-335, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-336. Verified reports.

(a) **General.** Sections 17309 and 81141 of the Act require that from time to time as the work of construction progresses, the architect, structural engineer or professional engineer in charge of observation of construction of the work, each architect or registered engineer delegated responsibility for a portion of the work, the project inspector, special inspectors, and the contractor shall each make and sign under penalty of perjury, a duly verified report to DSA upon a prescribed form or forms, showing that of his or her own personal knowledge the work during the period covered by the report has been performed and materials have been used and installed in every material respect in compliance with the duly approved plans and specifications, and setting forth such detailed statements of fact as shall be required.

The term "personal knowledge" as applied to an architect or registered engineer means the personal knowledge that is obtained from periodic visits of reasonable frequency to the project site for the purpose of general observation of the work, and that is obtained from the reporting of others on the progress of the work, testing of materials, inspection and superintendence of the work. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to the project inspector means the actual personal knowledge that is obtained from the inspector's personal continuous inspection of the work in all stages of its progress. For work performed away from the site, the project inspector may obtain personal knowledge from the reporting of testing or special inspection of materials and workmanship for compliance with approved plans, specifications and applicable standards. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to a special inspector means the actual personal knowledge which is obtained from the inspector's personal inspection of the work assigned. The verified report shall clearly describe the work assigned to each individual special inspector. The exercise of reasonable diligence to obtain the facts is required.

The term "personal knowledge" as applied to the contractor means the personal knowledge gained from constructing the building. The exercise of reasonable diligence to obtain the facts is required.

(b) **Report form.** Verified reports shall be made on Form DSA-6 by project inspectors and contractors, Form DSA-292 for special inspectors and Form DSA-6A/E by architects and engineers. Form DSA-6A/E may be filed either separately or jointly by architects and engineers. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

(c) **Required filing.** Verified reports shall be made as follows:

1. By each contractor having a contract with the owner, at the completion of the contract.
2. By the architect, registered engineers, project inspector and special inspectors at the completion of the project.
3. By the architect, registered engineers, project inspector and contractor at the suspension of all work for a period of more than one month.
4. By the project inspector when any building included in the scope of the project is occupied or re-occupied.
5. By any architect, registered engineer, project inspector, special inspector, or contractor whose services in connection with the project have been terminated for any reason.
6. At any time a verified report is requested by DSA.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17309 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-336, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effec-

tive July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-337. Semimonthly reports. In addition to the verified reports (Section 4-336) the project inspector shall make semimonthly reports of the progress of construction to the architect or registered engineer in general responsible charge and the structural engineer if delegated to observe the structural portion of the construction. A copy of each such report shall be sent directly to the school board and directly to DSA.

Semimonthly reports shall state the name of the building, the school and the school district, and give the file and application number. The reports shall include a list of official visitors to the project and whom they represent, a brief statement of the work done, instructions received from the architect or registered engineer during the period covered by the report and pertinent information regarding any unusual conditions or questions that may have arisen at the job. The semimonthly report shall include problems or noncomplying conditions which have occurred on the project and how they were resolved or brought into compliance. Forms are not provided by DSA for semimonthly reports. Failure to comply with this section, in a timely manner (seven days after reporting period), will be cause for DSA to withdraw approval of the inspector.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17309, 17310, 81130, 81141 and 81142.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-337, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-338. Addenda and change orders.

(a) **General.** Work shall be executed in accordance with the approved plans addenda and change orders. Changes in the plans and specifications shall be made by addenda, field change documents or change orders approved by DSA. [See Section 4-318 (b).]

(b) **Addenda.** Changes or alterations of the approved plans or specifications prior to letting a construction contract for the work involved shall be made by means of addenda which shall be submitted to and approved by DSA prior to distribution to contractors. Original copies of addenda shall be stamped and signed by the architect or engineer in general responsible charge of preparation of the plans and specifications and by the architect or registered engineer delegated responsibility for the portion affected by the addenda. [See Section 4-317 (h).] One copy of each addendum is required for the files of DSA.

(c) **Change orders.** Changes of the approved plans or specifications after a contract for the work has been let shall be made only by means of change orders [or field change documents, see 4-338(d)] submitted to and approved by DSA prior to commencement of the work shown thereon. Change orders shall refer to the portions of the approved plans and specifications being changed, shall state the reason for the change and clearly describe the work to be accomplished, and, where necessary, shall be accompanied by supplementary drawings referenced in the text of the change order. Change orders shall be numbered sequentially for easy reference. All change orders and supplementary drawings shall be stamped and signed by the architect or engineer in general responsible charge of observation of the work of construction of the project and by the architect or registered engineer delegated responsibility for observation of the portion of the work of construction affected by the change order.

Change orders shall bear the approval of the school board and shall indicate the associated change in the project cost, if any. When previously approved field change documents are applicable to a change order the change order shall include the complete DSA stamped copy of the field change documents.

(d) **Field Change Documents.** In order to expedite construction, field change documents may be submitted to DSA. Field change documents shall meet all the requirements necessary for change orders, with the exception of the approval of the school board and the associated change, if any, in costs. Field change documents do not require the stamp or seal, but do require the signature of the architect or engineers. Work may proceed in accordance with the approved field change documents.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 12927 and 81134.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-338, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9,1992.

4-339. Final certification of construction. The certification of compliance by DSA for public school building projects will be issued when the work has been completed in accordance with the requirements as to safety of design and construction of Sections 17280-17316 and 81130-81147 of the Education Code. The certification of compliance will not be issued until the owner has filed a notice of completion with DSA and has filed a statement of final actual project cost as identified in Section 4-322, and has paid all required fees to the Department of General Services.

The certification by DSA may be evidenced either by letter or by certificate. A certificate of compliance will, in general, be issued only for large new projects where the board may desire to display such certificate in a conspicuous place. The letter or certificate of compliance will be directed to the school board.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17310 and 81142.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-339, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 6
DUTIES UNDER THE ACT

4-341. Duties of the architect, structural engineer or professional engineer.

(a) **General.** The architect or professional engineer is responsible to the school board and to DSA to see that the completed work conforms in every material respect to these regulations and to the approved plans and specifications. (See Section

4-316.) The responsible architect or engineer may, if so authorized, act as agent for the school board in completing and submitting the application Form DSA-1 to DSA. (See Section 4-315.)

The architect or registered engineer in no way is relieved of any responsibility by the activities of DSA in the performance of its duties.

(b) **General responsible charge.** The architect, structural engineer or professional engineer in general responsible charge shall advise the school board in regard to filing of the application for approval of plans, the selection of an inspector and the selection of a testing laboratory. The responsible architect or engineer shall prepare plans, specifications, design calculations and other data and shall prepare addenda and change orders authorized by the school board and as required by conditions on the project.

The responsible architect or engineer shall make, or cause to be made, the corrections required on the various documents to comply with the requirements of these regulations. The responsible architect or engineer shall perform general observation of the work of construction, interpret the approved drawings and specifications and shall provide the project inspector and testing facility with a complete set of stamped plans, specifications, addenda and change orders prior to the start of construction.

In general, DSA directs all technical correspondence to the architect or registered engineer in general responsible charge of the project.

(c) **Delegated responsibility.** An architect or registered engineer to whom responsibility has been delegated shall, under the general direction of the design professional in general responsible charge, prepare plans, specifications, calculations and other data, and make corrections on these documents as required to comply with these regulations. Such architect or registered engineer shall consult with the design professional in general responsible charge in the preparation of addenda, deferred approvals, field change documents and change orders and the selection of inspectors and the testing facility. The architect or registered engineer shall indicate his or her responsibility for the documents, which affect his or her portion of the work and are presented to DSA for approval, by his or her stamp and signature thereon. The architect or registered engineer shall observe the work of construction of his or her portion of the project and shall consult with the design professional in general responsible charge in the interpretation of the approved drawings and specifications.

(d) **Approval of inspectors.** The school district or architect or registered engineer in general responsible charge shall submit to DSA:

1. The name of the person proposed as project inspector of the work, together with an outline of his or her experience and pertinent qualifications on a Project Inspector Qualification Record (Form DSA-5), at least 10 days prior to the time of starting construction work.
2. When an assistant inspector is used, the name of the proposed assistant inspector together with an outline of his or her experience and pertinent qualifications on an Assistant Inspector Qualification Record (Form DSA-5A) must be submitted at least 10 days prior to the use of the assistant inspector.
3. When a special inspector is used, the name of the special inspector to be used in accordance with Section 4-333(d)5.

DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any DSA regional office.

The architect or registered engineer shall provide general direction of the work of the project inspector and shall immediately notify the school board and DSA by letter if the project inspector is found to be unable or unwilling to perform such duties properly. This notification shall include a statement as to whether the architect or registered engineer is recommending that DSA withdraw its approval of the project inspector and that the school board terminate the inspector's employment. Upon concurrence by DSA with the recommendation of the responsible architect or registered engineer the withdrawal of the project inspector's approval is automatic. Upon completion of a terminating verified report, the inspector's duties and responsibilities for the project are ended.

In view of the architect or registered engineer's responsibilities for directing the activities of the inspector, such architect or registered engineer shall review and evaluate the inspector's qualifications before recommending the approval of the inspector to DSA.

(e) **Report of contract.** The architect or registered engineer in general responsible charge shall report contract information and time of starting work to DSA. (See Section 4-331.)

(f) **Architect or engineer verified reports.** All architects and registered engineers having responsibility for observation of the work of construction shall maintain such personal contact with the project as is necessary to assure themselves of compliance in every material respect with the approved plans and specifications. Personal contact shall include visits to the project site by the architect, engineer or their qualified representative to observe the construction. Each architect or engineer shall submit verified reports to DSA as required by Section 4-336. The architect or registered engineer in general responsible charge shall also require that verified reports from the project inspector, special inspectors, testing facility, the geotechnical engineer, contractors and the other architects and engineers are submitted as required.

(g) **Testing and special inspection program.** The architect or registered engineer in general responsible charge shall establish the extent of the testing and special inspection program consistent with the needs of the particular project [see Sections 4-335 and 4-333(d)] and shall issue specific instructions to the testing facility and special inspectors prior to start of construction. He or she shall also notify DSA as to the disposition of materials noted on laboratory testing, and/or special inspection, reports as not conforming to the DSA approved documents.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17302, 17309, 17310, 81138, 81141 and 81142.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-341, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effec-

tive July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-342. Duties of the project inspector.

(a) **General.** The project inspector shall act under the direction of the architect or registered engineer. The project inspector is also subject to supervision by a representative of DSA.

(b) **Duties.** The general duties of the project inspector in fulfilling his or her responsibilities are as follows:

1. **Continuous inspection requirement.** The project inspector must have actual personal knowledge, obtained by personal and continuous inspection of the work of construction in all stages of its progress, that the requirements of the approved plans and specifications are being completely executed.

   Continuous inspection means complete inspection of every part of the work. Work, such as concrete work or masonry work which can be inspected only as it is placed, shall require the constant presence of the inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the inspector is not present. In any case, the inspector must personally inspect every part of the work. In no case shall the inspector have or assume any duties that will prevent the inspector from giving continuous inspection. DSA may require verification from the project inspector of time spent at the construction site during all phases of the work.

   The project inspector may obtain personal knowledge of the work of construction, either on-site or off-site, performed under the inspection of special inspectors and/or assistant inspectors (Section 4-333). The project inspector may obtain personal knowledge that materials used in the construction conform to the DSA approved documents by verifying test reports performed by DSA accepted testing facilities, verifying materials certifications shipped with the materials, or other means as specified in the DSA approved documents and referenced codes and standards. The project inspector shall be responsible for monitoring the work of the special inspectors and testing laboratories to ensure that the testing program is satisfactorily completed. The project inspector shall be responsible for supervising the work of all assistant inspectors in accordance with Section 4-333(e). The exercise of reasonable diligence to obtain the facts shall be required.

2. **Relations with architect or engineer.** Any uncertainties in the inspector's comprehension of the plans and specifications shall be reported promptly to the architect or registered engineer for interpretation and instructions. In no case shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the DSA approved documents.

3. **Job file.** The project inspector shall keep a file of approved plans and specifications (including all approved addenda or change orders) on the job at all times. The inspector, as a condition of employment, shall have and maintain on the job at all times, the edition of Title 24, Parts 1, 2, 3, 4, 5 and 6 referred to in the plans and specifications.

4. **Project inspector's semimonthly reports.** The project inspector shall keep the architect or registered engineer thoroughly informed as to the progress of the work by making semimonthly reports in writing as required in Section 4-337.

5. **Notifications to DSA.** The project inspectors shall notify DSA by email at the following times:

   A. When construction work on the project is started, or restarted if previously suspended per Item D below.

   B. At least 48 hours in advance of the time when foundation trenches will be complete, ready for footing forms.

   C. At least 48 hours in advance of the first placement of foundation concrete and 24 hours in advance of any subsequent and significant concrete placement.

   D. When all work on the project is suspended for a period of more than two weeks.

6. **Construction procedure records.** The project inspector shall keep a record of certain phases of construction procedure including, but not limited to, the following:

   A. **Concrete placing operations.** The record shall show the time and date of placing concrete and the time and date of removal of forms in each portion of the structure.

   B. **Welding operations.** The record shall include identification marks of welders, lists of defective welds, manner of correction of defects, etc.

   C. **Pile driving operations.** The record shall include penetration under the last 10 blows for each pile when piles are driven for foundations.

   All such records shall be kept on the job until the completion of the work and shall be readily accessible to DSA personnel during site visits. These records shall be made a part of the permanent school records.

7. **Construction project log.** The inspector shall maintain construction logs on site at all times including, but not limited to, the following:

   A. A log documenting all significant communications with the design professionals, contractors, DSA representatives and other persons involved in the project. Significant communications include, but are not limited to, interpretations, clarifications or directions from the design professionals, issues identified by DSA representatives, directives from the school district, and start notices from the contractor.

   B. A log of all deviation notices. The log shall reference all applicable details and specification sections related to nonconforming materials and workmanship including field change documents, change orders, addenda and deferred approvals. The log shall describe all corrective actions taken whether performed in accordance with DSA approved documents or not, the current status of each deviation issue and the resolution for each issue.

C. Copies of all deviation notices, semimonthly reports, test reports, special inspection reports, contractor's requests for information (RFI), responses to RFIs, interpretations and clarifications from the design professional in general responsible charge, and other applicable documents required to provide a complete record of the construction.

The construction project log shall be kept on the job until the completion of the work and shall be readily accessible to DSA personnel during site visits. The log shall be made a part of the permanent school records.

8. **Deviations.** The project inspector shall notify the contractor, in writing, of any deviations from the approved plans and specifications which are not immediately corrected by the contractor when brought to the contractor's attention. Copies of such notice shall be forwarded immediately to the architect or registered engineer, and to DSA.

   Failure on the part of the project inspector to notify the contractor of deviations from the approved plans and specifications shall in no way relieve the contractor of any responsibility to complete the work covered by his or her contract in accordance with the approved plans and specifications and all laws and regulations.

9. **Inspector verified report.** The project inspector shall make and submit directly to DSA verified reports (see Section 4-336). The project inspector shall prepare and deliver to DSA detailed statements of fact regarding materials, operations, etc., when requested.

10. **Performance of duties.** The inspector shall perform all duties and render all services with honesty. Inspectors who fail to carry out their duties in an ethical manner or who engage in illegal activities may be subject to disciplinary action as defined in Section 4-342(d).

(c) **Violations.** Failure, refusal or neglect on the part of an inspector to notify the contractor of any work which does not comply with the requirements of the approved plans and specifications, or failure, refusal or neglect to report immediately, in writing, any such violation to the architect or registered engineer to the school board, and to DSA shall constitute a violation of the Act and shall be cause for DSA to take action which may result in the withdrawal of the inspector's approval. The State Architect or designee may take appropriate action as described in Section 4-342(d) when any of the following conditions exist:

1. The inspector has failed to fulfill any of the relevant requirements of this code.
2. The inspector has been convicted of a crime considered to be substantially related to the qualifications, functions or duties of an inspector in a manner consistent with the public health, safety or welfare.
3. The State Architect has received a factual complaint, or other relevant information regarding the work of an inspector.

(d) **Disciplinary actions.** Failure to satisfactorily perform inspector duties identified in this code may be cause for DSA to take action(s) which include but are not limited to the following:

1. Require the inspector to meet with DSA in the regional office for counseling.
2. Requiring the inspector to attend training classes.
3. Withdrawal of the inspector's approval for the project.
4. Downgrading of the inspector's class of certification.
5. Suspension of the inspector's certification.
6. Withdrawal of the inspector's certification.

(e) **Notice of disciplinary actions.** Notice of disciplinary action shall specify the grounds for the actions taken.

(f) **Criteria for reinstatement.** When considering reversal of any disciplinary action taken pursuant to Section 4-342(d), the State Architect or designee evaluating the reinstatement of an inspector's approval for a project, or certification, may consider the following criteria:

1. Nature and severity of the act(s) or offense(s).
2. The time that has elapsed since the commission of the act(s) or offense(s).
3. If applicable, evidence of expungement proceedings pursuant to Section 1203.4 of the Penal Code.

(g) **Filing an appeal.**

1. The State Architect or his/her designee has the discretion to immediately order that approval for a project, or certification, be temporarily invalidated or to seek additional information, pending a final determination by the State Architect or his/her designee pursuant to Section 4-342(c). The decision to temporarily invalidate approval for a project, or certification, will be made on a case by case basis, as necessary to ensure public health, safety and welfare.
2. The State Architect or his/her designee shall provide the appellant with written notice that their approval for a project, or certification, has been temporarily invalidated as of a specific date or is subject to suspension or denial pursuant to Section 151(a), pending a final determination. The written notice shall include the reasons for the action being taken or investigated, as applicable, and provide a summary of the facts and allegations. Service of the written notice of the proposed action shall be confirmed by certified mail.
3. Written notice of the final determination by the State Architect or his/her designee shall be confirmed by certified mail within 60 days from the initial written notification. The time to render his/her determination may be extended an additional 30 days, as necessary to consider any additional supporting documentation provided to the State Architect relevant to the issue being investigated.
4. An appeal of an action by the State Architect or his/her designee to suspend approval for a project, or certification, or to deny renewal of a certification must be filed in writing with the Division of the State Architect within 60 days of the date posted on the certified service of the written notice of the final determination from the State Architect. Unless a hearing is specifically requested as provided in Section 4-342(d)6 the appeal will be based on an analysis of the materials available.
5. Within 60 days from the date of receipt of the appeal the State Architect or his/her designee shall render his/her determination on the appeal. The time to render the

determination may be extended an additional 30 days, as necessary to conclude any research or investigation required, at the discretion of the State Architect or his/her designee.

6. Should an individual submit a written request for a hearing, the State Architect may designate an appropriate hearing officer to conduct the hearing. Written notice of the date and time of the hearing and the reasons for the action being taken or investigated, as applicable, shall be provided to the appellant. The hearing shall be limited in scope to the actions stated in the written notice. The appellant may bring a representative of his/her choice.
7. The appellant shall be notified in writing of the determination made by State Architect or his/her designee regarding the appeal. Service of the written notice of the decision shall be confirmed by certified mail.
8. Any appeal of a decision rendered by the State Architect or his/her designee to rescind approval for a project or certification may be appealed to the Superior Court.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17309, 17311, 81141 and 81143.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-342, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-343. Duties of the contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved plans and specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the architect, engineer, inspector or DSA in the performance of such duties.

(b) **Performance of the work.** The contractor shall carefully study the approved plans and specifications and shall plan a schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved plans and specifications, the contractor shall correct the work immediately.

All inconsistencies or items which appear to be in error in the plans and specifications shall be promptly called to the attention of the architect or registered engineer, through the inspector, for interpretation or correction. In no case, however, shall the instruction of the architect or registered engineer be construed to cause work to be done which is not in conformity with the approved plans, specifications and change orders.

The contractor must notify the project inspector, in writing, of the commencment of construction of each and every aspect of the work at least 48 hours in advance.

The contractor must notify the inspector of the completion of each aspect of the work.

(c) **Contractor verified reports.** The contractor shall make and submit to DSA from time to time, verified reports as required in Section 4-336.

If work on the building is being done by independent contractors, having contracts with the school board, verified reports shall be submitted by each contractor regardless of the type of work involved.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17280, 17309, 81130 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-343, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-344. Duties of mechanical and electrical engineers. The architect or structural engineer in general responsible charge is responsible for the designs prepared by the mechanical and electrical engineers, except that where plans, specifications and estimates for alterations or repairs do not involve architectural or structural changes said plans, specifications and estimates may be prepared and work of construction may be observed by a professional engineer in general responsible charge who is duly qualified to perform such services and who holds a valid certificate under Chapter 7 of Division 3 of the Business and Professions Code for performance of services in that branch of engineering in which said plans, specifications, and estimates and work of construction are applicable.

The mechanical or electrical engineer shall fulfill the duties outlined in Section 4-341 when assuming general responsible charge and shall submit verified reports as required in Section 4-336. When accepting delegated responsibility he or she shall comply with the requirements of Sections 4-336 and 4-341 insofar as these may relate to the work delegated to him or her.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17302, 17309, 81133, 81138 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-344, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 7
EXAMINATION AND REPORT OF EXISTING BUILDINGS

4-345. Request for examination.

(a) **Examination and report requested of DSA by the school district.** Upon written request by the governing board of any school district or by at least 10 percent of the parents having pupils enrolled in any school district as certified to by the county superintendent of schools, DSA shall make an examination and report on the structural condition of any school building of the district. DSA must report whether or not each building examined is substantially compliant with applicable code provisions. Whether or not such examination is requested of DSA is entirely optional with the district or parents concerned, and consequently, in making such examination and report DSA acts as the agent of the school district to whom DSA makes its report and by whom it is guided in determining the extent and character of the examination made.

Upon receipt of request for examination, DSA shall furnish an application blank, Form DSA-2, which shall be filled out by

the applicant, supplying such information as is available. DSA forms are available on the Internet at www.dgs.ca.gov/dsa, or at any of the DSA regional offices.

DSA is not authorized to prepare plans or make estimates of the cost necessary to make such repairs to the building or buildings as are necessary to meet structural safety standards. (See Sections 17367 and 81162 of the Education Code.)

(b) **Examination and report by school district's structural engineer.** The school district may retain a structural engineer, at the school district's expense, to examine and report on the structural condition of any school building of the district. The structural engineer shall consult with DSA for guidance as to the standard of safety to which the structural condition must measure. The structural engineer must report on whether or not each of the buildings examined is safe or unsafe for school use, and whether or not each of the buildings is substantially compliant with applicable code requirements as required of DSA under Section 4-345 (a) above.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17313 and 81145.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-345, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-346. Cost of examinations done by DSA. Upon completion of the examination by DSA and the submission of the report thereof to the school board, DSA shall submit a statement of the actual expense involved in the examination and preparation of report. Payment by the school board shall be made to DSA upon receipt of the statement of expense involved unless waived by DSA upon recommendation of the state superintendent of public instruction.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17313 and 81145.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-346, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 8
DOCUMENTS AND RECORDS

4-350. Records. The records pertaining to the supervision of the construction of school buildings by ORS are public documents and are open to inspection during office hours. Documents shall not be taken from the custody of DSA except as required by law.

Examination reports prepared under the provisions of Sections 17313 and 81145 of the Act (See Section 4-345) are considered to be the property of the school board. Inquiries regarding examination reports shall be referred to the school board concerned.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17313, 11133 and 81145; and Health & Safety Code Sections 19850 through 19853.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-350, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-351. Location of records. A file of school building plans, specifications and documents for currently active school projects in each of four regions of the state is maintained in the respective DSA regional office: Oakland (Region 1), Sacramento (Region II), Los Angeles (Region III) and San Diego (Region IV). Completed or closed project records including files, plans and specifications are stored in the State Records Center in Sacramento or in electronic format at the regional offices.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17299, 17309, 81133, 81135 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-351, Part 1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

4-352. Submission of documents.

(a) **Application.** Applications for approval of plans and specifications shall be submitted to the DSA regional office serving the project location unless specific approval for submittal elsewhere is given by the state architect. Processing shall be completed by the receiving office but portions of the work may be reassigned.

(b) **Construction documents.** All documents such as notices (see Section 4-331), qualification records (see Sections 4-333 and 4-341), test reports (see Section 4-335), special inspection reports (see Section 4-333), verified reports (see Section 4-336), and semimonthly reports (see Section 4-337) shall be submitted to the appropriate DSA regional office according to location of project.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17295, 17299, 17309, 81133, 81135 and 81141.

HISTORY:

1. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-352, Part1, Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

ARTICLE 9
STATE ADVISORY BOARD TO THE DIVISION OF THE STATE ARCHITECT FOR THE FIELD ACT

4-355. Advisory board.

(a) **General.** The state architect may appoint an advisory board whose duty it is to serve in an advisory capacity to DSA in connection with technical or structural matters and with reference to regulations and requirements pertaining to the administration of the Act. This board shall also act as a board of review relating to enforcement of Title 24 for building projects under the jurisdiction of DSA.

(b) **Membership.** The board shall consist of 17 members appointed by the state architect. Of the appointive members:

two shall be structural engineers; two shall be architects; one shall be a geotechnical engineer; one shall be a general contractor; one shall be a local building official; one shall be an electrical engineer; one shall be a mechanical engineer; two shall be school district personnel; one shall be a project inspector; one shall be a fire and panic safety representative; one shall represent the field of accessibility compliance; one shall represent community colleges personnel; and two shall be members of the general public.

Each member shall be appointed for a term of four years and shall hold office until the appointment and qualification of his or her successor or until one year has elapsed since the expiration of the term for which he or she was appointed, whichever first occurs. No person shall serve as a member of the board for more than two consecutive terms. The state architect may remove any member of the board for neglect of duty or other just cause. All appointed board members may vote.

The state architect may also appoint up to three additional ex officio members. State architect-appointed ex officio members may continue to serve until appointment of their successors by the state architect. Appointed ex officio members may vote.

Appointive members, except for the public members and the appointed ex officio members, shall be qualified by close connection with public school and state building design and construction. They shall be appointed from nominees recommended by the governing bodies of California-based professional organizations representing school districts, architects, engineers construction inspectors, construction managers, consultants and facility planners, contractors, building officials and fire and panic safety representatives.

There shall be eight state representative members of the board, who shall be: the State Architect; the State Geologist; the Executive Director of the California Seismic Safety Commission; the State Superintendent of Public Instruction; the Chancellor, California Community Colleges; the Director of the Office of Statewide Health Planning and Development; the Deputy Director of the Department of General Services, Real Estate Services Division; and, the State Fire Marshal; or their officially designated representatives. These members are not entitled to vote.

(c) **Meetings.** The board shall elect its own chairperson and vice chairperson and shall convene upon the call of the chairperson or the state architect whenever it may be necessary in his or her judgment for the board to meet. The board shall adopt such rules of procedure as are necessary to enable it to perform the obligations delegated to it. The chairperson of the board shall at his or her discretion or upon instructions from the board designate subcommittees to study and report back to the board any technical subject or matter regarding which an independent review or further study is desired or regarding which appeal is made to the board from decisions or rulings of the office. The board members will be reimbursed from the fund defined in Sections 17301 and 81137 of the Act for their reasonable actual expenses in attending meetings, but shall receive no compensation for their services.

Authority: Education Code Sections 17310 and 81142.

Reference: Education Code Sections 17310 and 81142.

HISTORY:

1. Editorial renumbering of Article 5 to Article 9 to correct printing error (Register 83, No. 45).
2. (OSA/SS 1/92) Regular order by the Office of the State Architect/Structural Safety Section to amend Section 4-355, Part 1 , Title 24, C.C.R. Filed with the Secretary of State on December 15, 1992; effective July 1, 1993. Approved by the California Building Standards Commission on December 9, 1992.

HISTORY NOTE APPENDIX FOR CHAPTER 4

Administrative Regulations for the
Division of State Architect, Structural Safety
(Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (DSA-SS 1/02) Chapter 4, Section 4-309. Reconstruction or Alternation Projects in Excess of $25,000 in Cost. Approved by the Building Standards Commission on May 14, 2003 and effective 180 days after publication.

2. (DSA-SS EF 02/03) Emergency adoption/approval of technical design and construction building standards for the adaptive reuse of existing building public school use: CCR, Title 24, Part 1. Approved by the California Building Standards Commission on May 14, 2003 and filed with Secretary of State on May 15, 2003. Effective May 15, 2003.

3. (DSA-SS EF 04/03) Emergency re-adoption/re-approval of technical design and construction building standards for the adaptive reuse of existing building public school use; CCR, Title 24, Part 1. Approved by the California Building Standards Commission on July 16, 2003 and filed with Secretary of State on September 10, 2003. Effective September 10, 2003.

4. (DSA-SS EF 04/03) Emergency re-adoption/re-approval of technical design and construction building standards for the adaptive reuse of existing building public school use; CCR, Title 24, Part 1. Approved as permanent by the California Building Standards Commission on January 7, 2004 and filed with the Secretary of State on January 8, 2004. Effective January 8, 2004.

5. (DSA-SS 03/06) Editorial amendments to administrative standards for public elementary and secondary schools and community colleges which correlate with DSA-SS adoption of the 2006 *International Building Code* into Part 2 of Title 24. Effective January 1, 2008.

6. (DSA-SS EF 01/09) Modification to project renewal timeframes. Approved by the commission January 22, 2009 and filed with the Secretary of State on January 26, 2009 with an effective date of January 26, 2009

CHAPTER 5

ACCESS TO PUBLIC BUILDINGS BY PERSONS WITH DISABILITIES

ARTICLE 1
COMPLIANCE PROCEDURES

5-101. Purpose. These regulations implement Sections 4450 et seq. of the Government Code to ensure that where state funds are utilized for the construction or alteration of any public building or facility or where the funds of counties, municipalities or other political subdivisions are utilized for the construction or alteration of elementary, secondary or community college buildings and facilities that the plans and specifications for such buildings and facilities are reviewed by the Division of the State Architect (DSA) and certified to be in compliance with California law requiring access for persons with disabilities prior to a contract being awarded.

Authority: Government Code Sections 4450, 4453 and 4454.

Reference: Government Code Section 4454.

HISTORY:

1. New Group 2 (§§81 through 86) filed 3-5-71 as an emergency; effective on filing. Certificate of Compliance included (Register 71, No. 10). For history of former Group 2 see Register 66, No. 38.
2. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

5-102. General. For the purpose of assuring compliance with minimum requirements for accessibility by persons with disabilities, the governmental agency controlling the appropriation from which the project is funded shall submit an application, together with plans and full, complete and accurate specifications and filing fee, to the State Architect. The DSA will process the documents. Written approval shall be obtained prior to award of a construction contract.

Authority: Government Code Section 4453.

Reference: Government Code Section 4454.

HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

5-103. Application. For each project to be reviewed and certified, a separate application (Form DSA-1) shall be submitted to the DSA. The application shall be accompanied by a complete set of project plans and specifications and an appropriate filing fee (see Section 5-104).

The above documents shall be submitted to one of the following regional offices:

DIVISION OF THE STATE ARCHITECT
OAKLAND REGIONAL OFFICE
1515 Clay Street, Suite 1201
Oakland, CA 94612

DIVISION OF THE STATE ARCHITECT
SAN DIEGO REGIONAL OFFICE
10920 Via Frontera, Suite 300
San Diego, CA 92127

DIVISION OF THE STATE ARCHITECT
SACRAMENTO REGIONAL OFFICE
1102 Q Street, Suite 5200
Sacramento, CA 95811

DIVISION OF THE STATE ARCHITECT
LOS ANGELES REGIONAL OFFICE
700 N. Alameda St., Suite 5-500
Los Angeles, CA 90012

The application shall be considered received when all the required documents and fees have been received by the office and the application number assigned.

The documents submitted for review and used for certification shall be retained by the DSA.

Authority: Government Code Section 4454.

Reference: Government Code Section 4454.

HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47). For prior history, see Register 76, No. 25.
2. Renumbering and amendment of former Section 83 to Section 83.1 filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).
3. Erratum to reflect locations of offices.

5-104. Fees.

(a) The filing fee for projects under applications received on or after July 1, 2009 shall be four tenths of one percent (0.4%) of the first $500,000.00 of the estimated project cost plus two tenth of one percent (0.2%) of the project cost greater than $500,000.00 up to and including $2,000,000.00 plus two one-hundredths of one percent (0.02%) of the excess of the estimated project cost over $2,000,000.00, except that the minimum fee in any case shall be $400.00.

Example of filing fee to accompany application:

Estimated project cost = $250,000.00		
.004 × $250,000.00	=	$1,000.00
Estimated project cost = $1,500,000.00		
.004 × $500,000.00	=	$2,000.00
.002 × $1,000,000.00	=	2.000.00
		$4,000.00
Estimated project cost = $5,000,000.00		
.004 × $500,000.00	=	$2,000.00
.002 × $1,500,000.00	=	3,000.00
.0002 × $3,000,000.00	=	600.00
		$5,600.00

(b) The fee schedule in effect at the time of filing shall apply throughout the duration of such application.

(c) When the actual project cost exceeds the estimated cost a further fee for such projects shall become due and shall be equal to the difference between the filing fee paid and the amount computed under the schedule above using the actual cost of the project. The actual project cost shall be determined as directed in Section 5-105 and billed according to Section 5-107.

(d) If the applicant requests the cancellation or withdrawal of the application and return of the plans and specifications and filing fee, this shall be granted unless the review has begun. No

portion of the filing fee can be returned after the review has started.

(e) Beginning in July 2009, with a review in 2011 and within every four years thereafter, the State Architect shall review the fee schedule and make a written determination whether the fees are sufficient to fund the programs.

(i) If the State Architect determines that a lesser amount is sufficient to maintain the programs, the fees may be reduced for a period up to four years.

(ii) If the State Architect determines that a greater amount is necessary to maintain the programs utilizing these funds, the State Architect shall propose a fee schedule increase.

Authority: Government Code Section 4453.

Reference: Government Code Section 4454.

HISTORY:

1. New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).
2. (OSA/AC-A 1/89) Editorial transfer from CCR, Title 21 to Title 24 11-1-89.
3. (OSA/AC-A 2/89) Amend CCR, Title 24, Part 1, Sec. 5-104 (a) (b), effective 1-1-90. Approved by Building Standards Commission 10-30-89.
4. (OSA/AC EF 1/92) Emergency order by the Office of the State Architect/Access Compliance to amend Section 5-104 (a), Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state February 25, 1992; effective March 1, 1992. Approved as an emergency by the California Building Standards Commission on February 24, 1992.
5. (OSA/AC EF 1/92) Emergency order by the Office of the State Architect/Access Compliance to amend Section 5-104 (a), Part 1, Title 24, California Code of Regulations; approved by the California Building Standards Commission on February 24, 1992; filed as an emergency order with the secretary of state February 25, 1992, and effective March 1, 1992, has lapsed. No action was taken by the OSA/AC to make these regulations permanent; therefore, the initial regulations are back in effect as of June 29, 1992.

5-105. Project cost. For purposes of determining the fees, both the estimated and actual project cost shall be the cost for the total outlay contemplated for all work included in the certified plans and specifications. The term "project" shall be defined as all buildings and other structures, together with the development of the site, but in the event the plans and specifications submitted with the application do not provide for the construction of, addition or alteration to a building or structure, then it shall be for the site development proposed in the application.

The actual project cost shall include all items which are normally considered to be contractors operation costs. Addenda or change order items which increase the contract amount shall be included in the final actual project cost computation.

All fees and/or reimbursable charges paid the construction managers shall be included in the actual project cost. When the contract for the work includes items not otherwise subject to the approval of the office and not included in the approved plans and specifications the actual cost shall include this work unless such costs are segregated by separate bid items or by separately priced items of change orders, or by a certified copy of the subcontractor's bid. Such segregation shall not be made by contract price breakdown or estimates.

Authority: Government Code Section 4454.

Reference: Government Code Section 4454.

HISTORY:

1. New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2 (d) (Register 84, No. 35).

5-106. Revision of plans and specifications. No additional fee is charged upon submission of revisions to the approved plans and specifications, provided that the entire matter is actually one transaction having to do with the same project and the revisions do not require substantial review for accessibility. If the original plans are abandoned and the plans and specifications submitted in lieu thereof are in fact for a new project rather than an identical project, or where a modified set of plans is for an essentially different concept, it is necessary that a new application be filed and a fee paid. This is regardless of the fact that the project may have the same name, be of the same general size, and be situated at the same location as the project for which the original application was made.

Authority: Government Code Section 4454.

Reference: Government Code Section 4454.

HISTORY:

1. New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).

5-107. Billing for further fees. For public school projects the DSA shall determine whether or not further fees are due and shall bill the district for such further fees.

For projects other than public schools, the applicant or owner shall submit to the office a report verifying the actual project cost within 90 days after the completion of the project. This actual project cost shall be the basis for the further fee computation. The accuracy and timely submission of this actual project cost report shall be the responsibility of the owner or his designated agent. The owner shall be billed for further fees upon completion of the project or portion thereof if fee is due.

Authority: Government Code Section 4454.

Reference: Government Code Section 4454.

HISTORY:

1. New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2 (d) (Register 84, No. 35).

5-108. Refunds. Claims for refunds of five dollars or less due to errors in cost reporting or fee computation shall be made within one year from the date of payment.

Authority: Government Code Section 4454.

Reference: Government Code Section 4454.

HISTORY:

1. New section filed 8-30-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 35).

5-109. Review of plans and specifications. The DSA will review the submitted documents to ensure that the requirements cited in Article 1 are fully met.

Authority: Government Code Section 4453.

Reference: Government Code Section 4454.

HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).

5-110. Written approval.

(a) **Approval obtained.** Upon completion of review, DSA will return to the awarding authority a written approval, if the documents comply with the requirements. This approval of the application constitutes the "written approval" required by Sec-

tion 4454 of the Government Code. No changes or revisions shall be made following written approval which affect access compliance items unless such changes or revisions are submitted to the DSA for approval.

(b) **Approval denied.** If the documents fail to meet the requirements of these regulations, DSA will return to the awarding authority the plans with corrections noted thereon together with instructions for resubmittal of the plans and specifications. The corrected plans are the property of the Division of the State Architect and shall be returned within six months or the application will be void. No valid construction contract may be awarded before written approval is obtained.

(c) **Unauthorized deviations.** In the event that there is an unauthorized deviation from the requirements of these regulations with respect to the standards specified, the same shall be rectified by full compliance therewith within ninety (90) days after discovery of such deviation.

(d) **Notification.** Where the State Architect is the enforcement authority and any project is proposed to be approved and such approval action would deny accessibility either required by Sections 4450 and 4458, inclusive, of the Government Code to persons with disabilities, or by reason of an equivalent facilitation exception granted pursuant to Section 4451 of the Government Code, the State Architect shall notify affected persons with disabilities or organizations and others who have made written requests to be informed as to such proposals under consideration.

Authority: Government Code Sections 4450 and 4460 and Health and Safety Code Section 18949.

Reference: Government Code Section 4460.

HISTORY:

1. Amendment filed 11-24-78; designated effective 1-1-79 (Register 78, No. 47).
2. New subsection (d) filed 3-6-81 as an emergency; effective upon filing (Register 81, No. 10). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 7-4-81.
3. Order of Repeal of 3-6-81 emergency order filed 3-13-81 by OAL pursuant to Government Code Section 11349.6 (Register 81, No. 11).
4. New subsection (d) filed 7-28-82; effective thirtieth day (Register 82, No. 31).
5. Amendment of subsection (a) filed 7-17-85; effective thirtieth day thereafter (Register 85, No. 29).

5-111. General requirements. General requirements and building standards are located in Title 24, Part 2.

ARTICLE 2
DIVISION OF THE STATE ARCHITECT—ACCESS COMPLIANCE PROCESSING PRODUCT APPROVALS
January 1, 2001

Detectable warning products and directional surfaces installed after January 1, 2001 shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect, Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

5-201. Processing independent entity evaluation approvals (IEEA). Independent Entity Evaluation Approvals shall be registered in the Division of the State Architect (DSA) headquarters office.

To maintain a central file for all IEEA and to operate within the current DSA program, certain administration and all accounting shall be performed at the DSA headquarters office under the direction of the Principal Architect.

5-202. IEEA application procedure.

1. Upon receipt of an IEEA application, send the application fee and a copy of the application to the DSA headquarters office, attention: Access Compliance.
2. A paper file will be created for each IEEA, which will initially include a copy of the application and the application fee. Headquarters personnel will then file the product, manufacturer and registration information, creating an IEEA number.
3. The application fee will be given to the headquarters' cashier for deposit.

5-203. IEEA acceptance procedure.

1. Prior to issuing IEEA acceptance, it is required that all fees be paid. If fees are due, please contact the manufacturer for payment and forward the payment to the DSA headquarters office, along with the request for the additional payment.
2. The fee, if any, will be given to the headquarters' cashier for filing and deposit.
3. The acceptance letter will be retained at DSA headquarters, Access Compliance. A copy of the status approval letter will be returned to the applicant.
4. Headquarters' personnel will register, prepare and distribute all necessary copies of the acceptance letter. The original file shall be maintained at headquarters.

5-204. Accounting of IEEA. Income for IEEA will be earned in the month in which they are banked. This money will be applied to Disability Access Account for deposit.

5-205. Contacts for questions.

1. IEEA Contact—DSA headquarters, attention: Access Compliance, IEEA Program.
2. Headquarters Administration Contact—DSA headquarters, attention: Access Compliance, IEEA Program.
3. Headquarters Accounting Contact—DSA headquarters, Accounting.

Authority: Government Code Sections 4450, 4460 and Health and Safety Code Section 18949.1.

Reference: Government Code Section 4460.

ARTICLE 3
ACCEPTANCE OF DETECTABLE WARNING AND DIRECTIONAL SURFACE PRODUCTS FOR MANUFACTURERS AND DESIGN PROFESSIONALS
January 1, 2001

Detectable warning products and directional surfaces installed after January 1, 2001 shall be evaluated by an independent entity, selected by the Department of General Services, Divi-

sion of the State Architect, Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing, evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.

5-301. Division of the State Architect, Access Compliance, acceptance of product. The procedure for the DSA-AC acceptance of manufactured products is detailed in this article.

All products require prior evaluation by a recognized evaluation agency that has a program specifically intended for such purposes. DSA-AC shall review the evaluation report for compliance with related and appropriate national standards and Title 24 requirements.

5-301.1. Product submittal. Products must meet the requirements of Section 5-301.

5-301.2. Division of the State Architect, Access Compliance, products exempt from evaluation by a recognized agency. No products can be approved for use that do not require evaluation by a recognized evaluation agency.

5-301.3. Products evaluated by recognized state and city agencies. No products can be approved by any state and city agencies for use that do not require evaluation by a recognized evaluation agency.

5-301.4. Products evaluated by a recognized evaluation agency. Products must have, as a minimum, an approved report published by a nationally recognized evaluation agency. Without an evaluation report, the applicant will be required to obtain such a report or will be denied acceptance on DSA-AC projects. The report and its evaluation criteria may be reviewed for compliance with national standards.

5-301.5. Development of DSA acceptance criteria. Development of new DSA-AC acceptance criteria shall be based on acceptance criteria from a recognized evaluation agency.

5-301.6. Marking. Each detectable warning and directional surface products shall be provided with:

1. Label indicating the DSA label number,
2. Manufacturer's product number, and
3. Product approval expiration date.

Authority: Government Code Sections 4450 and 4460 and Health and Safety Code Section 18949.1.
Reference: Government Code Section 4460.

ARTICLE 4
APPLICATION FOR INDEPENDENT ENTITY EVALUATION APPROVAL (IEEA)

5-401. Application for IEEA. The following form must be filed in duplicate:

APPLICATION FOR IEAA FORM
(Filed in Duplicate)

1. Product Name: _____

2. Description of Product: _____ Expiration Date:_____

3. Intended Product Use: _____

4. Company Name:_____

5. Company Address: _____

6. Contact Person: _____
   Title: _____
   Contact Person's Phone Number: _____
   Contact Person's Fax Number: _____

7. Name of Applicant: _____

8. Signature of Applicant: _____ Date: _____

9. Application Fee Submitted: _____

Please make checks payable to Division of the State Architect, Access Compliance

New Submittal: $1,500.00

Revised Submittal: $500.00

Fees shown are for initial application. Additonal time expended during product review in excess of the initial fee will be billed on an hourly basis.

10. Return application, check and submittal to:

Division of the State Architect—Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95811

HISTORY NOTE APPENDIX FOR CHAPTER 5

Administrative Regulations for the Division of the State Architect, Access Compliance (Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (DSA-AC 2/01) Adoption of detectable warning products and standards, Chapter 5, Articles 2, 3 and 4. Approved by the California Building Standards Commission on November 28, 2001. Filed with the Secretary of State on March 1, 2002, effective April 2, 2002.

2. (DSA-AC 05/04) Changes without regulatory effect to addresses in Section 5-103 and an acronym in Section 5-202. Filed with Secretary of State on June 28, 2006 and effective 30th day after filing with Secretary of State.

3. (DSA-AC 03/06) Repeal of duplicate provisions and editorial and formatting amendments to administrative standards for implementing facility access in conformance with California Law and federally recognized accessibility standards. Effective January 1, 2008.

4. (DSA-AC 04/09) Revisions to Section 5-104, Fees, by State and Consumer Services Agency on behalf of the Division of State Architect-Access Compliance. Effective February 13, 2010.

CHAPTER 6

SEISMIC EVALUATION PROCEDURES FOR HOSPITAL BUILDINGS

ADMINISTRATIVE REGULATIONS FOR THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT (OSHPD)

ARTICLE 1
DEFINITIONS AND REQUIREMENTS

1.0 Scope. The regulations in this article shall apply to the administrative procedures necessary to implement the seismic retrofit requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983.

1.1 Application. The regulations shall apply to all general acute care hospital facilities as defined in Section 1.2 of these regulations.

1.2 Definitions. Unless otherwise stated, the words and phrases defined in this section shall have the meaning stated therein throughout Chapter 6, Part 1, Title 24.

ALTERNATIVE ANALYSIS means a complete seismic analysis using methodology approved in advance by the Office and meeting the criteria of Article 2, Section 2.7 of these regulations.

BULK MEDICAL GAS SYSTEM means an assembly of fixed equipment such as storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds and interconnecting piping that has a capacity of more than 20,000 cubic feet (NTP) of cryogenic medical gas.

COMMUNICATIONS SYSTEM means the assembly of equipment such as telephone switchgear, computers, batteries, radios, microwave communications systems, towers and antennas that provide essential internal and external communication links.

COMPLETE STRUCTURAL DAMAGE means a significant portion of the structural elements have exceeded their ultimate capacities for some critical structural elements or connections have failed, resulting in dangerous permanent lateral displacement, partial collapse or collapse of the entire building. A Complete Structural Damage would be a loss of 100% of the building's replacement cost.

CONFORMING BUILDING means a building originally constructed in compliance with the requirements of the 1973 or subsequent edition of the *California Building Code.*

CRITICAL CARE AREA means those special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, emergency rooms, operating rooms, postoperative recovery rooms and similar areas in which patients are intended to be subjected to invasive procedures and connected to line-operated, electromedical devices.

EMERGENCY POWER SUPPLY (EPS) means the source of electric power including all related electrical and mechanical components of the proper size or capacity, or both, required for the generation of the required electrical power at the EPS output terminals. For rotary energy converters, components of an EPS include the prime mover, cooling system, generator, excitation system, starting system, control system, fuel system and lube system (if required).

ESSENTIAL ELECTRICAL SYSTEMS means a system as defined in the *California Electrical Code,* Article 517 "Health Care Facilities," Chapter 5, Part 3 of Title 24.

FIRE ALARM SYSTEM means a system or portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal initiating devices and to initiate appropriate response to those signals.

FUNCTIONAL CONTIGUOUS GROUPING means a group of hospital buildings, each of which contains the primary source of one or more basic service that are operationally interconnected in a manner acceptable to the Department of Health Services.

GENERAL ACUTE CARE HOSPITAL as used in Chapter 6, Part 1 means a hospital building as defined in Section 129725 of the Health and Safety Code and that is also licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, but does not include these buildings if the beds licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, as of January 1, 1995, comprise 10 percent or less of the total licensed beds of the total physical plant, and does not include facilities owned or operated, or both, by the Department of Corrections. It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing or acute psychiatric services only.

HOSPITAL EQUIPMENT means equipment permanently attached to the building utility services such as surgical, morgue, and recovery room fixtures, radiology equipment, medical gas containers, food service fixtures, essential laboratory equipment, TV supports, etc.

HYBRID STRUCTURE means a structure consisting of an original and one or more additions, constructed at different times, and with lateral-force-resisting systems of different types, or constructed with differing materials or a different design approach. The original building and additions are interconnected and not seismically isolated.

NONCONFORMING BUILDING means any building that is not a conforming building.

NONSTRUCTURAL PERFORMANCE CATEGORY (NPC) means a measure of the probable seismic performance of building contents and nonstructural systems critical to providing basic services to inpatients and the public following an earthquake, as defined in Article 11, Table 11.1 of these regulations.

PRIMARY SOURCE means that building or portion of a building identified by the hospital as housing the main or prin-

cipal source of a basic hospital service, serving the greatest number of patients, providing the greatest number of patient beds, or having the largest/greatest floor space of the specified basic service. The hospital may submit data to substantiate the primary source through alternative criteria if different than above.

PRINCIPAL HORIZONTAL DIRECTIONS means the two predominant orthogonal translational modes of vibration with the lowest frequency.

PROBABILITY OF COLLAPSE means the fraction of building that is expected to collapse given that the ground motions defined in Section 1.4.5.1.2.1.4 occur at the building site.

SIGNIFICANT STRUCTURAL DEFICIENCY means an attribute of the structure considered to be significant with respect to Probability of Collapse.

SLENDER SEISMIC RESISTING SYSTEM means any vertical system for resisting lateral forces, such as walls, braced frames or moment frames, with a height to width ratio greater than four for the minimum horizontal dimension at any height.

STRUCTURAL PERFORMANCE CATEGORY (SPC) means a measure of the probable seismic performance of building structural systems and risk to life posed by a building subject to an earthquake, as defined in Article 2, Table 2.5.3 of these regulations.

1.3 Seismic evaluation. All general acute care hospital owners shall perform a seismic evaluation on each hospital building in accordance with the Seismic Evaluation Procedures as specified in Articles 2 through 11 of these regulations. By January 1, 2001, hospital owners shall submit the results of the seismic evaluation to the Office for review and approval. By completing this seismic evaluation, a hospital facility can determine its respective seismic performance categories for both the Structural Performance Category (SPC) and the Nonstructural Performance Category (NPC) in accordance with Articles 2 and 11 of these regulations.

1.3.1 Seismic evaluation submittal. Hospital owners shall submit the seismic evaluation report to the Office by January 1, 2001. There are no provisions for submittal of the evaluation report after this date, except as provided in Section 1.4.5.1.2. The hospital owners shall submit the evaluation report in accordance with Section 7-113, "Application for Plan Report or Seismic Compliance Extension Review" and Section 7-133, "Fees" of Article 3, Chapter 7, Part 1, Title 24.

Exceptions:

1. Any hospital facility owner whose building is exempted from the structural evaluation per Section 2.0.1.2 shall not be required to submit a structural evaluation report as specified in Section 1.3.3. In lieu of the structural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001;
2. Any hospital facility owner whose building is exempted from the nonstructural seismic evaluation per Section 11.0.1.2 shall not be required to submit a nonstructural evaluation report as specified in Section 1.3.4. In lieu of the nonstructural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001.

1.3.2 Seismic evaluation format. The evaluation shall consist of the Structural Evaluation and the Nonstructural Evaluation Reports. The reports shall be prepared in conformance with Part 1, Chapter 7, Title 24 and these regulations and prepared as follows:

1. Reports shall be submitted in an $8^1/_2$″ x 11″ format;
2. All site, architectural, and engineering plans shall be formatted on 11- by 17-inch sheets (folded to $8^1/_2$ by 11 inches);
3. Larger sheets, if required to clearly describe the requested information, shall be appended to the reports; and
4. Other supporting documents in addition to those meeting the minimum requirements of Sections 1.3.3 and 1.3.4 may be appended to the reports.

1.3.3 Structural evaluation report. The structural evaluation report shall include the following elements:

1. A description of the building, including photographs of the building, and sketches of the lateral force resisting system;
2. The "General Sets of Evaluation Statements" from the Appendix;
3. A synopsis of the investigation and supporting calculations that were made;
4. A list of the deficiencies requiring remediation to change statement responses from false to true; and
5. The SPC for the building, with comments on the relative importance of the deficiencies.

1.3.4 Nonstructural evaluation report. The nonstructural evaluation report shall include the following elements:

1. A written description of the evaluation methods and procedures conducted in conformance with Article 11 of these regulations for the determination of the facilities existing compliance. The description shall include the systems and components required for the planned level of nonstructural performance as identified in Table 11.1;

   Exceptions:

   1. Additional evaluations as per Section 11.01.3 will be required for any hospital owner electing to obtain a higher NPC at a future date consistent with an approved compliance plan;
   2. A complete nonstructural evaluation up to NPC 5 is required prior to the hospital owner selling or leasing the hospital to another party.
2. Provide single line diagrammatic plans (site plan and floor plans) of the following:

   2.1 Location of the following areas/spaces:

   (a) Central supply areas;

   (b) Clinical laboratory service spaces;

   (c) Critical care areas;

(d) Pharmaceutical service spaces;

(e) Radiological service spaces; and

(f) Sterile supply areas.

2.2 Diagrammatic or narrative descriptions of the following major building systems where deficiencies are identified that are within the scope of the evaluation, including primary source location or point(s) of entry into the building and major distribution routes of each utility or system.

(a) Mechanical systems including:

i. Air supply equipment, piping, controls and ducting;

ii. Air exhaust equipment and ducting;

iii. Steam and hot water piping systems, including boilers, piping systems, valving and components; and

iv. Elevators selected to provide service to patient, surgical, obstetrical and ground floors.

(b) Plumbing systems including:

i. Domestic water supply system, including heating equipment, valving, storage facilities and piping;

ii. Medical gas supply system, including storage facilities, manifolding and piping;

iii. Fire protection system, including sprinkler systems, wet and dry standpipes, piping systems and other fire suppression systems; and

iv. Sanitary drainage system, including storage facilities and piping.

(c) Electrical systems, including:

i. Essential electrical system, including emergency fuel storage;

ii. Internal communication systems;

iii. External communication systems;

iv. Fire alarm systems; and

v. Elevators selected to provide service to patient, surgical, obstetrical and ground floors.

Building name/ designation	OSHPD (or local building) permit date/ number	Governing building code	Construction completion date	Building type (per Section 2.2.3)	SPC	NPC

3. A synopsis of the evaluation and all the calculations used in the course of the evaluation for the planned level of nonstructural performance;

4. A list of the deficiencies identified in the course of the evaluation for the planned level of nonstructural performance;

5. Provide an 11- by 17-inch scaled Site Plan which identifies the boundaries of the facility property, locates all buildings, roadways, parking and other significant site features and improvements. Identify boundaries between buildings which were constructed at different times. For all buildings, note the names of the buildings and date of each related building permit. Provide the SPC and NPC for all buildings.

6. Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately. For buildings constructed, reconstructed or remodeled under a building permit issued by the Office, provide the OSHPD application number and the date of the initial submittal.

1.4 Compliance plans. A compliance plan shall be prepared and submitted for each building subject to these regulations. All general acute care hospital owners shall formulate a compliance plan which shall indicate the facilities intent to do any of the following:

1. Building retrofit for compliance with these regulations for continued acute care operation beyond 2030;
2. Partial retrofit for initial compliance, with closure or replacement expected by 2002, 2008, 2013 or 2030;
3. Removal from acute care service with conversion to nonacute care health facility use; or
4. No action, building to be closed, demolished or replaced.

This plan must clearly indicate the actions to be taken by the facility and must be in accordance with the timeframes set forth in Article 2 (Structural Performance Category-"SPC") and Article 11 (Nonstructural Performance Category-"NPC") of the Seismic Evaluation Procedure regulations.

1.4.1 Preparation of the compliance plan. The Compliance Plan shall be prepared and submitted in conformance with these regulations in the following format:

1. Compliance Plans shall be submitted in an $8^1/_2$- by 11-inch format;
2. All site, architectural, and engineering plans shall be formatted on 11- by 17-inch sheets (folded to $8^1/_2$ by 11 inches);
3. Larger sheets, if required to clearly describe the requested information, shall be appended to the compliance plan; and
4. Other supporting documents in addition to those meeting the minimum requirements of Section 1.4.4 may be appended to the compliance plan.

1.4.2 Compliance plan submittal. Hospital owners shall submit the compliance plan to the Office by January 1, 2001, unless the owner requests an extension pursuant to Section 1.4.3. The hospital owners shall submit the compliance plan in accordance with Section 7-113, "Application for Plan or Report Review" and Section 7-133, "Fees" of Article 3, Chapter 7, Part 1, Title 24.

1.4.3 Compliance plan submittal extension. Hospital owners may request an extension from the Office for submission of the compliance plan. Any hospital owner requesting an extension for submittal of the compliance plan shall make such request in writing to the Office up to 180 days prior to, but no later than January 1, 2001. The compliance plan must be submitted no later than January 1, 2002. All hospital owners requesting an extension for submittal of the compliance plan shall certify to OSHPD that all hospital buildings continuing acute care operation beyond January 1, 2002 meet the standards of NPC 2 by January 1, 2002.

1.4.4 Compliance plan requirements. Each compliance plan shall contain the following elements:

1. An Existing Site/Campus Description;
2. A Compliance Plan Description;
3. A Compliance Site Plan;
4. A Compliance Plan Schedule; and
5. An Existing and Planned Buildings Matrix.

1.4.4.1 Existing site/campus description. If the compliance plan is submitted separately from the seismic evaluation, it will be necessary to resubmit the information as specified in Section 1.3.4.5, of the Nonstructural Evaluation Report.

1.4.4.2 Compliance plan description. Provide a comprehensive narrative description of the Compliance Plan, including the projected schedule for compliance.

1.4.4.3 Compliance site plan. Provide Compliance Site Plans, indicating the configuration of the facility at the 2008 and 2030 milestones. The plans shall indicate conforming and nonconforming buildings and identify the final configuration of the facility at each milestone, after completion of compliance measures.

1.4.4.4 Compliance plan schedule. Provide a bar graph schedule which describes the schedule for compliance with the SPC and NPC seismic performance categories, indicating the schedule of the following major phases of the plan:

1. Obtain a geotechnical report (if necessary);
2. Architecture and engineering design/construction document preparation;
3. Local approvals;
4. Office review, approval and permitting;
5. Approval of Department of Health Services Licensing and Certification, and any other required licensing;
6. Permanent relocation of acute care services to other buildings or facilities (identify services affected);
7. Temporary/interim relocation of acute care services to other buildings including the duration of the approved program flexibility plan pursuant to Health and Safety Code Section 1276.05;
8. Construction period; and
9. Beneficial occupancy.

Building name/ designation	Building type (per Section 2.2.3)	SPC existing	SPC planned	NPC existing	NPC planned

1.4.4.5 Existing and planned buildings matrix. Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately.

1.4.5 Compliance plan update/change notification. Should a hospital owner change an approved Compliance Plan, the hospital shall document any changes and submit for review and approval to the Office an amended Compliance Plan. Changes are defined as alterations to the planned level of seismic performance or compliance schedule. Submittal of an amended compliance plan shall require a hospital owner to comply with one or more of the following provisions, if applicable:

1. A hospital owner shall submit to the Department of Health Services' Seismic Safety Unit (DHS) an Office-approved compliance plan that includes interim relocation of general acute care services in accordance with a program flexibility plan pursuant to Health and Safety Code Section 1276.05. This submittal by the hospital owner to DHS shall occur within 30 days of the Office's approval.
2. A hospital owner shall comply with the requirements of Section 1.5.2, "Delay in Compliance" for any amended compliance plan.
3. A hospital owner amending a compliance plan to attain a higher NPC level will perform a nonstructural evaluation of the systems and components required for the planned level of nonstructural performance identified in Table 11.1, "Nonstructural Performance Categories."

1.4.5.1 Change in seismic performance category. The SPC or NPC for a hospital building may be changed by the Office from the initial determination in Section 1.3.3 or 1.3.4, provided the building has been modified to comply with the requirements of Chapter 34A, Part 2 of Title 24 for the specified SPC or NPC. The SPC of a hospital building may also be changed by the Office on the basis of collapse probability assessments in accordance with Section 1.4.5.1.2.

1.4.5.1.1 The SPC or NPC for a hospital building may be changed by the Office from the initial determination made per Sections 2.0.1.2.3 or 11.0.1.2.1 upon the following:

1. A Seismic Evaluation Report shall be submitted and approved which shall include either or both of the following:
   1.1 A structural evaluation report in accordance with Section 1.3.3;

1.2 A nonstructural evaluation report in accordance with Section 1.3.4.

Exception: To change an NPC 1 hospital building to an NPC 2 under this section, the nonstructural evaluation may be limited in scope to the systems and equipment specified in Section 11.2.1.

2. The building has been modified to comply with the requirements of Chapter 34A, Part 2 of Title 24 for the specified SPC or NPC.

1.4.5.1.2 Hospital buildings with an SPC 1 rating, may be reclassified to SPC 2 by the Office, pursuant to Table 2.5.3, on the basis of a collapse probability assessment, provided the hospital buildings received an extension to the January 1, 2008, compliance deadline in accordance with Section 1.5.2.

Exception: Hospital buildings with the following deficiencies are not eligible for reclassification:

a) The potential for surface fault rupture and surface displacement at the building site is present (Section 9.3.3).

b) Buildings with unreinforced masonry bearing wall construction (Section 5.4).

1.4.5.1.2.1 The collapse probability assessment by the Office shall be determined using the following:

1. Multi-Hazard Loss Estimation Methodology, Earthquake Module (HAZUS-MH MR 2) developed by the Federal Emergency Management Agency (FEMA) / National Institute of Building Sciences (NIBS).
2. Building specific input parameters required by the Advanced Engineering Building Module (AEBM) of the HAZUS methodology shall be obtained from Appendix H to Chapter 6.
3. Modifications by the Office to the AEBM input parameters are hereby adopted as shown in Appendix H to Chapter 6, which are based on the following:
   a) Building type
   b) Building height and number of stories
   c) Building age
   d) Significant Structural Deficiencies listed in Section 1.4.5.1.2.2.2.2.
4. Site seismicity parameters adjusted for soil type, as determined by the Office, shall be the lesser of:
   a) Deterministic ground motion due to the maximum magnitude earthquake event on the controlling fault system.
   b) Probabilistic ground motion having 10 percent probability of being exceeded in 50 years.

1.4.5.1.2.2 Hospital buildings with SPC 1 rating may be reclassified as follows:

1. The Office shall issue a written notice to the hospital owners informing them that they may be eligible for reclassification of their SPC 1 buildings as permitted by Section 1.4.5.1.2.
2. For a building to be considered for reclassification, the hospital owner shall submit the following by January 1, 2012:

2.1 A complete seismic evaluation of the building pursuant to Section 1.3.3.

Exception: Hospital owners who had submitted a complete structural evaluation report in compliance with Section 1.3.3, that is deemed to be complete by the Office, need not resubmit.

2.2 A supplemental evaluation report prepared by a California registered structural engineer that identifies the existence or absence of the building structural Lateral Force Resisting System (LFRS) properties and Significant Structural Deficiencies listed below:

a. Age: Year of the *California Building Code* (CBC) used for the original building design.

Exception: For pre-1933 buildings, the design year shall be reported.

b. Materials Tests: Office approved materials test results based on test plan preapproved by the Office (Section 2.1.2).

c. Load path (Section 3.1)

d. Mass irregularity (Section 3.3.4).

e. Vertical discontinuity (Section 3.3.5).

f. Short captive column (Section 3.6).

g. Material deterioration (Section 3.7).

h. Weak columns (Sections 4.2.8 and 4.3.6).

i. Wall anchorage (Section 8.2).

j. Redundancy (Section 3.2).

k. Weak story irregularity (Section 3.3.1).

l. Soft story irregularity (Section 3.3.2).

m. Torsional irregularity (Section 3.3.6).

n. Deflection incompatibility (Section 3.5).

o. Cripple walls (Section 5.6.4).

p. Openings (in diaphragm) at shear walls (Section 7.1.4).

q. Topping slab missing (Sections 7.3 and 7.4) or the building type (structural system) is of lift slab construction.

This supplemental evaluation report shall include supporting documentation relating to the existence or absence of the Significant Structural Deficiencies listed above including calculations, where required, for review and acceptance by the Office, unless they are included in the complete structural evaluation.

2.3 Building systems shall be classified as to their Model Building Type per Table 1.4.5.1. For buildings with multiple building types, all types shall be listed. The building type resulting in the maximum collapse probability will be utilized by

TABLE 1.4.5.1—MODEL BUILDING TYPE

MODEL BUILDING TYPE (MBT)	DESCRIPTION
W1	Wood, Light Frame (≤ 5,000 sq ft)
W2	Wood, greater than 5,000 sq ft
S1	Steel Moment Frame
S2	Steel Braced Frame
S3	Steel Light Frame
S4	Steel Frame with Cast-In Place Concrete Shear Walls
S5	Steel Frame with Unreinforced Masonry Infill Walls
C1	Concrete Moment Frame
C2	Concrete Shear Walls
C3	Concrete Frame with Unreinforced Masonry Infill Walls
PC1	Precast Concrete Tilt-Up Walls
PC2	Precast Concrete Frames with Concrete Shear Walls
RM1	Reinforced-Masonry Bearing Walls with Wood or Metal Deck Diaphragms
RM2	Reinforced-Masonry Bearing Walls with Concrete Diaphragms
URM	Unreinforced-Masonry Bearing Walls
MH	Manufactured Housing

the Office to determine eligibility for reclassification.

2.4 Building height and number of stories above and below the seismic base shall be specified.

1.4.5.1.2.3 Upon assessment of the collapse probability of the SPC-1 building, the Office shall notify the hospital owner in writing the final SPC rating of the subject building.

Every building with collapse probability more than 0.75 percent, but less than or equal to 1.20 percent, shall be altered, repaired or seismically retrofitted to mitigate any deficiencies identified in accordance with Article 10 Sections 10.1.1.1, 10.1.2.2, 10.1.6 and 10.1.7 of this chapter (as part of the complete seismic evaluation in accordance with Section 1.3.3) by January 1, 2015. Hospitals not meeting the deadline set by this section shall not be issued a building permit for any noncompliant building except those required for seismic compliance in accordance with the California Administrative Code (Chapter 6), maintenance, and emergency repairs until the building permit required by this section is issued.

1.4.5.1.2.4 When the collapse probability assessment by the Office results in the building remaining in SPC 1, further evaluation may be provided by the hospital owner in accordance with Section 2.7 in order to substantiate a higher SPC rating.

1.4.5.1.3 Except as provided in Section 1.4.5.1.4, a nonconforming hospital building that does not meet the structural and nonstructural requirements of Table 2.5.3 and Table 11-1 shall not provide acute care services or beds after the compliance deadlines set forth in Section 1.5.1. After these deadlines, the following shall apply.

1. A nonconforming hospital building used as a hospital outpatient clinical services building shall not be classified as a hospital building. It shall comply with the provisions of Health and Safety Code Section 129725. It shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
2. A nonconforming hospital building used as an acute psychiatric hospital or multistory skilled nursing facility or intermediate care facility shall be classified as a hospital building. However, it shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
3. A nonconforming hospital building used as a single-story wood frame or light steel frame skilled nursing facility or intermediate care facility shall not be classified as a hospital building, and shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
4. A nonconforming hospital building used for purposes other than those listed above shall not be classified as a hospital building; shall not be licensed pursuant to Health and Safety Code Section 1250(a); shall not be subject to the requirements of Title 24, Part 1, Chapter 6; and shall not be under the jurisdiction of the Office.

1.4.5.1.4 A hospital building from which acute care services and beds have been removed shall not provide such services unless it has been modified to comply with the requirements of SPC 5 and NPC 4 or 5. Prior to use for acute care service, the SPC and/or NPC of the hospital building shall be changed in accordance with Section 1.4.5.1.1.

1.5 Compliance requirements. All general acute care hospital owners shall comply with the seismic performance categories, both SPCs and NPCs, established in the seismic evaluation procedures, Articles 2 and 11 and set forth in Tables 2.5.3 and 11.1, respectively.

1.5.1 Compliance deadlines.

1. After January 1, 2002, any general acute care hospital building which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 2, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.
2. After January 1, 2008, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 2, as defined in Article 2, Table 2.5.3 or shall no longer provide acute care services.

   Exception: A general acute care hospital may request a delay of SPC 2 requirements if the conditions of Section 1.5.2 are met.
3. After January 1, 2008, any general acute care hospital which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 3, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

   Exception: A general acute care hospital may request an exemption from the anchorage and bracing requirements of NPC 3 if all the conditions of Section 1.5.2 are met.
4. After January 1, 2030, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 3, 4 or 5, as defined in Article 2, Table 2.5.3 and the nonstructural requirements of NPC 5, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

1.5.2 Delay in compliance.

1. The Office may grant the hospital owner an extension to the January 1, 2008 seismic compliance deadline for both structural and nonstructural requirements if compliance will result in diminished health care capacity which cannot be provided by other general acute care hospitals within a reasonable proximity.

   1.1 Hospital owners requesting an extension in accordance with Section 1.5.2 must submit an application form to the Office by January 1, 2007. The application form shall be accompanied by a statement explaining why the hospital is seeking the extension to the January 1, 2008 seismic compliance deadline. The statement shall include, at a minimum, the following information:

   (a) The length/duration of the extension request;

   (b) The hospital buildings requiring an extension; and

   (c) The acute care services that will be completely or partially unavailable if the extension is denied.

   1.2 The hospital owner shall request an extension for seismic compliance in one year increments, up to a maximum of five years, beyond the mandated year of compliance. The hospital owner shall also submit an amended compliance plan and schedule in accordance with Section 1.4.5 indicating when compliance will be obtained.

2. Any general acute care hospital located in Seismic Design Category D, as defined by Section 1613A of the 2010 *California Building Code,* may request an exemption from the anchorage and bracing requirements of NPC 3 for a hospital building if all the following conditions are met:

   2.1 The hospital building shall meet the anchorage and bracing requirements for NPC 2.

   2.2 Any future upgrade of building(s) to SPC 5 shall be accompanied by upgrade of nonstructural components to either NPC 4 or NPC 5.

   2.3 By January 1, 2024, the hospital owner shall submit to the Office a complete nonstructural evaluation up to NPC 5, for each building.

   2.4 By January 1, 2026, the hospital owner shall submit to the Office construction documents for NPC 5 compliance that are deemed ready for review by the Office, for each building.

   2.5 By January 1, 2028, the hospital owner shall obtain a building permit to begin construction, for NPC 5 compliance of each building that the owner intends to use a a general acute care hospital building after January 1, 2030. Hospitals not meeting the January 1, 2028 deadline set by this section shall not be issued a building permit for any noncompliant building except those required for seismic compliance in accordance with the California Administrative Code (Chapter 6), maintenance, and emergency repairs until the building permit required by this section is issued.

3. Any SPC-1 building which is part of the functional contiguous grouping of a general acute care hospital may receive a five-year extension to the January 1, 2008 deadline for both structural and nonstructural requirements under the following conditions:

   3.1 The owner must apply for an extension with the Office no later than January 1, 2004;

   3.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;

   3.3 The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002;

   3.4 At least one building within the contiguous grouping shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;

   Exception: Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.

   3.5 The basic service(s) from the building shall be:

   (a) Relocated to an SPC-3, 4, or 5/NPC-4 or 5 building by January 1, 2013.

i. The building shall not be used for general acute care service after January 1, 2013, unless it has been retrofitted to an SPC-5/NPC-4 or 5 building; or

(b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013;

3.6 Any other SPC-1 building in the contiguous grouping other than the building identified in subsection 1.5.2.3.4 must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013, or no longer used for acute care hospital inpatient services.

4. A post-1973 building classified as SPC-3 or 4 may receive an extension to the January 1, 2008, deadline for both the structural and nonstructural requirements, provided it will be closed to general acute care inpatient service by January 1, 2013. The basic services in this building shall be relocated to an SPC-5/NPC-4 or 5 building by January 1, 2013;

4.1 Any SPC-1 building in a functional contiguous grouping must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013, or no longer used for acute care hospital inpatient services. The following conditions apply to these hospital buildings:

(a) The owner must apply for an extension with the Office no later than January 1, 2004;

(b) The owner must submit an amended compliance plan to the Office by July 1, 2004; and

(c) The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002.

5. A single building containing all of the basic services may receive a five-year extension to the January 1, 2008, deadline for both structural and nonstructural requirements under the following conditions:

5.1 The owner must apply for an extension with the Office no later than January 1, 2004;

5.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;

5.3 The building shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;

Exception: Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.

5.4 The basic services from this building shall be:

(a) Relocated to an SPC-3, 4, or 5/NPC-4 or 5 building by January 1, 2013.

i. The building shall not be used for general acute care service after January 1, 2013, unless it has been retrofitted to an SPC-5/NPC-4 or 5 building; or

(b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013.

6. Any general acute care hospital that received an approval by the Office to replace all the nonconforming buildings subject to the requirements of Health and Safety Code Section 130060(a) with new buildings by January 1, 2020, may request an exemption from the anchorage and bracing requirements of NPC 3 if all of the following conditions are met:

6.1 The hospital shall meet the anchorage and bracing requirements for NPC 2.

6.2 New building(s) replacing the existing noncompliant building(s) shall be either NPC 4 or NPC 5 building(s).

7. Any general acute care hospital (buildings located in Seismic Design Category D or F) may request an extension from the anchorage and bracing requirements of NPC 3 up to January 1, 2020, if all of the following conditions are met:

7.1 The hospital shall meet the anchorage and bracing requirements for NPC 2.

7.2 All building(s) shall be upgraded to either NPC 4 or NPC 5 by January 1, 2020.

7.3 By January 1, 2014, the hospital owner shall submit to the Office a complete nonstructural evaluation up to NPC 5, for each building.

7.4 By January 1, 2016, the hospital owner shall submit to the Office construction documents for NPC 4 or NPC 5 compliance that are deemed ready for review by the Office, for each building.

7.5 By January 1, 2018, the hospital owner shall obtain a building permit to begin construction, for NPC 4 or NPC 5 compliance of each building that the owner intends to use as general acute care hospital building after January 1, 2020. Hospitals not meeting the January 1, 2018, deadline set by this section shall not be issued a building permit for any noncompliant building except those required for seismic compliance in accordance with the California Administrative Code (Chapter 6), maintenance, and emergency repairs until the building permit required by this section is issued.

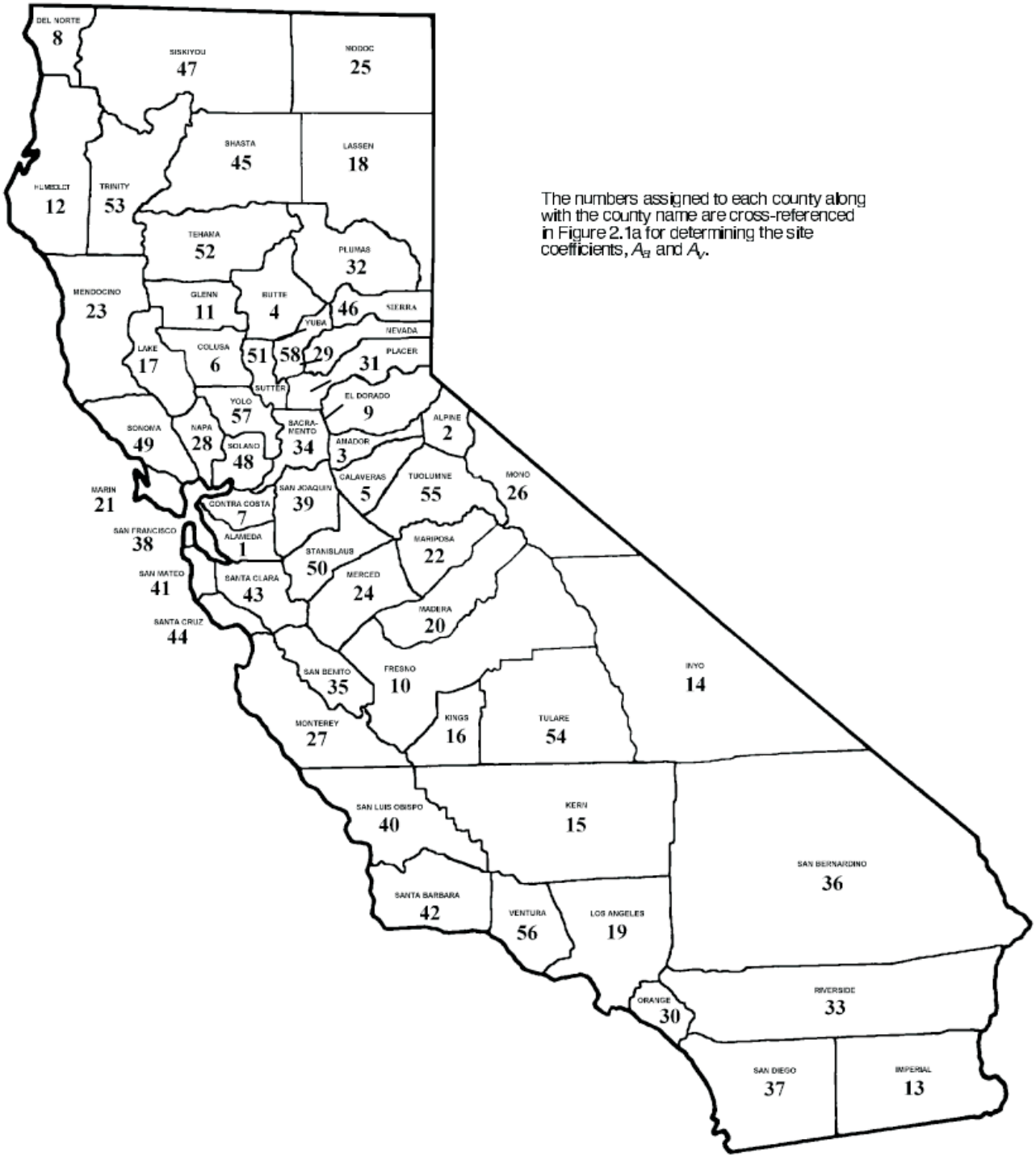
1.6 Dispute resolution/appeals process. Dispute resolution and appeals shall be in conformance with Article 5, Chapter 7, Part 1 of Title 24.

1.7 Notification from OSHPD.

1. The Office shall issue written notices of compliance to all hospital owners that have attained the minimum required SPC and NPC performance levels by January 1, 2008, January 1, 2013, and January 1, 2030;
2. The Office shall issue written notices of violation to all hospital owners that are not in compliance with the min-

imum SPC and NPC performance levels by January 1, 2008, January 1, 2013, and January 1, 2030; and

3. The Office shall notify the State Department of Health Services of the hospital owners which have received a written notice of violation for failure to comply with these regulations.



The numbers assigned to each county along with the county name are cross-referenced in Figure 2.1a for determining the site coefficients, A_a and A_v.

FIGURE 2.1

ARTICLE 2
PROCEDURES FOR STRUCTURAL EVALUATION OF BUILDINGS

2.0 General.

2.0.1 Structural evaluation procedure.

1. The structural evaluation process shall include the following steps:
   - 1.1 Site visit and data collection;
   - 1.2 Identification of building type;
   - 1.3 Completion of evaluation statements in appendix;
   - 1.4 Follow-up field work, if required;
   - 1.5 Follow-up analysis for "False" evaluation statements;
   - 1.6 Final evaluation for the building;
   - 1.7 Preparation of the evaluation report; and
   - 1.8 Submittal of evaluation report to OSHPD.
2. A general acute care hospital facility building may be exempted from a structural evaluation upon submittal of a written statement by the hospital owner to OSHPD certifying the following conditions:
   - 2.1 A conforming building as defined in Article 1, Section 1.2, may be placed into SPC 5 in accordance with Table 2.5.3 under the following circumstances:
     - (a) The building was designed and constructed to the 1989 or later edition of Part 2, Title 24, and
     - (b) If any portion of the structure, except for the penthouse, is of steel moment resisting frame construction (Building Type 3, or Building Type 4 or 6 with dual lateral system, as defined in Section 2.2.3) and the building permit was issued after October 25, 1994.
   - 2.2 All other conforming buildings as defined in Article 1, Section 1.2, may be placed into SPC 4 in accordance with Table 2.5.3, except those required by Section 4.2.10 to be placed in SPC 3 in accordance with Table 2.5.3, without the need for any structural evaluation.
   - 2.3 Nonconforming buildings as defined in Article 1, Section 1.2 may be placed into SPC 1 in accordance with Table 2.5.3 without any structural evaluation.

2.1 Site visit, evaluation and data collection procedures.

2.1.1 Site visit and evaluation.

1. The evaluator shall visit the building to observe and record the type, nature and physical condition of the structure.

FIGURE 2.1a—EFFECTIVE PEAK ACCELERATION COEFFICIENT (A_a) AND EFFECTIVE PEAK VELOCITY COEFFICIENT (A_v) FOR CALIFORNIA

No.	County	EPA A_a	EPV A_v		No.	County	EPA A_a	EPV A_v
1	Alameda	0.40	0.40		30	Orange	0.40	0.40
2	Alpine	0.20	0.20		31	Placer	0.20	0.20
3	Amador	0.20	0.20		32	Plumas	0.20	0.20
4	Butte	0.20	0.20		33	Riverside	0.40	0.40
5	Calaveras	0.20	0.20		34	Sacramento	0.20	0.30
6	Colusa	0.20	0.30		35	San Benito	0.40	0.40
7	Contra Costa	0.40	0.40		36	San Bernardino	0.40	0.40
8	Del Norte	0.20	0.20		37	San Diego	0.40	0.40
9	El Dorado	0.20	0.20		38	San Francisco	0.40	0.40
10	Fresno	0.40	0.40		39	San Joaquin	0.30	0.30
11	Glenn	0.20	0.20		40	San Luis Obispo	0.40	0.40
12	Humboldt	0.20	0.30		41	San Mateo	0.40	0.40
13	Imperial	0.40	0.40		42	Santa Barbara	0.40	0.40
14	Inyo	0.40	0.40		43	Santa Clara	0.40	0.40
15	Kern	0.40	0.40		44	Santa Cruz	0.40	0.40
16	Kings	0.40	0.40		45	Shasta	0.20	0.20
17	Lake	0.30	0.30		46	Sierra	0.20	0.20
18	Lassen	0.20	0.20		47	Siskiyou	0.20	0.20
19	Los Angeles	0.40	0.40		48	Solano	0.40	0.40
20	Madera	0.20	0.30		49	Sonoma	0.40	0.40
21	Marin	0.40	0.40		50	Stanislaus	0.40	0.40
22	Mariposa	0.20	0.30		51	Sutter	0.20	0.20
23	Mendocino	0.40	0.40		52	Tehama	0.20	0.20
24	Merced	0.40	0.40		53	Trinity	0.20	0.30
25	Modoc	0.20	0.20		54	Tulare	0.40	0.40
26	Mono	0.40	0.40		55	Tuolumne	0.20	0.20
27	Monterey	0.40	0.40		56	Ventura	0.40	0.40
28	Napa	0.40	0.40		57	Yolo	0.20	0.30
29	Nevada	0.20	0.20		58	Yuba	0.20	0.20

TABLE 2.1—SOIL PROFILE TYPES AND SITE COEFFICIENTS

SOIL PROFILE TYPE	PROFILE WITH	SITE COEFFICIENT, *S*
*S*1	Rock of any characteristic, either shalelike or crystalline in nature. Such material may be characterized by a shear wave velocity greater than 2,500 feet per second or by other appropriate means of classification.	1.0
	or	
	Stiff soil conditions where the soil depth is less than 200 feet and the soil types overlying rock are stable deposits of sands, gravels or stiff clays.	
*S*2	Deep cohesionless or stiff clay conditions, including sites where the soil depth exceeds 200 feet and the soil types overlying rock are stable deposits of sands, gravels or stiff clays.	1.2
*S*3	Soft- to medium-stiff clays and sands characterized by 30 feet or more of soft- to medium-stiff clays with or without intervening layers of sand or other cohesionless soils.	1.5
*S*4	More than 70 feet of soft clays or silts characterized by a shear wave velocity less than 400 feet per second.	2.0

2. The evaluator shall review an *Engineering Geological Report* on site geologic and seismic conditions. The report shall be prepared in accordance with Title 24, Section 1634A of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC.

   Exceptions:

   1. Reports are not required for one-story, wood-frame and light steel-frame buildings of Type II or Type V construction and 4,000 square feet or less in floor area;
   2. A previous report for a specific site may be resubmitted, provided that a reevaluation is made and the report is found by the Office to be currently appropriate.

3. Establish the following *site and soil parameters:*

   a. The value of the effective peak acceleration coefficient (A_a) from Figure 2.1 and 2.1a;

   b. The value of the effective peak velocity-related acceleration coefficient (A_v) from Figure 2.1 and 2.1a;

   c. The soil profile type (S_1, S_2, S_3 or S_4) derived from the geotechnical report or from Table 2.1;

   d. The site coefficient, (S), from Table 2.1; and

   e. The ground motion parameters and near field effects in strong ground shaking required for the evaluation of welded steel moment frame structures per Sections 4.2.0.1, 4.2.0.2 and 4.2.10.

4. Assemble building design data including:

   a. Construction drawings, specifications and calculations for the original building (Note: when reviewing and making use of existing analyses and structural member checks, the evaluator shall assess and report the basis of the earlier work);

   b. All drawings, specifications and calculations for remodeling work; and

   c. Material tests and inspection reports for nonconforming buildings. If the original drawings are available, but material test and inspection reports are not available, perform the testing program as specified in Section 2.1.2.2.

   If structural drawings are not available, the site visit and evaluation shall be performed as described in Section 2.1.1.5, and structural data shall be collected using the procedures in Sections 2.1.2.1 and 2.1.2.2.

5. During the site visit, the evaluator shall:

   a. Verify existing data;

   b. Develop other needed data (e.g., measure and sketch building as outlined in Section 2.1.2);

   c. Verify the vertical and lateral systems;

   d. Check the condition of the building; and

   e. Identify special conditions, anomalies and oddities.

6. Review other data available such as assessments of building performance following past earthquakes.
7. Prepare a summary of the data using an OSHPD-approved format.
8. Perform the evaluation using the procedures in Sections 2.2 through 2.5.
9. Prepare a report of the findings of the evaluation using an OSHPD-approved format.

2.1.2 Data collection. Building information pertinent to a structure's seismic performance, including condition, configuration, detailing, material strengths and foundation type, shall be obtained in accordance with this section, and documented on drawings and/or sketches that shall be included with the structural calculations.

Exception: Materials testing is not required for reclassification by the collapse probability assessment option as permitted by Section 1.4.5.1.2, where nonavailability of materials test is identified as a deficiency per Section 1.4.5.1.2.2.2.2 (b).

2.1.2.1 Building characteristics. Characteristics of the building relevant to its seismic performance shall be obtained for use

in the building evaluation. This shall include current information on the building's condition, configuration, material strengths, detailing and foundation type. This data shall be obtained from:

1. Review of construction documents;
2. Destructive and nondestructive testing and examination of selected building components; and
3. Field observation of exposed conditions.

The characteristics of the building shall be established, including identification of the gravity- and lateral-load-carrying systems. The effective lateral-load carrying system may include structural and nonstructural elements that will participate in providing lateral resistance, although these elements may not have intended to provide lateral resistance. The load path shall be identified, taking into account the effects of any modifications, alterations or additions.

2.1.2.1.1 Nonconforming buildings without construction documents. Where the available construction documents do not provide sufficient detail to characterize the structure, the evaluation may be based on field surveys, summarized in as-built drawings. These drawings must depict building dimensions, component sizes, reinforcing information (for concrete and masonry elements), connection details, footing information, and the proximity of neighboring structures. All parts of the building that may contribute to the seismic resistance or that may be affected by the seismic response of the structure must be identified. The field survey shall establish the physical existence of the structural members, and identify critical load bearing members, transfer mechanisms, and connections. The survey shall include information on the structural elements and connector materials and details. Performing the field survey will entail removal of fireproofing or concrete encasement at critical locations to permit direct visual inspection and measurement of elements and connections. Nondestructive techniques such as radiographic, electromagnetic and other methods may be used to supplement destructive techniques.

1. **Steel elements.** Steel elements shall be classified by structural member type (e.g., rolled or build-up, material grade, and general properties). The survey shall note the presence of degradation or indications of plastic deformation, integrity of surface coatings, and signs of any past movement. For degraded elements, the lost material thickness and reduction of cross-sectional area and moment of inertia shall be determined. Visual inspection of welds shall be per American Welding Society D1.1, "Structural Welding Code-Steel." Structural bolts shall be verified to be in proper configuration and tightened as required in the AISC Steel Construction Manual. Rivets shall also be verified to be in proper configuration and in full contact, with "hammer sounding" conducted on random rivets to ensure they are functional. Nondestructive testing methods, such as dye penetrant and magnetic particle testing, acoustic emission, radiography and ultrasound shall be used when visual inspection identifies degradation or when a particular element or connection is critical to seismic resistance and requires further verification. For buildings in which archaic cast and wrought irons are employed, additional investigations to confirm ductility and impact resistance shall be conducted.
2. **Concrete elements.** The configuration and dimensions of primary and secondary structural elements shall be established. The configuration and condition of reinforcing steel shall be assessed, through removal of concrete cover and direct visual inspection, and through nondestructive inspection using electromagnetic, radiographic and other methods. Critical parameters of the reinforcing system, such as lap splice length, presence of hooks, development within concrete, degree of corrosion and integrity of the construction shall be established in sufficient detail to perform the structural evaluation.
3. **Masonry elements.** The configuration and dimensions of masonry elements shall be established. The configuration and condition of reinforcing-steel shall be assessed, through removal of masonry cover and direct visual inspection, and through nondestructive inspection using electromagnetic, radiographic and other methods. Critical parameters of the reinforcing system, such as lap splice length, presence of hooks, development within concrete, degree of corrosion and integrity of the construction shall be established in sufficient detail to perform the structural evaluation.
4. **Wood elements.** The configuration and dimensions of wood elements; the connections between wood elements; and the connections between wood and other structural components or elements such as concrete or masonry walls shall be established. The configuration and condition of wood members, including size, type, grade, condition and quality shall be assessed, through removal of finish materials, and examination of unfinished areas such as attics, crawl spaces and basements. Critical connections and elements shall be visually inspected, using invasive procedures or removal of finishes where necessary. For shear walls, select locations shall be exposed to allow evaluation of sheathing material, nail size, spacing and installation (e.g., overdriven or nails that miss or split the framing members). The base connections of shear resisting elements shall be inspected and evaluated for their adequacy to connect the base of the structure to the foundation or structure below.
5. **Foundation elements.** In the absence of dependable construction drawings, determination of the size and detailing of the foundation system requires invasive procedures. The evaluator shall select representative footings for exposure to establish footing size and depth. Conservative assumptions regarding the reinforcement may be made considering code requirements and local practice at the time of the design. In the absence of evidence to the contrary, it may be assumed that the foundation elements were adequately designed to resist actual gravity loads to which the building has been subjected.

2.1.2.2 Material properties. The building evaluation shall be based on the strength and deformation properties of the existing materials and components. The strength of existing components shall be calculated using data on their configuration,

obtained from the original construction documents, supplemented by field observations and the test values of material properties. Where such effects may have a deleterious effect on component or structural behavior, allowances shall be made for the likely effects of strain hardening or degradation. Test values may be obtained from samples extracted from the structure, or from original materials and compliance certificates. The Office will determine the adequacy of the testing program.

2.1.2.2.1 Nonconforming buildings with construction documents. The material properties for nonconforming buildings for which original construction documents of sufficient detail are available shall be confirmed by testing or from acceptable original materials and compliance certificates. If original materials and compliance certificates are available, they must provide the information specified in Items 1 through 4 of this section to be considered acceptable.

1. **Steel elements.** The following properties are required for each member type (e.g., beams, columns, braces) and each steel grade used in the structure:
   a) Ultimate tensile and yield capacities;
   b) Modulus of elasticity; and
   c) Deformation characteristics including mode of failure.
2. **Concrete elements.** The following material properties are required for each member type (e.g., beams, columns, walls) in the structure:
   a) Concrete compressive strength;
   b) Concrete unit weight;
   c) Concrete modulus of elasticity;
   d) Reinforcing steel tensile yield point;
   e) Reinforcing steel modulus of elasticity;
   f) Reinforcing steel chemical composition and carbon equivalent; and
   g) Reinforcing steel surface deformations.
3. **Masonry elements.** The following material properties are required for each type of masonry in the structure:
   a) Masonry compressive strength;
   b) Masonry unit weight;
   c) Masonry modulus of elasticity;
   d) Reinforcing steel tensile yield point;
   e) Reinforcing steel modulus of elasticity;
   f) Reinforcing steel chemical composition and carbon equivalent; and
   g) Reinforcing steel surface deformations.
4. **Wood elements.** The following material properties are required for each type of wood element in the structure:
   a) Identification of Wood Species, and
   b) Grade Material. (Note: This may be established by visual inspection or stamped labels on the element.)

2.1.2.2.2 Nonconforming buildings without construction documents. The material properties for nonconforming buildings for which original construction documents of sufficient detail are unavailable shall be confirmed by testing. The number and location of tests shall be selected so as to provide sufficient information to adequately define the existing condition of materials in the building. The evaluator shall determine the number and location of tests. The test locations shall be located throughout the entire building in those components which provide the primary path of lateral force resistance.

2.2 Selection and use of evaluation statements.

2.2.1 Identification of building type. The evaluator shall determine the building type using the following procedure:

1. Identify the lateral-force-resisting system using text and drawings, including whatever components are available and effective to constitute a system. Prepare floor and roof plans, and elevations and sketches of the lateral-force-resisting system.
2. Select one or more of the 15 common building types which best characterize the structure (see Sections 2.2.2 and 2.2.3 below). Structures with multiple lateral force resisting systems (different lateral systems in orthogonal directions, or structures where the system changes from level to level) may require the use of two or more building types. In the case of hybrid structures or other buildings that cannot be adequately classified using the 15 building types, the alternative analysis procedure shall be used, or the building shall be placed in SPC "1."
3. Reproduce from the Appendix the list of evaluation statements. These statements shall be used for all types of buildings. Some statements on the list may not be appropriate. These statements may be marked "NA" as "not applicable." The Appendix also contains the set of evaluation statements that address foundations and geologic site hazards, and nonstructural elements.

2.2.2 Using the general procedure. The general procedure involving use of the set of evaluation statements presented in the Appendix consists of the following steps:

1. Evaluate the basic building system according to the evaluation statements in Article 3;
2. Evaluate the vertical systems resisting lateral forces according to Article 4 (moment frames), Article 5 (shear walls) or Article 6 (braced frames) as appropriate. For buildings with a combination of vertical systems, each system in the building must be evaluated;
3. Evaluate the diaphragm or horizontal bracing system according to Article 7;
4. Evaluate the structural connections according to Article 8;
5. Evaluate the foundation and possible geologic site hazards according to Article 9;
6. Evaluate the nonstructural elements that involve immediate life-safety issues according to Article 10; and
7. Evaluate the critical nonstructural components and systems according to Article 11.

If a statement is found to be true, the condition being evaluated is acceptable according to the criteria of these regulations, and the issue may be set aside. If a statement is found to be false, a condition exists that needs to be addressed further,

using the specified analysis procedures. Analysis procedures are given in Section 2.4. Each statement includes a reference to a particular section in Articles 3 through 10 where additional procedures for the resolution of the issues are given. The evaluator shall assemble the list of deficiencies and the results of the analysis and proceed to the final evaluation in Section 2.5.

2.2.3 Common building types. The evaluator shall determine the type(s) of building being evaluated, choosing from among the following 15 common types:

1. **Building Type 1—Wood, light frame.** These buildings are typically small structures of one or more stories. The essential structural character of this type is repetitive framing by wood joists on wood studs. Loads are light and spans are small. These buildings may have relatively heavy chimneys and may be partially or fully covered with veneer. Lateral loads are transferred by diaphragms to shear walls. The diaphragms are roof panels and floors. Shear walls are exterior walls sheathed with plank siding, stucco, plywood, gypsum board, particle board or fiberboard. Interior partitions are sheathed with plaster or gypsum board.
2. **Building Type 2—Wood, commercial and industrial.** These are buildings with a floor area of 5,000 square feet or more and with few, if any, interior bearing walls. The essential structural character is framing by beams on columns. The beams may be glulam beams, steel beams or trusses. Lateral forces usually are resisted by wood diaphragms and exterior walls sheathed with plywood, stucco, plaster or other paneling. The walls may have rod bracing. Large exterior wall openings often require post-and-beam framing. Lateral force resistance on those lines may be achieved with steel rigid frames or diagonal bracing.
3. **Building Type 3—Steel moment frame.** These buildings have a frame of steel columns and beams. Lateral forces are resisted by the development of flexural forces in the beams and columns. In some cases, the beam-column connections have very small moment resisting capacity but, in other cases, the connections of some of the beams and columns were designed to fully develop the member capacities. Lateral loads are transferred by diaphragms to moment resisting frames. The diaphragms can be of almost any material. The frames develop their stiffness by full or partial moment connections. The frames can be located almost anywhere in the building. Usually the columns have their strong directions oriented so that some columns act primarily in one direction while the others act in the other direction, and the frames consist of lines of strong columns and their intervening beams.
4. **Building Type 4—Steel braced frame.** These buildings are similar to Type 3 buildings except that the vertical components of the lateral-force-resisting system are braced frames rather than moment frames.
5. **Building Type 5—Steel light frame.** These buildings are pre-engineered and prefabricated with transverse rigid frames. The roof and walls consist of lightweight panels. The frames are built in segments and assembled in the field with bolted joints. Lateral loads in the transverse direction are resisted by the rigid frames with loads distributed to them by shear elements. Loads in the longitudinal direction are resisted entirely by shear elements. The shear elements can be either the roof and wall sheathing panels, an independent system of tension-only rod bracing, or a combination of panels and bracing.
6. **Building Type 6—Steel frame with concrete shear walls.** The shear walls in these buildings are cast-in-place concrete and may be bearing walls. The steel frame is designed for vertical loads only. Lateral loads are transferred by diaphragms of almost any material to the shear walls. The steel frame may provide a secondary lateral-force-resisting system depending on the stiffness of the frame and the moment capacity of the beam-column connections. In "dual" systems, the steel moment frames are designed to work together with the concrete shear walls in proportion to their relative rigidities. In this case, the walls would be evaluated under this building type and the frames would be evaluated under Type 3, Steel Moment Frames.
7. **Building Type 7—Steel frame with infill shear walls.** This is one of the older type of buildings. The infill walls usually are offset from the exterior frame members, wrap around them, and present a smooth masonry exterior with no indication of the frame. Solidly infilled masonry panels act as a diagonal compression strut between the intersections of the moment frame. If the walls do not fully engage the frame members (i.e., lie in the same plane), the diagonal compression struts will not develop. The peak strength of the diagonal strut is determined by the tensile stress capacity of the masonry panel. The post-cracking strength is determined by an analysis of a moment frame that is partially restrained by the cracked infill. The analysis shall be based on published research and shall treat the system as a composite of a frame and the infill. An analysis that attempts to treat the system as a frame and shear wall is not permitted.
8. **Building Type 8—Concrete moment frame.** These buildings are similar to Type 3 buildings except that the frames are of concrete. There is a large variety of frame systems. Older buildings may have frame beams that have broad shallow cross sections or are simply the column strips of flat-slabs.
9. **Building Type 9—Concrete shear walls.** The vertical components of the lateral-force-resisting system in these buildings are concrete shear walls that are usually bearing walls. In older buildings, the walls often are quite extensive and the wall stresses are low but reinforcing is light. Remodeling that entailed adding or enlarging the openings for windows and doors may critically alter the strength of the modified walls. In newer buildings, the shear walls often are limited in extent, generating the need for boundary members and additional design consideration of overturning forces.
10. **Building Type 10—Concrete frame with infill shear walls.** These buildings are similar to Type 7 buildings except that the frame is of reinforced concrete. The analysis of this building is similar to that recommended

for Type 7 except that the shear strength of the concrete columns, after cracking of the infill, may limit the semi-ductile behavior of the system. Research that is specific to confinement of the infill by reinforced concrete frames shall be used for the analysis.

11. **Building Type 11—Precast/tilt-up concrete walls with lightweight flexible diaphragm.** These buildings have a wood or metal deck roof diaphragm that distributes lateral forces to precast concrete shear walls. The walls are thin but relatively heavy while the roofs are relatively light. Tilt-up buildings often have more than one story. Walls can have numerous openings for doors and windows of such size that the wall behaves more like a frame than a shear wall.
12. **Building Type 12—Precast concrete frames with concrete shear walls.** These buildings contain floor and roof diaphragms typically composed of precast concrete elements with or without cast-in-place concrete topping slabs. The diaphragms are supported by precast concrete girders and columns. The girders often bear on column corbels. Closure strips between precast floor elements and beam-column joints usually are cast-in-place concrete. Welded steel inserts often are used to interconnect precast elements. Lateral loads are resisted by precast or cast-in-place concrete shear walls.
13. **Building Type 13—Reinforced masonry bearing walls with wood or metal deck diaphragms.** These buildings have perimeter bearing walls of reinforced brick or concrete-block masonry. These walls are the vertical elements in the lateral-force-resisting system. The floors and roofs are framed either with wood joists and beams with plywood or straight or diagonal sheathing or with steel beams with metal deck with or without a concrete fill. Wood floor framing is supported by interior wood posts or steel columns; steel beams are supported by steel columns.
14. **Building Type 14—Reinforced masonry bearing walls with precast concrete diaphragms.** These buildings have bearing walls similar to those of Type 13 buildings, but the roof and floors are composed of precast concrete elements such as planks or tee-beams, and the precast roof and floor elements are supported on interior beams and columns of steel or concrete (cast-in-place or precast). The precast horizontal elements may have a cast-in-place topping.
15. **Building Type 15—Unreinforced masonry (URM) bearing wall buildings.** These buildings include structural elements that vary depending on the building's age and, to a lesser extent, its geographic location. In buildings built before 1900, the majority of floor and roof construction consists of wood sheathing supported by wood subframing. In large multistory buildings, the floors are cast-in-place concrete supported by the unreinforced masonry walls and/or steel or concrete interior framing. In buildings built after 1950, unreinforced masonry buildings with wood floors usually have plywood rather than board sheathing. The perimeter walls, and possibly some interior walls, are unreinforced masonry. The walls may or may not be anchored to the diaphragms. Ties between the walls and diaphragms are more common for the bearing walls than for walls that are parallel to the floor framing. Unreinforced masonry bearing wall buildings (TYPE 15) shall be assigned to SPC 1. No further analysis is required.

2.3 Follow-up field work. The first assessment of the evaluation statements may indicate a need for more information about the building. The evaluator shall make additional site visits, performing the necessary surveys and tests to complete the evaluation.

2.4 Analysis of the building. The general requirements for building analysis (including the determination of force level, horizontal distribution of lateral forces, accidental torsion, interstory drift and overturning) are summarized in this section. For cases where dynamic analysis is required, the general requirements are given in Section 2.4.10.

2.4.1 Scope of analysis. When an evaluation statement is false and requires further analysis, the evaluator shall provide appropriate analyses that will cover the statement requirements. For the analysis, the evaluator will:

1. Calculate the building weights;
2. Calculate the building period;
3. Calculate the lateral force on the building;
4. Distribute the lateral force over the height of the building;
5. Calculate the story shears and overturning moments;
6. Distribute the story shears to the vertical resisting elements in proportion to their relative stiffness;
7. Examine the individual elements as required by the evaluation statements:
   a. Load and reaction diagrams for diaphragms and for the vertical resisting elements;
   b. Shearing stresses and chord forces in the diaphragm;
   c. Vertical components (walls and frames) and find the story deflections, member forces and deflections; and
   d. Total forces or deflections according to the specified load combinations.

For moment frames consisting of beams and columns, the distribution of story shears to the vertical lateral-force-resisting elements in that story may be in proportion to their relative stiffness. In multistory frame-shear wall structures or in structures where the vertical resisting elements have significantly different lateral stiffnesses, or where the stiffnesses of the vertical resisting elements change significantly over the height of the structure, an analysis of the entire structure under the prescribed lateral loads shall be performed.

2.4.2 Demand. All building components evaluated shall resist the effects of the seismic forces prescribed herein and the effects of gravity loadings from dead, floor live and snow loads. The following load combinations shall be used:

$$Q = 1.1\,Q_D + Q_L + Q_S \pm Q_E \qquad (2\text{-}1)$$

or

$$Q = 0.9Q_D \pm Q_E \qquad (2\text{-}2)$$

TABLE 2.4.3.1—RESPONSE COEFFICIENTS[1]

R	C_d	SYSTEM
		Bearing wall systems
6.5	4	Light-framed walls with shear panels
4.5	4	Reinforced concrete shear walls
3.5	3	Reinforced masonry shear walls
4	3.5	Concentrically braced frames
1.25	1.25	Unreinforced masonry shear walls
		Building frame systems
8	4	Eccentrically braced frames, moment-resisting connections at columns away from link
7	4	Eccentrically braced frames, nonmoment-resisting connections at columns away from link
7	4.5	Light-framed walls with shear panels
5	4.5	Concentrically braced frames
5.5	5	Reinforced concrete shear walls
4.5	4	Reinforced masonry shear walls
3.5	3	Tension-only braced frames
1.5	1.5	Unreinforced masonry shear walls
		Moment-resisting frame system
8	5.5	Special moment frames of steel
8	5.5	Special moment frames of reinforced concrete
4	3.5	Intermediate moment frames of reinforced concrete
4.5	4	Ordinary moment frames of steel
2	2	Ordinary moment frames of reinforced concrete
		Dual system with a special moment frame capable of resisting at least 25 percent of prescribed seismic forces.
		Complementary seismic-resisting elements
8	4	Eccentrically braced frames, moment-resisting connections at columns away from link
7	4	Eccentrically braced frames, nonmoment-resisting connections at columns away from link
6	5	Concentrically braced frames
8	6.5	Reinforced concrete shear walls
6.5	5.5	Reinforced masonry shear walls
8	5	Wood sheathed shear panels
		Dual system with an intermediate moment frame of reinforced concrete or an ordinary moment frame of steel capable of resisting at least 25 percent of prescribed seismic forces.
		Complementary seismic-resisting elements
5	4.5	Concentrically braced frames
6	5	Reinforced concrete shear walls
5	4.5	Reinforced masonry shear walls
7	4.5	Wood sheathed shear panels
		Inverted pendulum structures
2.5	2.5	Special moment frames of structural steel
2.5	2.5	Special moment frames of reinforced concrete
1.25	1.25	Ordinary moment frames of structural steel

[1]Some building systems such as precast moment resisting frames are not listed in Table 2.4.3.1. When an unlisted building system must be evaluated, the evaluator shall perform an alternate analysis per Section 2.7 or place the building in SPC 1.

where:

Q = the effect of the combined loads.

Q_D = the effect of dead load.

Q_E = the effect of seismic forces.

Q_L = the effective live load is equal to 25 percent of the unreduced design live load but not less than the actual live load.

Q_S = the effective snow load is equal to either 70 percent of the full design snow load or, where conditions warrant and are approved by OSHPD, not less than 20 percent of the full design snow load except that, where the design snow load is less than 30 pounds per square foot, no part of the load need be included in seismic loading.

The seismic portion of the demand *(Q_E)* is obtained from analysis of the building using the seismic base shear *(V)* from Equation 2-3.

2.4.3 Seismic analysis of the building.

2.4.3.1 Base shear. The seismic base shear determined from Equation 2-3 is the basic seismic demand on the building. Element forces and deflections obtained from analysis based on this demand are the element demands *(Q_E)* to be used in the load combinations of Equations 2-1 and 2-2. The demands are modified in some cases as discussed in Section 2.4.11.

The seismic base shear *(V)* in a given direction shall be determined as follows:

$$V = C_s W \qquad (2\text{-}3)$$

where:

C_s = the seismic design coefficient determined by Equation 2-4 or 2-5.

W = the total dead load and applicable portions of the following:

- In storage and warehouse occupancies, a minimum of 25 percent of the floor live;
- Where an allowance for partition load is included in the floor load design, the actual partition weight or a minimum weight of 10 psf of floor area, whichever is greater;
- Total operating weight of all permanent equipment; and
- The effective snow load as defined in Section 2.4.2.

TABLE 2.4.3.2—COEFFICIENT FOR UPPER LIMIT ON CALCULATED PERIOD

A_v	C_a
0.4	1.2
0.3	1.3
0.2	1.4

The seismic coefficient (C_s) for existing buildings shall be determined as follows:

$$C_s = 0.67\left(\frac{1.2 A_v S}{RT^{2/3}}\right) = \frac{0.80 A_v S}{RT^{2/3}} \qquad (2\text{-}4)$$

where:

A_v = the peak velocity-related acceleration coefficient given in Figures 2.1 and 2.1a.

R = a response modification coefficient from Table 2.4.3.1.

S = the site coefficient given in Table 2.1. In locations where the soil properties are not known in sufficient detail to determine the Soil Profile Type S_3 shall be used. Soil Profile Type S_4 need not be assumed unless OSHPD determines that Soil Profile Type S_4 may be present at the site, or in the event the Soil Profile Type S_4 is established by the geotechnical engineer.

T = the fundamental period of the building.

The value of C_s need not be greater than:

$$C_s = 0.85\left(\frac{2.5\,A_a}{R}\right) = \frac{2.12\,A_a}{R} \qquad (2\text{-}5)$$

where:

A_a = the effective peak acceleration coefficient given in Figures 2.1 and 2.1a.

2.4.3.2 Period. For use in Equation 2-4, the value of T shall be calculated using one of the following methods:

Method 1. The value of T may be taken to be equal to the approximate fundamental period of the building (T_a) determined as follows:

a. For buildings in which the lateral-force-resisting system consists of moment-resisting frames capable of resisting 100 percent of the required lateral force and such frames are not enclosed or adjoined by more rigid components tending to prevent the frames from deflecting when subjected to seismic forces:

$$T_a = C_T h_n^{3/4} \qquad (2\text{-}6a)$$

where:

C_T = 0.035 for steel frames.

C_T = 0.030 for concrete frames.

h_n = the height in feet above the base to the highest level of the building.

b. As an alternate for concrete and steel moment-resisting-frame buildings of 12 stories or fewer with a minimum story height of 10 feet, the equation $T_a = 0.10N$, where N= the number of stories, may be used in lieu of Equation 2-6a.

c. For all other buildings,

$$T_a = \frac{0.05\,h_n}{\sqrt{L}} \qquad (2\text{-}6b)$$

where:

L = the overall length (in feet) of the building at the base in the direction under consideration.

Method 2. The fundamental period T may be estimated using the structural properties and deformational characteristics of the resisting elements in a properly substantiated analysis. This requirement may be satisfied by using the following equation:

$$T = 2\pi\sqrt{\frac{\Sigma(w_i d_i^2)}{g\Sigma(f_i d_i)}} \qquad (2\text{-}7)$$

The values of f_i represent any lateral force, associated with weights w_i, distributed approximately in accordance with the principles of Equations 2-8, 2-9 and 2-10 or any other rational distribution. The elastic deflections, d_i, should be calculated using the applied lateral forces, f_i. The period used for computation of C_s shall not exceed C_aT_a, where C_a is given in Table 2.4.3.2.

2.4.3.3 Direction of seismic forces. Assume that seismic forces will come from any horizontal direction. The forces may be assumed to act nonconcurrently in the direction of each principal axis of the structure except as discussed in Section 2.4.3.5.

2.4.3.4 Uplift. The beneficial effects of uplift at the foundation soil level may be considered, using the alternative analysis procedure.

2.4.3.5 Orthogonal effects. The critical load effect due to direction of application of seismic forces on the building may be assumed to be satisfied if components and their foundations are designed for the following combination of prescribed loads: 100 percent of the forces for one direction plus 30 percent of the forces for the perpendicular direction. The combination requiring the maximum component strength should be used.

Exception: Diaphragms and components of the seismic resisting system utilized in only one of the two orthogonal directions need not be designed for the combined effects.

2.4.3.6 Combinations of structural systems. When combinations of structural systems are incorporated into the same structure, the following requirements shall be satisfied:

1. **Vertical combinations.**

1.1 Structures not having the same structural system throughout their height shall be evaluated using the dynamic lateral force procedure.

Exceptions:

1. Structures five stories or less without stiffness and strength irregularities may be evaluated using the equivalent lateral force procedures; and
2. Structures conforming to Section 2.4.3.6.2, below.

1.2 A two-stage analysis may be used if a structure contains a relatively rigid base supporting a flexible upper portion and both portions considered separately can be classified as regular structures. The rigid base shall have a calculated natural period in each direction of not more than 0.06 seconds. The periods shall be evaluated using Eq. 2-7, or its equivalent, considering the total mass of the flexible upper portion concentrated at the top of the rigid base. The flexible upper portion shall be evaluated as a separate structure supported laterally by the rigid base. The rigid base shall be evaluated as a separate structure. The reactions of the flexible upper portion shall be applied at the top of the rigid base, amplified by the ratio of the R and C_d factors of the superstructure divided by those for

the base structure. The values of R and C_d for the base structure shall be greater than or equal to those used for the superstructure. The total lateral force on the base shall include the forces determined for the base itself.

2. **Combinations along different axes.** If a building has a bearing wall system in only one direction, the value of R used for systems in the other direction shall not be greater than that used for the bearing wall system.

2.4.3.7 Vertical distribution of forces. The lateral force (F_x), induced at any level, shall be determined as follows:

$$F_x = C_{vx}V \qquad (2\text{-}8)$$

and

$$C_{vx} = \frac{w_x h_x^k}{\sum_{i=1}^{n} w_i h_i^k} \qquad (2\text{-}9)$$

where:

C_{vx} = vertical distribution factor.

h_i and
h_x = the height (feet) from the base to Level I or x.

k = an exponent related to the building period as follows:
For buildings having a period of 0.5 second or less, $k = 1$.
For buildings having a period of 2.5 seconds or more, $k = 2$.
For buildings having a period between 0.5 and 2.5 seconds, k may be taken as 2 or may be determined by linear interpolation between 1 and 2.

V = total design lateral force or shear at the base of the building.

w_i and
w_x = the portion of the total gravity load of the building (W) located or assigned to Level I or x.

2.4.3.8 Horizontal distribution of shear. The story shear, (V_x), shall be distributed to the various vertical elements of the lateral-force-resisting system in proportion to their rigidities, considering the rigidity of the diaphragm.

2.4.3.9 Horizontal torsional moments. The increased shears resulting from horizontal torsion where diaphragms have the capability to transmit that torsion shall be evaluated. The accidental torsional moment shall be determined assuming displacements of the centers of mass each way from their calculated locations. The minimum assumed displacement of the center of mass at each level shall be five percent of the dimension at that level measured perpendicular to the direction of the applied force. For each element, the most severe loading shall be considered.

2.4.3.10 Overturning. Every structure shall be capable of resisting the overturning effects caused by earthquake forces specified. At any level, the overturning moments to be resisted shall be estimated using those seismic forces $(F_t$ and $F_x)$ that act on levels above the level under consideration. At any level, the incremental changes of the overturning moment shall be distributed to the various resisting elements in the same proportion as distribution of the horizontal shears to those elements. The foundations of buildings (but not the connection of the building to the foundation), except inverted pendulum structures, shall be evaluated for the foundation overturning design moment (M_f) at the foundation-soil interface determined using the overturning moment at the base with an overturning moment reduction factor of 0.75.

2.4.3.11 *P*-delta effects. The resulting member forces and moments and the story drifts induced by P-delta effects shall be considered in the evaluation of overall structural frame stability. P-delta need not be considered if the drift satisfies the "Quick Check for Drift" given in Section 2.4.7.

2.4.3.12 Foundations. The foundation shall be capable of transmitting the base shear and the overturning forces defined in this article from the structure into the supporting soil. The short-term dynamic nature of the loads may be taken into account in establishing the soil properties.

2.4.3.12.1 Soil capacities. The capacity of the foundation soil in bearing or the capacity of the soil interface between pile, pier or caisson and the soil shall be sufficient to support the structure with all prescribed loads, other than earthquake forces, taking due account of the settlement that the structure is capable of withstanding. For the load combination including earthquake, the soil capacities must be sufficient to resist loads at

TABLE 2.4.6—SEISMIC COEFFICIENT, C_c

		C_c
Parts of structure	Walls:	
	Unbraced (cantilevered parapets and walls)	2.4
	Other exterior walls at and above the ground floor	0.9
	All interior bearing and nonbearing walls and partitions	0.9
	Masonry or concrete fences over 6 feet high	0.9
	Penthouse (except where framed by an extension of the building frame)	0.9
	Connections for prefabricated structural elements other than walls with force applied at the center of gravity	0.9
Nonstructural components	Exterior and interior ornamentations and appendages	2.4
	Chimneys, stacks, trussed towers and tanks:	
	Supported on or projecting as an unbraced cantilever above the roof more than one-half its total height	2.4
	All others including those supported below the roof with unbraced projection above the roof less than one-half its height or braced or guyed to the structural frame at or above its center of mass	0.9
	Mechanical, plumbing and electrical equipment	0.9
	Anchorage for suspended ceilings and light fixtures	0.9

acceptable strains considering both the short time of loading and the dynamic properties of the soil. Allowable soil capacities multiplied by a factor of 2.0 may be used, except that values for sliding friction may not be increased.

2.4.3.12.2 Structural materials. The strength of concrete foundation components subjected to seismic forces alone or in combination with other prescribed loads and their detailing requirements shall be determined from the provisions of ACI 318. Reductions to foundation component capacities shall be made where components do not meet the requirements of ACI 318.

2.4.4 Deformation and drift. When deformations and drift limits need to be checked, such as for frames failing the "Quick Check of Drift" and slender seismic resisting systems of any type, compute the elastic deformations caused by the required forces and then multiply by the factor C_d to determine the total deformations. Interstory drifts shall not exceed $0.0133h_{sx}$, where h_{sx} is the story height below level x. For purposes of this drift analysis only, it is permissible to use the computed fundamental period (T) of the building without the upper bound limitation specified in Section 2.4.3.2 when determining drift level seismic design forces.

2.4.5 Demand on diaphragms. The deflection in the plane of the diaphragm shall not exceed the permissible deflection of the attached elements as determined by the evaluator. Permissible deflection permits the attached element to maintain its structural integrity under the individual loading and continue to support the prescribed loads without endangering the occupants of the building.

Floor and roof diaphragms shall be designed to resist a minimum force equal to $0.5A_V$ times the weight of the diaphragm and other elements attached to the building plus the portion of the seismic shear force at that level, (V_x), required to be transferred to the components of the vertical seismic-resisting system because of offsets or changes in stiffness of the vertical components above and below the diaphragm.

Diaphragms shall provide for both the shear and bending stresses resulting from these forces. Diaphragms shall have ties or struts to distribute the wall anchorage forces into the diaphragm as prescribed in Section 3.6.4 of the 1994 *NEHRP Recommended Provisions.*

2.4.6 Demand on parts and portions of the building. Parts and portions of structures and permanent nonstructural components and equipment supported by a structure and their attachments, as identified in the building evaluation procedures, shall be evaluated to verify that they are capable of resisting the seismic forces specified below. All attachments or appendages, including anchorages and required bracing, shall be evaluated for seismic forces. Nonrigid equipment, the structural failure of which would cause a life-safety hazard, also shall be evaluated.

Each element or component evaluated shall be capable of resisting a total lateral seismic force, F_p, where:

$$F_p = 0.67(A_V C_C W_C) \qquad (2\text{-}10)$$

where:

A_v = the velocity-related acceleration coefficient given in Figures 2.1 and 2.1a.

C_c = a coefficient given in Table 2.4.6.

W_c = the weight of the element or component.

The NPC of the building shall be determined using the procedures in Article 11.

2.4.7 Quick checks of strength and stiffness. Evaluation statements may require quick check estimates of the strength and stiffness of the building.

To check the average shear stress or drift for upper stories in addition to the first story, the story shear for an upper story may be approximated as follows:

$$V_j = \left(\frac{n+j}{n+1}\right)\left(\frac{W_j}{W}\right)1.2V \qquad (2\text{-}11)$$

where:

j = number of story level under consideration.

n = total number of stories above ground level.

V = base shear from Equation 2-3.

V_j = maximum story shear at story Level j.

W = total seismic dead load.

W_j = total seismic dead load of all stories above Level j (see Section 2.4.1).

2.4.7.1 Story drift for moment Frames.The following equation for the drift ratio is applicable only to regular, multistory, multibay frames with columns continuous top and bottom:

$$DR = \left(\frac{k_b + k_c}{K_b \bullet K_c}\right)\left(\frac{h}{12E}\right)V_c C_d \qquad (2\text{-}12)$$

where:

C_d = deflection amplification factor from Table 2.4.3.1.

DR = drift ratio = interstory displacement divided by interstory height.

E = modulus of elasticity (ksi).

h = story height (in.).

I = moment of inertia (in.^{4}).

k_b = I/L for the beam.

k_c = I/h for the column.

L = center-to-center length (in.).

V_c = shear in the column (kips).

For reinforced concrete frames, use appropriate cracked section properties pursuant to ACI 318-95 or later. For other configurations of frames, compute the drift ratio from the principles of structural mechanics.

2.4.7.2 Shearing stress in concrete frame columns. The equation for a quick estimate of the average shearing stress, (v_{avg}), in the columns of concrete frames is as follows:

$$v_{avg} = \left(\frac{n_c}{N_c - n_f}\right)\left(\frac{V_j}{A_c}\right) \qquad (2\text{-}13)$$

where:

A_c = summation of the cross-sectional area of all columns in the story under consideration.

n_c = total number of columns.

n_f = total number of frames in the direction of loading.

V_j = story shear from Equation 2-11.

Equation 2-13 assumes that nearly all of the columns in the frame have similar stiffness. For other configurations of frames, compute the shear stress in the concrete columns from the principles of structural mechanics.

2.4.7.3 Shearing stress in shear walls. The equation for a quick estimate of the average wall shear stress *(v_{avg})* is as follows:

$$v_{avg} = \frac{V_j}{A_w} \qquad (2\text{-}14)$$

where:

A_w = summation of the horizontal cross-sectional area of all shear walls in the direction of loading. The wall area shall be reduced by the area of any openings. For masonry walls, use the net area. For wood-framed walls, use the length rather than the area.

V_j = story shear at the level under consideration determined from Equation 2-11.

The allowable stresses for the various types of shear wall building are given in Section 5.1 for concrete shear walls, Section 5.3 for reinforced masonry shear walls, Section 5.4 for unreinforced masonry shear walls and Section 5.6 for wood shear walls.

2.4.7.4 Diagonal bracing. The equation for a quick estimate of the average axial stress in the diagonal bracing *(f_{br})* is as follows:

$$f_{br} = \left(\frac{V_j}{sN_{br}}\right)\left(\frac{L_{br}}{A_{br}}\right) \qquad (2\text{-}15)$$

where:

A_{br} = the average area of a diagonal brace (in.^{2}).

L_{br} = average length of the braces (ft).

N_{br} = number of braces in tension and compression if the braces are designed for compression; if not, use the number of braces in tension, if the braces are not designed for compression.

s = average span length of braced spans (ft).

V_j = maximum story shear at each level (kips).

2.4.8 Procedure for evaluating unreinforced masonry bearing wall buildings. Unreinforced masonry bearing wall buildings shall automatically be placed in SPC 1.

2.4.9 Element capacities. Calculate element capacities on the ultimate-strength basis of the 1994 *NEHRP Recommended Provisions.*

When calculating capacities of deteriorated or damaged elements, the evaluator shall make appropriate reductions in the material strength, the section properties and any other aspects of the capacity affected by the deterioration.

2.4.9.1 Wood. The basic document is Chapter 9 of the 1994 *NEHRP Recommended Provisions,* as modified in Section 5.6 of these regulations.

2.4.9.2 Steel. The basic document is Chapter 5 of the 1994 *NEHRP Recommended Provisions,* as modified in Articles 4 and 6 of these regulations.

2.4.9.3 Concrete. The basic document is ACI 318-89. Because this document is on an ultimate-strength basis, the 1994 *NEHRP Recommended Provisions* specifies special load factors that include the factor of 1.0 for earthquake effects (see Equations 2-1 and 2-2).

2.4.9.4 Masonry. The basic document is Chapter 8 of the 1994 *NEHRP Recommended Provisions,* as modified in Article 5 of these regulations.

2.4.10 Dynamic analysis. Unless otherwise noted, the procedures given in Articles 3 through 10 use the equivalent lateral force procedure. The use of a dynamic analysis procedure is required for the following:

1) Buildings 240 feet or more in height;
2) Buildings with vertical irregularities caused by significant mass or geometric irregularities;
3) Buildings where the distribution of the lateral forces departs from that assumed in the equivalent lateral force procedure; and
4) Where required by the evaluation statements in Articles 3 through 10.

Dynamic analysis procedures shall conform to the criteria established in this section. The analysis shall be based on an appropriate ground motion representation as specified in this section and shall be performed using accepted principles of dynamics. Structures that are evaluated in accordance with this section shall comply with all other applicable requirements.

2.4.10.1 Ground motion. The ground motion representation shall be an elastic response spectra developed for mean values for the specific site, in accordance with the procedures in Title 24, Section 1629A.2 of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC.

2.4.10.2 Mathematical model. A mathematical model of the physical structure shall represent the spatial distribution of the mass and stiffness of the structure to calculate the significant features of its dynamic response. A three-dimensional model shall be used when the dynamic analysis involves a structure with an irregular plan configuration and rigid or semirigid diaphragms.

2.4.10.3 Analysis procedure.

2.4.10.3.1 Response spectrum analysis. An elastic dynamic analysis of a structure shall use the peak dynamic response of all modes having a significant contribution to total structural response. This requirement may be satisfied by demonstrating that for the modes considered, at least 90% of the participating mass of the structure is included in the calculation of response in each principal horizontal direction. Peak modal responses are calculated using the ordinates of the appropriate response spectrum curve that corresponds to the modal periods. Maximum modal contributions shall be combined in a statistical manner using recognized combination methods to obtain an approximate total structural response.

2.4.10.3.2 Scaling of results. When the base shear for a given direction is less than that required by the equivalent lateral force procedure, the base shear shall be increased to the value prescribed in that procedure. All corresponding response parameters, including deflections, member forces and moments, shall be increased proportionately.

When the base shear for a given direction is greater than that required by the equivalent lateral force procedure, the base shear may be decreased to the value prescribed in that procedure. All corresponding response parameters, including deflections, member forces, and moments, may be decreased proportionately.

2.4.10.3.3 Post-yield analyses. Post-yield analyses of a simplified model of the building may be made to estimate the nonlinear displacements of the structural system. If the analyses is made with a two-dimensional planar model, the additive torsional displacement shall be established through methods that are equivalent to those used for response spectra analyses.

The displacements or rotations of structural members estimated by the post-yield analysis shall be compared with relevant experimental data to determine the adequacy of the member or system.

2.4.10.4 Torsion. The analysis shall account for torsional effects, including accidental torsional effects, as prescribed in Section 2.4.3.9. Where three-dimensional models are used for analysis, effects of accidental torsion shall be accounted for by appropriate adjustments in the model such as adjustment of mass locations or by equivalent static procedures such as provided in Section 2.4.3.9.

2.4.11 Acceptance criteria. The elements to be analyzed are specified in the procedures given in Articles 3 through 10. The total demand, Q, is calculated by Equation 2-1 or 2-2 as modified below. The capacity, C, is calculated according to the procedures of Section 2.4.9. The basic acceptance criterion is:

$$Q \leq C \qquad (2\text{-}17)$$

Where elements or portions of a lateral force resisting system are expected to behave in a less ductile manner than the system as a whole, the term Q_E in Equation 2-1 or 2-2 shall be modified or special calculations be made to account for the different failure modes of the various elements. Modification of Q_E, and special calculation procedures and when they shall be used, are described in Articles 3 through 8.

If all significant elements meet the basic acceptance criteria as specified herein, no further analysis is needed.

2.4.12 Assessment of element deficiencies. The result of the checks specified in Articles 3 through 10 will show whether or not the elements meet the requirements of the 1994 *NEHRP Recommended Provisions* as modified herein.

For those elements not meeting the specified acceptance criteria, the relative hazard or seriousness of the deficiencies shall be assessed. Deficiencies shall be ranked according to:

1) Degrees of "overstress" (both total and seismic);
2) Element importance in the load path; and
3) Building, ductile and element stability.

2.5 Final evaluation.

2.5.1 Review the statements and responses. Upon completion of the analysis and field work, the evaluator shall review the evaluation statements and the responses to the statements to ensure that all of the concerns have been addressed.

2.5.2 Assemble and review the results of the procedures. Upon completion of the procedures given in Articles 3 through 10, the evaluator shall assemble and review the results.

TABLE 2.5.3—STRUCTURAL PERFORMANCE CATEGORIES (SPC)

SPC	DESCRIPTION
SPC 1	Buildings posing a significant risk of collapse and a danger to the public. These buildings must be brought up to the SPC 2 level by January 1, 2008, or be removed from acute care service. Where the Office has performed a collapse probability assessment, buildings with Probability of Collapse greater than 1.20% shall be placed in this category.
SPC 2	Buildings in compliance with the pre-1973 *California Building Standards Code* or other applicable standards, but not in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act. These buildings do not significantly jeopardize life, but may not be repairable or functional following strong ground motion. These buildings must be brought into compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, its regulations or its retrofit provisions by January 1, 2030, or be removed from acute care service. Where the Office has performed a collapse probability assessment, buildings with Probability of Collapse less than or equal to 1.20% shall be placed in this category.
SPC 3	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, utilizing steel moment-resisting frames in regions of high seismicity as defined in Section 4.2.10 and constructed under a permit issued prior to October 25, 1994. These buildings may experience structural damage which does not significantly jeopardize life, but may not be repairable or functional following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained throughOSHPD. These buildings may be used to January 1, 2030, and beyond.
SPC 4	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, but may experience structural damage which may inhibit ability to provide services to the public following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained through OSHPD. These buildings may be used to January 1, 2030, and beyond.
SPC 5	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, and reasonably capable of providing services to the public following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained through OSHPD. These buildings may be used without restriction to January 1, 2030, and beyond.

2.5.2.1 *Q* versus *C*. The criterion $Q \leq C$ is an indication of whether an element meets the requirements of the 1994 *NEHRP Recommended Provisions* as modified for these regulations. However, because Q involves gravity effects, the ratio of Q to C for an element must be considered in light of the seismic demand versus capacity in order to fully determine the seriousness of the earthquake hazard.

2.5.2.2 D_E/C_E ratios. The severity of the deficiencies shall be assessed by listing the D_E/C_E ratios in descending order. The element with the largest value is the weakest link in the building. If the element can fail without jeopardizing the building, then the SPC may be based upon the element with the next lower ratio, and so on. Failure of an element will not jeopardize the building provided an alternate load path (neglecting the failed element) exists, and the vertical and lateral stability of the structure, or portions of the structure, is not impaired. The presence of an element with a D_E/C_E greater than one, where failure of that element will jeopardize the stability of the building or element, requires that nonconforming buildings be placed in SPC 1. For conforming buildings, see the appropriate evaluation statement.

2.5.2.3 Qualitative issues. Some of the procedures identify specific deficiencies without any calculation. These deficiencies will automatically place buildings in SPC 1, 3 or 4.

2.5.3 Final evaluation. The final evaluation will place the building in the appropriate the SPC (Table 2.5.3), based on a review of the qualitative and quantitative results of the procedures and the list of deficiencies. In general, an unmitigated "false" answer to an evaluation statement will lower the SPC of the Building. A "false" evaluation statement may be considered mitigated if the building, element or component is justified using the procedure outlined in the evaluation statement, or the effects of the condition are incorporated in the overall evaluation, as described in Section 2.5.2.2. Alternatively, the SPC rating of a building may be assigned by the Office on the basis of a collapse probability assessment performed in accordance with Section 1.4.5.1.2.

2.5.3.1 Conforming buildings. Conforming buildings, other than those of welded steel moment frame construction (Building Type 3 and possibly Building Types 4 and 6, if a dual system is present), without any unmitigated "false" evaluation statements shall be placed in SPC 5. Other conforming buildings shall be placed in the lowest SPC directed by the evaluation statements.

2.5.3.2 Nonconforming buildings. An unmitigated "False" answer to any evaluation statement shall result in nonconforming buildings being placed in SPC 1, unless directed otherwise by the procedures for that particular evaluation statement. All other nonconforming buildings shall be placed in SPC 2.

2.6 The final report. The report shall include the following elements:

1. A description of the building, including photographs, and sketches of the lateral-force-resisting system using an OSHPD approved format;
2. The set of statements from the Appendix, with a synopsis of the investigation and supporting calculations that were made;
3. A list of the deficiencies that must be remedied in order to change statement responses from false to true;
4. The SPC for the building, with comments on the relative importance of the deficiencies; and
5. The NPC for the building.

2.7 Alternative analysis. The owner of a building may elect to perform an Alternative Analysis, to evaluate a structure in more detail than that provided by the evaluation procedures specified in these regulations. The methodology of an Alternative Analysis must be approved in advance by OSHPD, and shall meet the following criteria:

1. Data collection on the structure and site conditions shall be performed in accordance with the appropriate Sections of Article 2 of these regulations. Depending upon the type of analysis to be performed, additional data regarding the as built condition and material properties may be required;
2. The Alternative Analysis shall be based on a site specific ground motion as specified in Section 3413A.1.2 of the 2010 *California Building Code* (CBC);
3. The analysis of the structure shall determine the distribution of strength and deformation demands produced by the design ground shaking and other seismic hazards. The analysis shall address seismic demands and capacities to resist these demands for all elements in the structure that either:
   - Are essential to the lateral stability of the structure (primary elements); or
   - Are essential to the vertical load-carrying integrity of the building.
4. The analysis procedure may consist of a linear or nonlinear analysis. The analytical methods and acceptance criteria shall conform to Section 3412A of the 2010 CBC and nonlinear response history analysis procedure shall be reviewed and approved, in advance, by OSHPD.

ARTICLE 3
PROCEDURES FOR BUILDING SYSTEMS

3.0 Introduction. This article sets forth general requirements that apply to all buildings: load path, redundancy, configuration, adjacent buildings and the condition of the materials.

3.1 Load path. The structure contains a complete load path for seismic force effects from any horizontal direction that serves to transfer the inertial forces from the mass to the foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The load path is the most essential requirement for a building. There must be a lateral-force-resisting system that forms a load path between the foundation and all diaphragm levels and that ties all of the portions of the building together. The load path must be complete and sufficiently strong.

3.2 Redundancy. The structure will remain laterally stable after the failure of any single element.

Check whether stability of the structure depends on a single element. If the failure of a single element (member or connection) will result in loss of lateral stability, the element shall be

checked for adequacy using an amplification factor of C_d /2, but not less than 1.5. *P*-delta effects shall be included in this check.

3.3 Configuration. Vertical irregularities are defined in terms of discontinuities of strength, stiffness, geometry and mass.

Horizontal irregularities involve the horizontal distribution of lateral forces to the resisting frames or shear walls. Irregularities in the shape of the diaphragm itself (i.e., diaphragms that are L-shaped or have notches) are covered in Article 7.

3.3.1 Weak story. Visual observation or a Quick Check indicates that there are no significant strength discontinuities in any of the vertical elements in the lateral-force-resisting system; the story strength at any story is not less than 80 percent of the strength of the story above.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check story strengths individually. Where a weak story exists, the resisting elements shall be checked; include *P*-delta effects and inelastic demand. To compensate for the concentration of inelastic action where the story strength of the weak story is less than 65 percent of the story above, amplify the design forces in the weak story by the factor C_d /2, but not less than 1.5. Conforming buildings which fail this check shall be placed in SPC 4.

3.3.2 Soft story. Visual observation or a Quick Check indicates that there are no significant stiffness discontinuities in any of the vertical elements in the lateral-force-resisting system; the lateral stiffness of a story is not less than 70 percent of that in the story above or less than 80 percent of the average stiffness of the three stories above.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stiffness of certain portions of the building. Where a soft story condition is indicated, the stiffness of the building shall be calculated story by story, in order to determine whether a story falls within the definition of a soft story. Where a soft story exists, the resisting elements shall be checked; include *P*-delta effects. For buildings more than 65 feet or five stories tall, a dynamic analysis shall be performed to compute the distribution of seismic forces.

3.3.3 Geometry. There are no significant geometrical irregularities; there are no setbacks (i.e., no changes in horizontal dimension of the lateral-force-resisting system of more than 30 percent in a story relative to the adjacent stories).

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. Where geometric irregularities exist, a dynamic analysis shall be performed to compute the vertical distribution of seismic forces.

3.3.4 Mass. There are no significant mass irregularities; there is no change of effective mass of more than 50 percent from one story to the next, excluding light roofs.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the distribution of mass in the building. The effective mass is the real mass consisting of the dead weight of the floor plus the actual weights of partitions and equipment. Where mass irregularities exist, a dynamic analysis shall be performed to compute the vertical distribution of seismic forces.

3.3.5 Vertical discontinuities. All shear walls, infilled walls and frames are continuous to the foundation.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The primary deficiency is in the strength of the columns that support the wall or frame. The secondary deficiency is in the strength of the connecting strut or diaphragm. Conforming buildings which fail these checks shall be placed in SPC 4.

Procedure for columns: Check the columns that support the upper vertical lateral load-resisting element for their capacity to support the gravity loads plus the overturning forces. The overturning forces shall be based on the design forces amplified by the factor C_d /2, but not less than 1.5, or on the capacity of the vertical lateral load-resisting element to resist lateral force if this is greater. The column check shall include *P*-delta effects.

Procedure for strut or diaphragm: Check the strut or diaphragm for its ability to transfer the load from the discontinuous element to the lower resisting element.

3.3.6 Torsion. The lateral-force-resisting elements form a well-balanced system that is not subject to significant torsion. Significant torsion will be taken as any condition where the distance between the story center of rigidity and the story center of mass is greater than 20 percent of the width of the structure in either major plan dimension.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. One deficiency is in the layout and the strengths and stiffness of the walls and frames of the lateral-force-resisting system. Another deficiency is in the strength of columns that are not part of the lateral-force-resisting system but are forced to undergo displacements due to the rotation of the diaphragm. Verify the adequacy of the system by analyzing the torsional response using procedures that are appropriate for the relative rigidities of the diaphragms and the vertical resisting elements. Calculate the maximum story drift (the average building drift plus the additional displacement due to torsion). Verify that all vertical load-carrying elements can maintain their load-carrying ability under the expected drifts. When checking columns, include *P*-delta effects and consider inelastic demand. Conforming buildings which fail this check shall be placed in SPC 4.

3.4 Adjacent buildings. There is no immediately adjacent structure that is less than half as tall or has floors/levels that do not match those of the building being evaluated. A neighboring structure is considered to be "immediately adjacent" if it is within 2 inches times the number of stories away from the building being evaluated.

The deficiency is the distance between the buildings. Report the condition as a hazard. Where both buildings are designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated. Other conforming buildings which fail these checks shall be placed in SPC 4.

3.5 Deflection incompatibility. Column and beam assemblies that are not part of the lateral-force-resisting system (i.e., gravity load-resisting frames) are capable of accommodating imposed building drifts, including amplified drift caused by diaphragm deflections, without loss of vertical load-carrying capacity.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the ductility of the vertical load-carrying system. Calculate the expected drifts using the procedures in Section 2.4.4. Use net section properties for all reinforced concrete elements in the lateral-force-resisting system. Include the lateral displacements due to diaphragm deflections, using the diaphragm loading computed in Section 2.4.6. Evaluate the capacity of the nonlateral-force-resisting columns and beam assemblies to undergo the combined drift, considering moment-axial force interaction and column shear.

3.6 Short "captive" columns. There are no columns with height-to-depth ratios less than 75 percent of the nominal height-to-depth ratios of the typical columns at that level.

The deficiency is in the tendency of short captive columns to attract high shear forces because of their high stiffness relative to adjacent elements. Calculate the story drift, and determine the shear demand (V_e) in the short column caused by the drift $(V_e=2M/L)$. The ratio of V_e/V_n shall be less than one, where V_n is the column nominal shear capacity computed in accordance with ACI criteria. Conforming buildings which fail these checks shall be placed in SPC 4.

3.7 Evaluation of materials and conditions.

3.7.1 Deterioration of wood. None of the wood members shows signs of decay, shrinkage, splitting, fire damage or sagging, and none of the metal accessories is deteriorated, broken or loose.

The deficiency is in the capacity of the deteriorated elements. Determine the cause and extent of damage. Identify the lateral-force-resisting system and determine the consequences of the damage to the system. The system shall be judged adequate if it can perform with the damaged elements. Check the structural systems with appropriate reductions in member properties.

3.7.2 Overdriven nails. There is no evidence of overdriven nails in the shear walls or diaphragms.

The deficiency is in the capacity of the fasteners. Check the wall demand and capacity, using reduced strength due to overdriven fasteners.

3.7.3 Deterioration of steel. There is no significant visible rusting, corrosion or other deterioration in any of the steel elements in the vertical- or lateral-force-resisting systems.

The deficiency is the reduction in cross-section of the elements. Check the structural systems with appropriate reductions in member properties. See Article 4 for inspection requirements for welded steel moment-resisting frame structures.

3.7.4 Deterioration of concrete. There is no visible deterioration of concrete or reinforcing steel in any of the frame elements.

The deficiency is the reduction in member properties. Check the structural systems with appropriate reductions in member capacities.

3.7.5 Post-tensioning anchors. There is no evidence of corrosion or spalling in the vicinity of post-tensioning or end fittings. Coil anchors have not been used.

The deficiency is the reduced area of the prestress strands and, with coil anchors, the ability of the anchorage to maintain its grip under cyclic loading. Inspect a sample of the concrete in the area of the anchorage to determine its condition. Determine the cause and extent of the deterioration. Consider the effects of anchorage failure on the vertical and lateral load-carrying capacity of the structure.

3.7.6 Concrete wall cracks. All diagonal cracks in the wall elements are 1.0 mm or less in width, are in isolated locations and do not form an X pattern.

The deficiency is the reduced capacity of the wall. Determine the cause and extent of the cracking. Check the structural systems with reduced wall capacity.

3.7.7 Cracks in boundary columns. There are no diagonal cracks wider than 1.0 mm in concrete columns that encase the masonry infills.

The deficiency is the reduced capacity of the wall. Evaluate the wall with limited capacity assigned to the deteriorated elements. Determine the cause and extent of the damage.

3.7.8 Precast concrete walls. There is no significant visible deterioration of concrete or reinforcing steel or evidence of distress, especially at the connections.

The deficiency is in the strength of the connections. Determine the cause and extent of distress and check the structural systems with appropriate reductions in capacity.

3.7.9 Masonry joints. The mortar cannot be easily scraped away from the joints by hand with a metal tool, and there are no significant areas of eroded mortar.

The deficiency is in the strength of the wall. Check the adequacy of the walls with the strength determined by tests. This evaluation statement also applies to masonry veneers present on the exterior or interior walls of the building.

3.7.10 Masonry units. There is no visible deterioration of large areas of masonry units.

The deficiency is in the strength of the units. Determine the cause and extent of deterioration and use reduced capacity in determining the adequacy of the units.

3.7.11 Cracks in infill walls. There are no diagonal cracks in the infilled walls that extend throughout a panel or are greater than 1.0 mm wide.

The deficiency is the reduced capacity of the wall. Determine the cause and extent of the cracking. If appropriate, check the structural systems with reduced wall capacity.

ARTICLE 4
PROCEDURES FOR MOMENT-RESISTING SYSTEMS

4.0 Introduction. Moment frames develop their resistance to lateral forces through the flexural strength and continuity of beam and column elements. Moment frames may be classified as special, intermediate and ordinary frames.

For evaluations using these regulations, it is not necessary to determine the type of frame in the building. The issues are addressed by appropriate acceptance criteria in the specified procedures. For determination of element capacities, see Article 2, Section 2.4.9.

4.1 Frames with infill walls.

4.1.1 Interfering walls. All infill walls placed in moment frames are isolated from structural elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is an inappropriate connection of the wall to the frame. Evaluate the relative strength and stiffness of the walls and frames, considering the nature and size of the joint or connection between the wall and the frame. If the strength of the walls is not commensurate with the stiffness, the building should be treated as Type 7 or Type 10 (Article 2, Section 2.2.3 "Common Building Types"), a frame with infill walls. If the infill walls do not extend the full story height and are not properly isolated from the frame columns, evaluate the column shear demand and capacity, based on a column height equal to the clear distance from the top of the wall to the bottom of the slab or beam above, amplifying the design forces in the short column by $C_d/2$, but not less than 1.5. The shear demand need not exceed the shear capacity corresponding to flexural capacity of the column, based on a column height equal to the clear distance from the top of the wall to the bottom of the slab or beam above.

4.2 Steel moment frames. Welded steel moment frames may be subject to detailed frame joint evaluation requirements, as outlined in this section. The purpose of this joint evaluation is to determine if the building has experienced joint damage in strong ground shaking.

4.2.0.1 Preliminary screening. All welded steel moment frame structures shall undergo a detailed frame joint evaluation if the building is located at a site that has experienced the following:

1. An earthquake of magnitude greater than or equal to 6.5 that produced ground motion in excess of 0.20 g; or
2. An earthquake that generated ground motion in excess of 0.30 g.

The ground motion estimates shall be based on actual instrumental recordings in the vicinity of the building. When such ground motion records are not available, ground motion estimates may be based on empirical or analytical techniques. All ground motion estimates shall reflect the site-specific soil conditions.

4.2.0.2 Additional indicators. A detailed frame joint evaluation of the building shall be performed if any of the following apply:

1. Significant structural damage is observed in one or more welded steel moment frame structures located within 1 km of the building on sites with similar, or more firm, soil properties;
2. An earthquake having a magnitude of 6.5 or greater, where the structure is located within 5 km of the trace of a surface rupture or within the vertical projection of the rupture area when no surface rupture has occurred;
3. Significant architectural or structural damage has been observed in the building following an earthquake; or
4. Entry to the building has been limited by the building official because of earthquake damage, regardless of the type or nature of the damage.

4.2.0.3 Connection inspections. Detailed frame joint evaluations shall be performed in accordance with the procedures in the *Interim Guidelines: Evaluation, Repair, Modification and Design of Welded Steel Moment Frame Structures,* FEMA 267, August 1995.

4.2.1 Drift check. The building satisfies the Quick Check of the frame drift.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check drift using the procedures in Section 2.4.7.1 against the prescribed limit. If the drift exceeds the limiting drift at any story level, the structure shall be evaluated with full-frame analysis using the anticipated distribution of lateral forces to the moment-resisting frames and including *P*-delta effects. Check the other statements using the demand from this analysis.

4.2.2 Compact members. All moment-frame elements meet the compact section requirements of the basic AISC documents.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the member capacities. Check member capacities, using member demands obtained from a frame analysis. Calculate member capacities using appropriate criteria for noncompact sections. Check the member capacities using appropriate *R* values (e.g., noncompact members require use of the *R* value for ordinary frames).

4.2.3 Beam penetrations. All openings in frame-beam webs have a depth less than one-fourth of the beam depth and are located in the center half of the beams.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the shear capacity of the beam. Check that the shear capacity of the beam is sufficient to develop the flexural plastic hinge. If the shear capacity is insufficient to develop the flexural capacity of the member, use the *R* value for ordinary frames.

4.2.4 Moment connections. All beam-column connections in the lateral-force-resisting moment frame have full-penetration flange welds and a bolted or welded web connection.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection. Check the connection on the basis of its strength. Check the member capacities using appropriate *R* values. Connections that do not develop the flexural capacity of the member require use of the *R* value for ordinary frames.

4.2.5 Column splices. All column splice details of the moment-resisting frames include connection of both flanges and the web.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the bolts or welds in the connection. Check the adequacy of the splice connection for all gravity and seismic loads. Amplify the seismic load for partial-penetration welded splices by the factor $C_d/2$.

4.2.6 Joint webs. All web thicknesses within joints of moment-resisting frames meet AISC criteria for web shear.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the web. Calculate the joint shear capacity using formulas given in the AISC provisions and compare it to the demand from an equivalent lateral force analysis or the average column shear, V_c, calculated for the Quick Check for drift.

4.2.7 Girder flange continuity plates. There are girder flange continuity plates at joints.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the joint. Check joints without such plates using AISC provisions, using the *R* value for ordinary frames.

4.2.8 Strong column/weak beam. At least one half of the joints in each story are strong column/weak beam (33 percent on every line of moment frame). Roof joints need not be considered.

The deficiency is excessive ductility demand and displacement in a single story. Compare beam and column moment capacities, including the effect of axial force. The evaluator may consider this condition mitigated if the joints in the building meet the provisions of Section 2710(g)5 of the 1992 edition of Part 2, Title 24. Conforming buildings which do not meet those provisions shall be placed in SPC 4.

4.2.9 Out-of-plane bracing. Beam-column joints are braced out-of-plane.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stability of the beam-column joint. Verify the joint bracing by visual observation.

4.2.10 Pre-Northridge earthquake welded moment frame joints. Welded steel moment frame beam-column joints are designed and constructed in accordance with recommendations in FEMA 267, *Interim Guidelines: Evaluation, Repair, Modification and Design of Welded Steel Moment Frame Structures,* August 1995.

For buildings constructed under permit issued after October 25, 1994, the evaluator may consider this condition as mitigated. The deficiency is in the ductility of the beam-column joint. The following procedures shall be used for categorizing buildings with welded steel moment frame joints:

Procedure for conforming buildings: Conforming buildings located in Seismic Zone 4 of 1995 *California Building Code* (CBC) or later version of the CBC, within a zone designated as being potentially subject to near field effects in strong ground shaking, shall be placed in SPC 3.

All other conforming buildings shall be placed in SPC 4.

Procedure for nonconforming buildings: Nonconforming buildings shall be placed in SPC 2.

4.3 Concrete moment frames. The details covered in evaluation statements in Sections 4.3.4 through 4.3.14 will be found in frames that have been designed and detailed for ductile behavior. If any one detail is not present, the frames are not considered to meet life-safety goals, and nonconforming buildings shall be placed in SPC 1. For conforming buildings, see the appropriate evaluation statement. For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the building may assume "true" responses to all evaluation statements in this section.

4.3.1 Shearing stress check. The building satisfies the Quick Check of the average shearing stress in the columns.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Perform a quick estimation of the average shearing stress in the columns according to the procedure specified in Section 2.4.7.2. If the average column shear stress is greater than 60 psi, a more detailed evaluation of the structure shall be performed. This evaluation shall employ a more accurate estimation of the level and distribution of the lateral loads; use the procedures outlined in Section 2.4.

4.3.2 Drift check. The building satisfies the Quick Check of story drift.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check drift using the procedures in Section 2.4.7.1 against the prescribed limit. If the drift exceeds the limiting drift at any story level, the structure shall be evaluated with full-frame analysis using the anticipated distribution of lateral forces to the moment-resisting frames and including *P*-delta effects as found in Section 2.4.1. Check the other statements using the demand from this analysis.

4.3.3 Prestressed frame elements. The lateral-load-resisting frames do not include any prestressed or post-tensioned elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the frames during inelastic straining. Check the capacity of the members and joints using all of the mild steel reinforcing that is available and bonded prestressing when appropriate. The *R* value used for evaluation

shall reflect the ductility and damping of the system. Where better information is not available, multiply the R value selected on the basis of mild reinforcement by 0.75 to account for the effect of prestressing.

4.3.4 Joint eccentricity. There are no eccentricities larger than 20 percent of the smallest column plan dimension between girder and column centerlines.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the frame, either the members or the joints or both. Evaluate the frames considering the additional shear stresses caused by the joint torsion.

4.3.5 No shear failures. The shear capacity of frame members is greater than the moment capacity.

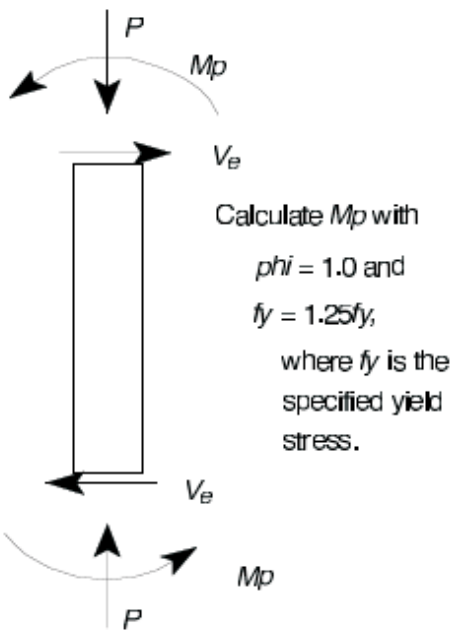


FIGURE 4.3.14
M_{pr} and V_e

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is inadequate shear capacity in the columns or beams. Compare V_e with the member shear capacity, ϕV_n, calculated in accordance with ACI 318 Appendix. The ratio $V_e/\phi V_n$ shall be less than or equal to 1.0.

4.3.6 Strong column/weak beam. The moment capacity of the columns is greater than that of the beams.

The deficiency is in column capacity. Compare the sum of the beam moment capacities to that of the column capacities. Include the participation of the slab in the beam capacities. The moment capacity to be compared is the plastic moment, M_{pr}. The ratio of the sum of the M_{pr} for the columns to the sum of the M_{pr} for the beams is required to be not less than 1.2. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.7 Stirrup and tie hooks. The beam stirrups and column ties are anchored into the member cores with hooks of 135 degrees or more.

The deficiency is in the shear resistance and confinement of the member. Determine if beam stirrups and column ties are appropriately anchored into member cores with hooks of 135 degrees or more. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.8 Column-tie spacing. Frame columns have ties spaced at $d/4$ or less throughout their length and at 8 d_b, or less at all potential plastic hinge regions.

The deficiency is in the shear capacity of the column. Report this condition as a deficiency. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.9 Column-bar splices. All column bar lap splice lengths are greater than 35 d_b, long and are enclosed by ties spaced at 8 d_b, or less.

The deficiency is in the strength and ductility of the column. Compare the splice length provided with that required by Sections 12.2 and 12.15 of the ACI 318 provisions. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.10 Beam bars. At least two longitudinal top and two longitudinal bottom bars extend continuously throughout the length of each frame beam. At least 25 percent of the steel provided at the joints for either positive or negative moment is continuous throughout the members.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength and ductility of the beam. Determine if the required beam bars are present. For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary.

4.3.11 Beam-bar splices. The lap splices for longitudinal beam reinforcing are located within the center half of the member lengths and not in the vicinity of potential plastic hinges.

The deficiency is in the strength and ductility of the beam. Determine if the beam bar splices are detailed and located such that the yield capacity of the beam can be developed. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.12 Stirrup spacing. All beams have stirrups spaced at $d/2$ or less throughout their length and at 8 d_b, or less at potential hinge locations.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength and ductility of the beam. Determine if the stirrups meet the specified spacing requirements, such that the yield capacity of the beam can be developed.

4.3.13 Beam truss bars. Bent-up longitudinal steel is not used for shear reinforcement.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength and ductility of the beam. Determine if bent-up shear reinforcement is present. If present,

check the shear capacity of the element ignoring the effects of the bent-up longitudinal bars.

4.3.14 Joint reinforcing. Column ties extend at their typical spacing through all beam-column joints at exterior columns.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength and ductility of the beam-column joint. Calculate the joint capacity, V_e, and the joint shear, V_j. The joint shear is calculated at a horizontal section at mid-height of the joint. The horizontal shear at the critical section is obtained from summation of horizontal forces in a free-body diagram of the upper half of the joint as $V_j = (T_l + T_r) - V_e$ where T_l and T_r, the forces in the flexural tensile reinforcement in the beams on the left and right sides of the joint, respectively, are calculated assuming a steel stress equal to 1.25 f_y. See Figure 4.3.14 for computation of V_e. The ratio V_j/V_e shall be less than or equal to 1. Conforming buildings which do not meet this criteria shall be placed in SPC 4.

4.3.15 Flat slab frames. The system is not a frame consisting of columns and a flat slab/plate without beams.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. Perform a detailed analysis, or assign the building to SPC 1.

4.4 Precast concrete moment frames.

4.4.1 Precast frames. The lateral loads are not resisted by precast concrete frame elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connections. Check the adequacy of the precast frames. Where lateral movement will cause strength capacities to be first exceeded at connections, use $R = C_d = 1.5$ unless there is information on connection behavior that justifies higher values. Where all yielding occurs within members, use the R-value for the appropriate cast-in-place frame.

4.4.2 Precast connections. For buildings with concrete shear walls, the connection between precast frame elements such as chords, ties and collectors in the lateral-force-resisting system can develop the capacity of the connected members.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connections. Analyze the connections. Determine where connection failures would be brittle (e.g., pull-out of an embedded item would occur before yield of a mild steel element). Analyze structure for stability assuming that these brittle connections have failed or are not capable of transmitting forces, or check such connections for seismic force amplified by factor $C_d/2$, but not less than 1.5. For shear capacity, refer to Section 4.3. For flexure, find the path of forces from the element through the connection into the other element.

4.5 Frames not part of the lateral-force-resisting system. This section deals with frames that were not designed to be part of the lateral-force-resisting system. These are basic structural frames of steel or concrete that are designed for gravity loads with shear walls, bracing or moment frames providing the resistance to lateral forces.

If the primary lateral-force-resisting system consists of concrete walls (infilled in steel frames or monolithic in concrete frames), the building shall be treated as a concrete shear wall building (Type 6) with the frame columns as boundary elements. If the walls are masonry infills, the frames shall be treated as steel or concrete frames with infill walls of masonry (Type 7 or 10). Buildings with steel braces shall be treated as braced frame systems (Type 4). The principal deficiency identified in this section is loss of vertical-load-carrying capacity due to excessive deformations.

The analysis must include the deformations imposed by the infill walls, and the consequences of the failure of such walls.

4.5.1 Complete frames. The steel or concrete frames form a complete vertical load-carrying system.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check the shear walls or braced frames, including the effects of all dead and live loads, and note that the R values for buildings without a complete vertical load-carrying space frame are different from those for complete frame buildings. For wall systems, the frame is considered incomplete if the beams end at the edge of a shear wall that has no boundary columns or, if there are such columns, the beams do not continue across in the plane of the wall. For chevron-braced frame systems, the frame is considered incomplete if the beam in the brace frame cannot carry the design dead and live loads without the presence of the braces.

ARTICLE 5
PROCEDURES FOR SHEAR WALLS

5.0 Introduction. Shear walls have two aspects: carrying in-plane shear when the earthquake direction under consideration is parallel to the wall and resisting out-of-plane forces when the earthquake direction under consideration is perpendicular to the wall. The in-plane effects are covered in this article. Out-of-plane effects are covered in Article 8. All walls not structurally isolated are assumed to act as shear walls that will participate in resisting lateral forces up to their capacity.

5.1 Concrete shear walls.

5.1.1 Shearing stress check. The building satisfies the Quick Check of the shearing stress in the shear walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Generate the lateral loads using the Quick Check procedure of Section 2.4.7.3. If v_{avg} is greater than 50 psi (or square root of f'_c if f'_c is known), a more detailed evaluation of the structure shall be performed. This evaluation shall employ a more accurate estimation of the level and distribution of the lateral loads, using the analysis procedures in Article 2.

5.1.2 Overturning. All shear walls have h_w/l_w ratios less than 4 to 1.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the required resistance to overturning moments. Calculate the resistance to the required overturning moments. The overturning resistance shall include the resistance contributed by wall flanges, friction on piling, earth over foundations, and floor and roof weights supported by the wall. The calculated resistance shall be greater than 0.75 times the base moment of the shear wall. The overturning resistance moment may be taken as the righting moment about an edge of the footing or the wall flexural capacity, whichever is less.

5.1.3 Coupling beams. The stirrups in all coupling beams are spaced at *d/2* or less and are anchored into the core with hooks of 135 degrees or more.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the coupling beams. Assume that the beams yield. Calculate their end-moment capacity based either on flexural yield or shear capacity, whichever is lower. The coupling beam moment capacity should include the contribution of a reasonable portion of the adjacent floor slab reinforcement when this reinforcement is in tension. Analyze the walls as independent walls with these restoring moments or shears helping to stabilize the walls. Check the stability of the wall and the stresses in the vertical boundaries. Conforming buildings which fail this check shall be placed in SPC 4, and no calculations are necessary.

5.1.4 Column splices. Steel column splice details in shear wall boundary elements can develop the tensile strength of the column.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the splice in the boundary column. Determine the maximum tensile column load in each case and verify the adequacy of the splice to resist this load, including gravity loads. Check the adequacy of the splice connection for all gravity and seismic loads. Amplify the seismic load for partial-penetration welded splices by the factor $C_d/2$, but not less than 1.5, when the seismic load produces tension at the splice.

5.1.5 Wall connections. There is positive connection between the shear walls and the steel beams and columns.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the adequacy of the connections between the shear wall and the beams and columns that are its boundary elements. Calculate the effective overturning demand for the walls and check the adequacy of the shear transfer to the steel elements. A value for shear friction between steel and concrete shall be included only if the steel element is completely encased with reinforced concrete.

5.1.6 Confinement reinforcing. For shear walls with h_w/l_w greater than 2.0, the boundary elements are confined with spirals or ties with spacing less then $8d_b$.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the ductility of the vertical boundary elements that are required to resist large axial forces. Check the need for boundary elements, per ACI 318. Where boundary elements are required but not provided, amplify the seismic forces for the entire structure by the factor 1.25 (and use $0.8C_d$ for drift calculation). Conforming buildings which fail this evaluation statement shall be placed in SPC 4, and no calculations are necessary.

5.1.7 Reinforcing steel. The total reinforcing steel for concrete walls is greater than 0.0025 times the gross area of the wall along both the longitudinal and transverse axes and the maximum spacing of reinforcing steel is 18 inches.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the quantity of reinforcing in the wall. Calculate the capacity of the walls with the reinforcing that is provided, but amplify the seismic forces by the factor 1.25 (and use $0.8C_d$ for drift calculation). Where the reinforcing in the wall is less than 0.0015 times the gross area of the wall along the longitudinal or transverse axis, or if the reinforcing steel spacing exceeds 18 inches, the contribution of the wall to lateral strength and stiffness of the building shall be ignored and, if it is a bearing wall, the building shall be placed in SPC 1.

5.1.8 Reinforcing at openings. There is special wall reinforcement around all openings.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the reinforcing in the piers and spandrels. Determine the capacity of the spandrels and piers considering all available reinforcing steel that crosses the critical sections.

5.2 Precast concrete shear walls. Shear walls of precast concrete are in segments that are tied together, but the connections may be of a brittle type. Connections adequate for design level forces may not be capable of developing the yield level capacity of the panels. The effects of the precast panel connections on the other evaluation statements concerned with wall elements shall be considered. The deficiency is in the quality and ductility of the connections.

5.2.1 Panel-to-panel connections. Adjacent wall panels are not connected by welded steel inserts.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the inserts. Check the welded inserts. Determine where connection failures would be brittle (e.g., pull-out of an embedded item would occur before yield of a mild steel element). Analyze structure for stability assuming that these brittle connections have failed or are not capable of transmitting forces or check such connections for seismic force amplified by the factor $C_d/2$, but not less than 1.5.

5.2.2 Wall openings. Openings constitute less than 75 percent of the length of any perimeter wall with the wall piers having h_w/l_w ratios of less than 2.0.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency may be in the strength of the panel connections or may be that the reinforced concrete elements actually behave

like a moment frame and should be evaluated as such. Check the elements in the precast shear wall system. When large open areas exist, check the transfer of shear between the diaphragm and the wall. Compare the lateral displacements of the wall due to shear and flexure. If more than 50 percent of the total lateral displacement is due to flexure, or if the width of the wall piers is less than five times the thickness, analyze the wall as a moment frame.

5.2.3 Collectors. Wall elements with openings larger than a typical panel at a building corner are connected to the remainder of the wall with collector reinforcing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the configuration of the wall or the diaphragm. Find an adequately strong path of forces. If none is found, report this as a deficiency.

5.3 Reinforced masonry shear walls.

5.3.1 Shearing stress check. The building satisfies the Quick Check of the shearing stress in the reinforced masonry shear walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Generate the lateral loads using the Quick Check procedure of Section 2.4.7.3. If v_{avg} is greater than 15 psi, a more detailed evaluation of the structure shall be performed. This evaluation shall employ a more accurate estimation of the level and distribution of the lateral loads, using the analysis procedures in Article 2.

5.3.2 Reinforcing. The total vertical and horizontal reinforcing steel in reinforced masonry walls is greater than 0.002 times the gross area of the wall with a minimum of 0.0007 in either of the two directions, the spacing of reinforcing steel is less than 48 inches and all vertical bars extend to the top of the walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. If the quantity of wall reinforcing is less than the specified amounts, report this condition as a deficiency.

5.3.3 Reinforcing at openings. All wall openings that interrupt rebar have trim reinforcing on all sides.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the lack of reinforcing at the end of wall elements adjacent to openings and at the corners of walls. Check the wall using only the length of piers between reinforcing steel.

5.4 Unreinforced masonry shear walls. Unreinforced masonry bearing wall buildings are automatically classified as SPC 1. The following provisions apply to unreinforced masonry shear wall structures that also possess a complete vertical load-carrying space frame.

5.4.1 Shearing stress check.

The building satisfies the Quick Check of the shearing stress in the unreinforced masonry shear walls.

Generate the lateral loads using the Quick Check procedure of Section 2.4.7.3. The allowable stress (on the gross area) for solid brick masonry is 10 psi; for hollow unit masonry, 6 psi; and for grouted block masonry, 12.5 psi. If v_{avg} is greater than the allowable stress, an Alternative Analysis of the structure shall be performed, or the building shall be placed in SPC 1.

5.4.2 Masonry lay-up.

Filled collar joints of multiwythe masonry walls have negligible voids.

The deficiency is in the lay-up of the wall that left voids between the wythes. Investigate the lay-up. This can be done when masonry units are removed for strength tests. If voids are present, report this condition as a deficiency.

5.5 Unreinforced masonry infill walls in frames.

5.5.1 Proportions.

The height/thickness ratio of the wall panels is as follows:

One-story building $h_w/t < 14$

Multistory building

Top story $h_w/t < 9$

Other stories $h_w/t < 20$

The deficiency is in the out-of-plane strength of the wall. Check the out-of-plane demand using the procedure for parts and portions of a building given in Section 2.4.6.

5.5.2 Solid walls. The infill walls are not of cavity construction.

The deficiency is in the out-of-plane strength of the wall. If infill walls are of cavity construction, report this as a deficiency.

5.5.3 Infill walls. The infill walls are continuous to the soffits of the frame beams.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the columns. Check the shear capacity of the columns to develop opposing yield moments at top and bottom of the short free height or to resist required force amplified by the factor $C_d/2$, but not less than 1.5.

5.5.4 Wall connections. All infill panels are constructed to encompass the frames around their entire perimeter.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the connection of the infill panel to the frame. Determine the panel edge condition from available drawings or from field investigation. If the panels are not properly connected to the frame, report this condition as a deficiency.

5.6 Walls in wood frame buildings.

5.6.1 Shearing stress check. The building satisfies the Quick Check of the shearing stress in wood shear walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Generate the lateral loads using the Quick Check procedure of Section 2.4.7.3 and compare to 400 pounds per foot of plywood wall or 50 pounds per foot of walls composed of gypsum board or other materials. If v_{avg} is greater than these values, a more

detailed evaluation of the structure shall be performed. This evaluation shall employ a more accurate estimation of the level and distribution of the lateral loads using the analysis procedures in Article 2.

5.6.2 Openings. Walls with garage doors or other large openings are braced with plywood shear walls or are supported by adjacent construction through substantial positive ties.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the lateral-force-resisting system. Check the ability of the walls and diaphragms to control, through torsional capacity, displacements at walls with large openings. Check that the diaphragm is a complete system with chords and collectors provided to deliver the lateral loads as required.

5.6.3 Wall requirements. All walls supporting tributary area of 24 to 100 square feet per foot of wall are plywood sheathed with proper nailing or rod braced and have a height-to-depth *(H/D)* ratio of 1 to 1 or less or have properly detailed and constructed hold-downs.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall and/or in hold-downs to resist overturning forces. Check the walls using floor areas tributary to the walls. Check all portions of the load path to ensure proper force transfer.

5.6.4 Cripple walls. All exterior cripple walls below the first floor level are braced to the foundation with shear elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the shear strength of the cripple walls. Check all exterior cripple walls below the first floor level to ensure that they are braced to the foundation with shear elements.

5.6.5 Narrow shear walls. Narrow wood shear walls with an aspect ratio greater than 2 to 1 do not resist forces developed in the building.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the narrow walls. Determine the shear capacity of the wall and related overturning demand. This shear capacity and related overturning must be transferred to the foundation within allowable stresses.

5.6.6 Stucco (exterior plaster) shear walls. Multistory buildings do not rely on exterior stucco walls as the primary lateral-force-resisting system.

The deficiency is in the strength of the stucco walls. Inspect stucco-clad buildings to determine if there is a lateral system such as plywood or diagonal sheathing at all but the top floor. Where exterior plaster is present, verify that the wire reinforcing is attached directly to the wall framing and the wire is completely embedded into the plaster material. Conforming buildings which fail this check shall be placed into SPC 4.

5.6.7 Plaster or gypsum wallboard shear walls. Interior plaster or gypsum wallboard is not being used for shear walls in buildings over one story in height.

The deficiency is in the strength of the walls. Determine if there is a lateral system such as plywood or diagonal sheathing at all but the top floor. Multistory buildings shall not rely on interior plaster or gypsum wallboard walls as the primary lateral-force-resisting system. Conforming buildings which fail this check shall be placed into SPC 4.

ARTICLE 6
PROCEDURES FOR BRACED FRAMES

6.0 Introduction. Braced frames develop their resistance to lateral forces by the bracing action of diagonal members. The braces induce forces in the associated beams and columns so that all work together like a truss with all members subjected to stresses that are primarily axial.

A **concentrically braced frame** has minor eccentricities in the joints of the frame that are accounted for in the design.

An **eccentrically braced frame** has elements that are strictly controlled to combine a stiffening effect due to the diagonal braces with yielding in the link beams. Eccentrically braced frames are present only in conforming buildings.

6.1 Concentrically braced frames.

6.1.1 Stress check. The building satisfies the Quick Check of the stress in the diagonals.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Calculate the average axial stress in the diagonals using the procedures of Section 2.4.7.4. Increase the calculated stress to account for torsion, based on the amount of torsion (Section 3.3.6) present and the distance between braced frames. If the average stress exceeds 30 ksi, an accurate analysis of the stresses on the bracing elements shall be performed.

6.1.2 Stiffness of diagonals. All diagonal elements required to carry compression have *Kl/r* ratios less than 120.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stiffness of the diagonals. Check the bracing elements, amplifying the seismic force by the factor 1.25.

6.1.3 Tension-only braces. Tension-only braces are not used as the primary diagonal bracing elements in structures over two stories in height.

The deficiency is in the strength of the braces. Check the braces. If they are tension-only, and the building is over two stories in height, place the building in SPC 1. Tension-only bracing of small penthouse structures may be reviewed using the procedures in Section 2.4.6. Conforming buildings which fail this check shall be placed in SPC 4.

6.1.4 Chevron bracing. The bracing system does not include chevron-, V-, or K-braced bays.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check all elements in the braced frames. For chevron- and V-braced frames, the beam shall be a single element that can carry the gravity loads without the intermediate support of the braces. Check the adequacy of the beam for the seismic forces amplified by $C_d/2$, but not less than 1.5. Consider the effect of

buckling of a leg of chevron-bracing or V-bracing, including the continuity, strength, and bracing of the beams and the ability of the connection to permit buckling of the brace while not destroying the capacity for repeated cycles of loading. If K-bracing is used in buildings over two stories, amplify the seismic forces in the bracing and columns by the factor $C_d/2$, but not less than 1.5.

6.1.5 Concentric joints. All the diagonal braces frame into the beam-column joints concentrically.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the joints. Evaluate the consequence of the eccentricity on the member required to resist it. Evaluate the shear, bending and axial force requirements at the locations of eccentricities.

6.1.6 Connection strength. All the brace connections are able to develop the yield capacity of the diagonals.

The deficiency is in the strength of the connections. Check the connection strength. Use a demand value that develops the tensile capacity of the brace or is 1.25 times the required seismic force. If connections in a conforming building cannot develop the yield capacity of the brace and do not meet the requirements of Part 2, Title 24, Section 2211A.9.3 of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC, the building shall be placed in SPC 4.

6.1.7 Column splices. All column splice details of the braced frames can develop the column yield capacity.

The deficiency is in the strength of the splice. Calculate the adequacy of the splice connection for all expected forces including gravity loads. Amplify the seismic load for partial penetration welded splices by the factor $C_d/2$ when the seismic load produces tension at the splice. If the column splice details in a conforming building cannot develop the yield capacity of the column and do not meet the requirements of Part 2, Title 24, Section 2211A.9.5 of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC, the building shall be placed in SPC 4.

6.1.8 Concrete braced frames. None of the braces in the framing system are of reinforced concrete construction.

The deficiency is in the ductility of the braced frame. Report this condition as a deficiency, and place nonconforming buildings in SPC 1. Place conforming buildings in SPC 4.

6.2 Eccentrically braced frames.

6.2.1 Link beam location. The link beams are not connected to the columns.

The deficiency is in the ductility of the link beam-column connection. Report this condition and place the building in SPC 4.

ARTICLE 7
PROCEDURES FOR DIAPHRAGMS

7.0 Introduction. The diaphragm is the horizontal subsystem that distributes lateral load to the vertical subsystems (walls and frames) and that provides lateral support for walls and parapets.

7.1 Diaphragms. Diaphragms are treated as horizontal beams. The floor (or roof), which is analogous to the web of a wide-flange beam, is assumed to carry the shear; the edge of the floor (or roof) or a spandrel, which is analogous to the flange, is assumed to carry the flexural stress.

7.1.1 Plan irregularities. There is significant tensile capacity at reentrant corners or other locations of plan irregularities.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm in the vicinity of corners. Evaluate the chord/collector requirements at the reentrant corners and other locations of plan irregularities by applying the maximum of the diaphragm force and the calculated story force to a model of the isolated diaphragm. All elements that can contribute to the tensile capacity at the reentrant corner may be included with appropriate consideration given to gravity load stresses. Conforming buildings which fail this check shall be placed in SPC 4.

7.1.2 Cross ties. There are continuous cross ties between diaphragm chords.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the adequacy of the path for wall anchorage forces into the diaphragm. A cross tie is a beam or girder that spans the width of the diaphragm, accumulates the wall loads and transfers them, over the full depth of the diaphragms, into the next bay and on to the nearest shear wall or frame. Calculate the wall anchorage forces according to Section 2.4.5, and check that these forces can be developed, element by element, in the diaphragm.

7.1.3 Reinforcing at openings. There is reinforcing around all diaphragm openings larger than 50 percent of the building width in either major plan dimension.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm in the vicinity of the openings. Check the adequacy of the diaphragm to transfer stresses around the opening.

7.1.4 Openings at shear walls. Diaphragm openings immediately adjacent to the shear walls constitute less than 25 percent of the wall length, and the available length appears sufficient.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the length of diaphragm needed to transfer shear to the wall or frame and to provide lateral support for the wall or frame.

Procedure for diaphragm shear: Verify that there is a path of forces and sufficient strength to deliver the diaphragm shear to the shear wall. The diaphragm shear is the demand.

Procedure for lateral support of the wall: Treat the wall as a portion of the building using F_p as the demand.

7.1.5 Openings at braced frames. Diaphragm openings immediately adjacent to the braced frames extend less than 25 percent of the length of the bracing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is similar to that described above for openings at shear walls.

Procedure for diaphragm shear: Verify that there is a path of forces and sufficient strength to deliver the diaphragm shear to the braced frame. The diaphragm shear is the seismic demand.

Procedure for lateral support of the frame: Treat the frame as a portion of the building using F_p as the demand.

7.1.6 Openings at exterior masonry shear walls. Diaphragm openings immediately adjacent to exterior masonry walls are no more than 8 feet long.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is similar to that described above for openings at shear walls.

Procedure for diaphragm shear: Verify that there is a path of forces and sufficient strength to deliver the diaphragm shear to the shear wall. The diaphragm shear is the demand.

Procedure for lateral support of the wall: Treat the wall as a portion of the building using F_p as the demand.

7.2 Wood diaphragms.

7.2.1 Sheathing. None of the diaphragms consist of straight sheathing or have a span/depth ratio greater than 2 to 1.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm. Analyze the wood diaphragm using the procedure given in Chapter 9 of the 1994 *NEHRP Recommended Provisions.*

7.2.2 Spans. All diaphragms with spans greater than 24 feet have plywood or diagonal sheathing. Structures in Building Type 2 may have rod-braced systems.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength and stiffness of the diaphragm. Evaluate the diaphragm stresses using the procedure given in Chapter 9 of the 1994 *NEHRP Recommended Provisions.* Also evaluate the deflections. A maximum displacement of 3 inches shall be acceptable. For horizontal bracing systems, see Section 7.5.

7.2.3 Unblocked diaphragms. Unblocked wood panel diaphragms consist of horizontal spans of less than 40 feet and have span/depth ratios less than or equal to 3 to 1.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm. Analyze the diaphragm using the 1994 *NEHRP Recommended Provisions* requirements for unblocked diaphragms.

7.2.4 Span/depth ratio. If the span/depth ratios of wood diaphragms are greater than 3 to 1, there are nonstructural walls connected to all diaphragm levels at less than 40-foot spacing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stiffness of the diaphragm. Analyze the wood diaphragm using the procedures given in Chapter 9 of the 1994 *NEHRP Recommended Provisions.*

7.2.5 Diaphragm continuity. None of the diaphragms are composed of split-level floors or, in wood commercial or industrial buildings, have expansion joints.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm. Evaluate the building with proper recognition of the effects of the discontinuities.

7.2.6 Chord continuity. All chord elements are continuous, regardless of changes in roof elevation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is the lack of a chord. Report the lack of a chord as a deficiency.

7.3 Metal deck diaphragms. Allowable values of metal deck diaphragms may be obtained from the manufacturer's approved data. The evaluator shall consider conditions that can weaken the diaphragm (i.e., troughs, gutters and recesses that have the effect of reducing the system to the bare deck or of creating a joint).

7.3.1 Deck topping. All metal deck roofs have a reinforced concrete topping slab.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm. Evaluate the bare metal deck diaphragm using the procedure given in the 1994 *NEHRP Recommended Provisions* requirements.

7.3.2 Untopped diaphragms. Untopped metal deck diaphragms consist of horizontal spans of less than 40 feet and have span/depth ratios less than or equal to 3 to 1.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm. Analyze the diaphragm using the procedure given in the 1994 *NEHRP Recommended Provisions* requirements.

7.4 Precast concrete diaphragms. Evaluation of precast concrete diaphragms and the connections between precast elements shall consider eccentricities, adequacy of welds and length of embedded bars. If a topping slab is provided, it shall be assumed to resist all of the shear.

7.4.1 Topping slab. Precast concrete diaphragm elements are interconnected by a reinforced concrete topping slab.

The deficiency is in the ability to transfer shear from one element to another. Check the slab element interconnection and check the lateral load capacity of the vertical elements that resist horizontal force. Where the capacity of the diaphragm is less than 150 percent of the sum of the load capacities of the vertical elements and where connections can allow the diaphragm to fail in a brittle manner, the R values used in computing the seismic demand shall be consistent with those for brittle systems (not to exceed $R = 2$). Conforming buildings without a reinforced concrete topping slab shall be placed in SPC 4.

7.4.2 Continuity of topping slab. The topping slab continues uninterrupted through the interior walls and into the exterior walls or is provided with dowels with a total area equal to the topping slab reinforcing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is the abrupt loss of strength where the topping slab is interrupted. Evaluate the tension and shear demand due to diaphragm forces, including collector requirements, perpendicular-to-wall loads, or chord forces at re-entrant corners.

7.5 Horizontal bracing. Horizontal bracing forms a complete system of adequate capacity.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is an incomplete or inadequate horizontal bracing system. Evaluate the horizontal bracing system for completeness of the system and its ability to gather all tributary forces and deliver them to the walls or frames.

7.6 Other systems. The diaphragm system does not include thin planks and/or toppings of gypsum.

The deficiency is the inadequate capacity of the diaphragm. Conforming buildings with this condition shall be placed in SPC 4.

ARTICLE 8
PROCEDURES FOR CONNECTIONS

8.0 Introduction. The connections evaluated in this article are connections between:

- Framing members and walls;
- Diaphragms and walls or frames; and
- Walls or frames and foundations.

Connections between other structural members are discussed in the appropriate article.

8.1 Connection concerns. The evaluation of these specific connections involves review of:

- Lateral support of walls that are perpendicular to the direction of the earthquake (“normal walls”);
- Transfer of shear from diaphragms to shear walls and frames that are parallel to the direction of the earthquake;
- Anchorage of walls and columns to the foundations; and
- Interconnection of elements where failure of connections would jeopardize the system.

8.2 Anchorage for normal forces.

8.2.1 Wood ledgers. The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall-to-diaphragm connection. Report this condition as a deficiency.

8.2.2 Wall anchorage. Exterior concrete or masonry walls are anchored to each of the diaphragm levels for out-of-plane loads.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall-to-diaphragm connections. Check that the anchor provides a direct, positive connection between the wall and the diaphragm for forces perpendicular to the face of the wall. Evaluate the wall anchorage, treating the wall as a portion of the building, with F_p as the demand.

8.2.3 Masonry wall anchors. Wall anchorage connections are steel anchors or straps that are developed into the diaphragm.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall anchors. Evaluate the wall anchorage, treating the wall as a portion of the building, with F_p as the demand.

8.2.4 Anchor spacing. The anchors from the floor and roof systems into exterior masonry walls are spaced at 4 feet or less.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength or the number of the anchors. Evaluate the wall anchors, treating the wall as a portion of the building, with F_p as the demand.

8.2.5 Tilt-up walls. Precast bearing walls are connected to the diaphragms for out-of-plane loads; steel anchors or straps are embedded in the walls and developed into the diaphragm.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall anchors. Evaluate the wall anchorage, treating the load as a portion of the building, with F_p as the demand. Check the load path between the wall anchors and the diaphragm cross tie.

8.2.6 Panel-diaphragm connections. There are at least two anchors from each precast wall panel into the diaphragm elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the number of anchors. Report this condition as a deficiency.

8.2.7 Inadequate stiffness of wall anchors. Anchors of walls to wood structural elements are installed taut and are stiff enough to prevent movement between the wall and roof.

The deficiency is in the ability of the wall anchor to prevent separations between the wall and roof sheathing that may result in out-of-plane failure of the ledger support. Inspect all anchors to see that they do not have twists, kinks, offsets, or are otherwise installed so that some movement is required before the anchor becomes effective, and that this condition may lead to cross grain bending in the ledger. Conforming buildings which fail this check shall be placed in SPC 4.

8.3 Shear transfer.

8.3.1 Transfer to shear walls. Diaphragms have sufficient capacity and are connected for transfer of loads to the shear walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the capacity of the connection to transfer shear. Verify the adequacy of the available diaphragm capacity.

8.3.2 Transfer to steel frames. The method used to transfer diaphragm shears to the steel frames is approved for use under lateral loads.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the capacity of the connection to transfer shear. Evaluate the capacity of the load-transfer mechanism provided, using AISC design methods or approved manufacturer's data. Compare this capacity to the assumed lateral force distribution.

8.3.3 Topping slab to walls and frames. Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled into the shear wall or frame elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the capacity of the connection to transfer shear. Evaluate the capacity of the load-transfer mechanism provided. Compare this capacity to the assumed lateral force distribution.

8.4 Vertical components to foundations.

8.4.1 Steel columns. The columns in lateral-force-resisting frames are substantially anchored to the building foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the frame and the foundation. Report this condition as a deficiency.

8.4.2 Concrete columns. All longitudinal column steel is doweled into the foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the column and the foundation. Report this condition as a deficiency.

8.4.3 Wood posts. There is positive connection of wood posts to the foundation and the elements being supported.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the post and the foundation. Report this condition as a deficiency.

8.4.4 Wall reinforcing. All vertical wall reinforcing is doweled into the foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the wall and the foundation. Report this condition as a deficiency.

8.4.5 Shear-wall-boundary columns. The shear-wall columns are substantially anchored to the building foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the shear-wall columns and the foundation. Report this condition as a deficiency.

8.4.6 Wall panels. The wall panels are connected to the foundation and/or ground floor slab with dowels equal to the vertical panel reinforcing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the wall panel and the foundation. Report this condition as a deficiency.

8.4.7 Wood sills. All wall elements are bolted to the foundation sill at 6-foot spacing or less with proper edge and end distances for concrete and wood.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection between the wood sill and the foundation. Report this condition as a deficiency.

8.5 Interconnection of elements.

8.5.1 Girders. Girders supported by walls or pilasters have special ties to secure the anchor bolts.

The deficiency is in the strength of the pilaster at the girder anchorage. Report this condition as a deficiency. Conforming buildings that fail this check shall be placed in SPC 4.

8.5.2 Corbel bearing. If the frame girders bear on column corbels, the length of bearing is greater than 3 inches.

The deficiency is in the length of bearing. Calculate the inter-story drift. Judge the adequacy of the connections to retain their vertical load-carrying integrity at a maximum drift estimated to be equal to the drift calculated with the unreduced demand. Conforming buildings that fail this check shall be placed in SPC 4.

8.5.3 Corbel connections. The frame girders are not supported on corbels with welded elements.

The deficiency is in the strength of the connection. Check all welded connections that transfer lateral loads or are subject to frame action. Determine where connection failures would be brittle (e.g., pull-out of embedded item would occur before yield of mild steel element). Analyze structure for capacity without such connections or check such connections for seismic force amplified by factor $C_d/2$, but not less than 1.5. For connections that can allow the diaphragm to fail in a brittle manner, the R values used in computing the seismic demand shall be consistent with those for brittle systems (not to exceed $R = 2$). Conforming buildings that fail this check shall be placed in SPC 4.

8.6 Roof decking.

8.6.1 Light-gage metal, plastic or cementitious roof panels. All light-gage metal, plastic or cementitious roof panels are properly connected to the roof framing at not more than 12 inches on center.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The

deficiency is the lack of connection of sufficient strength between the roof panels and the framing elements. Report this condition as a deficiency.

8.6.2 Wall panels. All wall panels (metal, fiberglass or cementitious) are properly connected to the framing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is the lack of connections of sufficient strength (to prevent a falling hazard) and flexibility (to allow for the relative displacements between the panel and the supporting frame). Report this condition as a deficiency.

ARTICLE 9
PROCEDURES FOR FOUNDATIONS AND GEOLOGIC SITE HAZARDS

9.0 Introduction. The seismic evaluation of an existing building shall include an examination of the building foundation, an assessment of the capability of the soil beneath the foundation to withstand the forces applied during an earthquake and an evaluation of any nearby geologic hazards that may affect the stability of the foundation.

9.1 Condition of foundations.

9.1.1 Foundation performance. The structure does not show evidence of excessive foundation movement such as settlement or heave that would affect its integrity or strength.

The deficiency is reduction of the integrity and strength of foundation elements by cracking, yielding, tipping or buckling of the foundation. Visually examine lower level walls, partitions, grade beams, visible footings, pile caps and the like for cracking, yielding, buckling and out-of-level conditions. Report evidence of movement as a deficiency.

9.1.2 Deterioration. There is no evidence that foundation elements have deteriorated due to corrosion, sulphate attack, material breakdown or other reasons in a manner that would affect the integrity or strength of the structure.

The deficiency is weakening of the foundation due to deterioration, with the same consequences as discussed in Section 9.1.1. Determine if there is historical evidence in the local area of deterioration of the particular type of foundation elements in the building where site conditions are similar. Examine the visible foundation elements for evidence of loss of support as specified in Section 9.1.1.

9.2 Capacity of foundations.

9.2.1 Overturning. The ratio of the effective horizontal dimension, at the foundation level of the seismic-resisting system, to the building height (base/height) exceeds 1.4 A_v.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is the concentration of seismic inertial response into narrow elements by the seismic-resisting system, which may overcome the ability of the foundation elements, either structure or soil, to provide adequate resistance. For shallow foundations, evaluate the shear and moment capacity of the foundation elements for adequacy to resist calculated seismic forces. Evaluate the vertical bearing pressure of the soil under seismic loading conditions due to the total gravity and overturning loads and compare to two times the allowable static-bearing pressure. For deep foundations, evaluate the ultimate vertical capacity of the pile or pier under seismic loads. Compare the foundation capacity to the gravity loads plus the overturning loads.

9.2.2 Ties between foundation elements. Foundation ties adequate for seismic forces exist where footings, piles and piers are not restrained by beams, slabs, or competent soils or rock.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is the possibility of significant differential lateral deformations of the foundations. Evaluate the lateral restraint to seismic forces provided by the foundation materials or the structural ties. For shallow foundations, evaluate the horizontal capacity of the foundation soils under seismic loading conditions (the lateral resistance of the footings due to passive resistance on affected sides of the footings plus the friction on the base of the footings) and compare to the base shear of the building. In the evaluation of base friction, consideration shall be given to the effect of the vertical component of ground motion.

9.2.3 Load path at pile caps. The pile caps are capable of transferring overturning and lateral forces between the structure and individual piles in the pile cap.

The deficiency is insufficient capacity of the pile cap to transfer seismic forces from the superstructure to the individual piles. Check the moment and shear capacity to transfer uplift and lateral forces from the point of application on the pile cap to each pile. Conforming buildings which fail this check shall be placed in SPC 4.

9.2.4 Lateral force on deep foundations. Piles and piers are capable of transferring the lateral forces between the structure and the soil.

The deficiencies include inadequate flexural strength and ductility of piles or piers at the connection to the cap and the upper portion of the pile. Compare the maximum lateral resistance of soil against piles or piers and caps against the demand. For concrete piles, check for a minimal amount of longitudinal reinforcement in the upper portion of piles or piers and for hoops or ties immediately beneath the caps. Also check for confining transverse reinforcement wherever bending moments might be high, including changes in soil stiffness. Conforming buildings which fail this check shall be placed in SPC 4.

9.2.5 Pole buildings. Pole foundations have adequate embedment.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is inadequate strength of the pole foundation. Check lateral force resistance of embedded poles using conventional procedures, comparing with conventional allowable pressures times 1.5.

9.2.6 Sloping sites. The grade difference from one side of the building to another does not exceed one-half story.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. If

this statement is false, include the horizontal force due to the grade difference, appropriately modified for seismic motions, with the seismic inertial force when checking sliding stability and the lateral-force-resisting system below grade.

9.3 Geologic site hazards. This section addresses geologic and local site conditions that can lead to building structural damage and threaten life safety in an earthquake. In the seismic evaluation of buildings for life-safety considerations, it will be necessary to investigate the site to establish that there are no geologic site hazards present or, if they are present, that their threat is not significant or is mitigated by the design. Requirements for engineering geologic reports are given in Section 2.1.2.

9.3.1 Liquefaction. Liquefaction susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in the foundation soils at depths within 50 feet under the building.

The deficiency is the potential for liquefaction that will result in vertical settlement and potential loss of foundation support for spread footings, or for lateral spreading of liquefied soils that can occur on nearly flat slopes and be detrimental to the foundation system. Evaluate the liquefaction potential and consequences of vertical settlement or lateral movement of the foundations. Conforming buildings which fail this check shall be placed in SPC 4.

9.3.2 Slope failure. The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating small predicted movements without failure.

Evaluate the likely movements associated with seismically induced slope failures beneath, above or adjacent to the building and their effect on the structural integrity of the building. Conforming buildings which fail this check shall be placed in SPC 4.

9.3.3 Surface fault rupture. Surface fault rupture and surface displacement at the building site are not anticipated.

Evaluate the proximity of known active faults to the building. If the potential for surface fault rupture and surface displacement at the building site is present, nonconforming buildings shall be placed in SPC 1. Conforming buildings which fail this check shall be placed in SPC 4.

ARTICLE 10
EVALUATION OF ELEMENTS THAT ARE NOT PART OF THE LATERAL-FORCE-RESISTING SYSTEM

10.0 Introduction. This article sets forth general requirements that apply to nonstructural elements related to life-safety issues. Article 11 addresses evaluation of critical nonstructural systems needed for continued hospital function following an earthquake, and assignment of buildings to Nonstructural Performance Categories.

The evaluation statements discussed in this article (and listed in the appendix) deal with life-safety concerns. Some of the statements can be answered directly. For others, further investigation will be required in accordance with evaluation procedures indicated in other articles of these regulations using seismic forces indicated in Section 2.4.6 and the appropriate C_c seismic coefficient given in Table 2.4.3.1. Also, the materials used in the nonstructural element and its connections must be considered.

10.1 Nonstructural walls. The term "nonstructural walls" refers to walls that are not part of the load-carrying system, but may become load bearing upon attachment and interaction with other elements. Evaluation must be made to determine if they are capable of resisting seismic forces required by Section 2.4.6 as well as the other requirements of these regulations.

10.1.1 Partitions.

10.1.1.1 Masonry partitions. There are no unbraced unreinforced masonry or hollow clay tile partitions in critical care areas, clinical laboratory service spaces, pharmaceutical service spaces, radiological service spaces, central and sterile supply areas, exit corridors, elevator shafts or stairwells.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check for the presence of support angles at floor and roof, and for spaces at the sides and top of the wall to provide for interaction of the structural system.

10.1.1.2 Structural separations. At structural separations, partitions in exit corridors have seismic or control joints.

Check that seismic and/or control joints have been provided at structural separations. Conforming buildings that fail this check shall be placed in SPC 4.

10.1.1.3 Partition bracing. In exit corridors, the tops of partitions that extend only to the ceiling line have lateral bracing.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Partitions extending only to ceilings may overturn or buckle due to the lack of bracing.

10.1.2 Cladding and veneer. For conforming buildings, the evaluator may consider these conditions as mitigated, and no calculations are necessary. Exterior wall panels or cladding can fall if their connections to the building frames have insufficient strength and/or ductility.

10.1.2.1 Masonry veneer. Masonry veneer is connected to the back-up with corrosion-resistant ties spaced 24 inches on center maximum with at least one tie for every $2^2/_3$ square feet.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check for the presence of the required ties.

10.1.2.2 Cladding panels in moment frame buildings. For moment frame buildings of steel or concrete, panels are isolated from the structural frame to absorb predicted interstory drift without collapse.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check the ability of the cladding panels and their connections to tolerate the story drift computed in Section 2.4.4 without an anchorage failure.

10.1.2.3 Cladding panel connections. Where bearing connections are required, there are at least two bearing connections for

each cladding panel and there are at least four connections for each cladding panel capable of resisting out-of-plane forces.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Verify that an adequate number of the appropriate connection types are present for each cladding panel.

10.1.2.4 Cladding panel condition. Cladding panel connections appear to be installed properly. No connection element is severely deteriorated or corroded. There is no cracking in the panel materials indicative of substantial structural distress. There is no substantial damage to exterior cladding due to water leakage. There is no substantial damage to exterior wall cladding due to temperature movements.

Substantial deterioration can lead to loss of cladding elements or panels. Exterior walls shall be checked for deterioration. Damage due to corrosion, rotting, freezing or erosion can be concealed within the wall. Probe into the wall space, if necessary, for signs of water leakage at vulnerable interior spaces (e.g., around windows and at floor areas). Check elements that tie cladding to the backup structure and that tie the back-up structure to floor and roof slabs. Check exterior walls for cracking due to thermal movements. Check the cladding systems with appropriate reductions in member capacities. Conforming buildings that fail this check shall be placed in SPC 4.

10.1.3 Metal stud back-up systems.

10.1.3.1 General. Additional steel studs frame window and door openings. Corrosion of veneer ties, tie screws, studs and stud tracks is minimal. Stud tracks are adequately fastened to the structural frame.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Verify that adequate framing has been provided around openings in the exterior walls. Check the cladding systems with appropriate reductions in member capacities. Check the adequacy of the connection to the structural frame using the forces specified in Section 2.4.6.

10.1.3.2 Masonry veneer with stud back-up. Masonry veneer more than 30 feet above the ground is supported by shelf angles or other elements at each floor level. Masonry veneer is adequately anchored to the back-up at locations of through-wall flashing. Masonry veneer is connected to the back-up with corrosion-resistant ties spaced 24 inches on center maximum and with at least one tie for every $2^2/_3$ square feet.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check that adequate supports and ties are provided.

10.1.4 Masonry veneer with concrete block back-up.

10.1.4.1 General. The concrete block back-up qualifies as reinforced masonry.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Verify that the concrete block back-up meets the requirements of Sections 5.3.2 and 5.3.3.

10.1.4.2 Masonry veneer support. Masonry veneer more than 30 feet above the ground is supported by shelf angles or other elements at each floor level. Masonry veneer is adequately anchored to the back-up at locations of through-wall flashing. Masonry veneer is connected to the back-up with corrosion-resistant ties spaced 24 inches on center maximum and with at least one tie for every $2^2/_3$ square feet. The concrete block back-up is positively anchored to the structural frame at 4-foot maximum intervals along the floors and roofs.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check that adequate supports and ties are provided.

10.1.5 Other veneer/panel systems.

10.1.5.1 Thin stone veneer panels. Stone anchorages are adequate for computed loads.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. There are no visible cracks or weak veins in the stone. Check the adequacy of the connection to the stone anchorage using the forces specified in Section 2.4.6.

10.1.5.2 Wood/aggregate panels. There is no visible deterioration of screws or wood at panel attachment points.

The deficiency is in the strength of the connections. Determine the cause and extent of distress and check the attachment of the panels with appropriate reductions in capacity. Conforming buildings that fail this check shall be placed in SPC 4.

10.1.6 Parapets, cornices, ornamentation and appendages. There are no laterally unsupported unreinforced masonry parapets or cornices above the highest anchorage level with height/thickness ratios greater than 1.5. Concrete parapets with height/thickness ratios greater than 1.5 have vertical reinforcement. Cornices, parapets, signs and other appendages that extend above the highest anchorage level or cantilever from exterior wall faces and other exterior wall ornamentation are reinforced and well anchored to the structural system.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. If any of these items are of insufficient strength and/or are not securely attached to the structural elements, they may break off and fall, becoming significant life-safety hazards. Check the adequacy of these items using the forces specified in Section 2.4.6.

10.1.7 Means of egress. Canopies are anchored and braced to prevent collapse and blockage of building exits.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check canopies for the forces specified in Section 2.4.6.

ARTICLE 11
EVALUATION OF CRITICAL NONSTRUCTURAL COMPONENTS AND SYSTEMS

11.0 Introduction. This article covers nonstructural components and systems critical to patient care.

11.01 Nonstructural evaluation procedure.

1. The nonstructural performance evaluation shall examine the respective critical nonstructural systems and elements for the planned NPC as specified in Table 11.1, "Nonstructural Performance Categories." The

nonstructural evaluation process shall include the following steps:

1. Site visit and data collection;
2. Identification of building SPC;
3. Identification of critical nonstructural systems for the planned NPC;
4. Identification of critical care services housed in the building;
5. Final evaluation for the critical nonstructural elements and systems for the planned NPC;
6. Preparation of evaluation report; and
7. Submittal of evaluation report to OSHPD.

2. A general acute care hospital facility may be exempted from a nonstructural evaluation upon submittal of a written statement by the hospital owner to OSHPD certifying the following conditions:

TABLE 11.1—NONSTRUCTURAL PERFORMANCE CATEGORIES

TIMEFRAMES	NONSTRUCTURAL PERFORMANCE CATEGORY[1]	DESCRIPTION
	NPC 1	Buildings with equipment and systems not meeting the bracing and anchorage requirements of any other NPC.
January 1, 2002	NPC 2	The following systems are braced or anchored in accordance with Part 2, Title 24[1]: • communications systems, • emergency power supply, • bulk medical gas systems, • fire alarm systems and • emergency lighting equipment and signs in the means of egress.
January 1, 2008	NPC 3/NPC 3R	The building meets the criteria for NPC "2" and in critical care areas, clinical laboratory service spaces, pharmaceutical service spaces, radiological service spaces, and central and sterile supply areas, the following components meet the bracing and anchorage requirements of Part 2, Title 24[2]: • Nonstructural components, listed in the 1995 CBC, Part 2, Title 24, Table 16A-0. **Exception:** For NPC 3R, lateral bracing of suspended ceiling systems may be omitted in rooms with a floor area less than 300 square feet, provided the room is not an intensive care or coronary care unit patient room, angiography laboratory, cardiac catheterization laboratory, delivery room, operating room or post-operative recovery room. • "Equipment," as listed in the 1995 CBC, Part 2, Title 24, Table 16A-0, "Equipment," including equipment in the physical plant that service these areas. **Exceptions:** 1. Seismic restraints need not be provided for cable trays, conduit and HVAC ducting. Seismic restraints may be omitted from piping systems, provided that an approved method of preventing release of the contents of the piping system in the event of a break is provided. 2. Only elevator(s) selected to provide service to patient, surgical, obstetrical and ground floors during interruption of normal power need to meet the structural requirements of Part 2, Title 24. • Fire sprinkler systems comply with the bracing and anchorage requirements of NFPA 13, 1994 edition, or subsequent applicable standards. **Exception:** Acute care hospital facilities in both a rural area as defined by Section 70059.1, Division 5 of Title 22 and Seismic Zone 3 shall comply with the bracing and anchorage requirements of NFPA 13, 1994 edition, or subsequent applicable standards by January 1, 2013.
	NPC 4	The building meets the criteria for NPC "3" and all architectural, mechanical, electrical systems, components and equipment, and hospital equipment meet the bracing and anchorage requirements of Part 2, Title 24[2]. This category is for classification purposes of the Office of Emergency Services.
January 1, 2030	NPC 5	The building meets the criteria for NPC "4" and onsite supplies of water and holding tanks for wastewater, sufficient for 72 hours emergency operations, are integrated into the building plumbing systems. As an alternative, hook-ups to allow for the use of transportable sources of water and sanitary waste water disposal have been provided. An onsite emergency system as defined within Part 3, Title 24 is incorporated into the building electrical system for critical care areas. Additionally, the system shall provide for radiological service and an onsite fuel supply for 72 hours of acute care operation.

[1] For the purpose of NPC 2 and NPC 5, all enumerated items within Table 11.1 shall meet the requirements of Section 1632A of 2001 *California Building Code* (CBC) or equivalent provision in later version of the CBC by the specified timeframe as indicated by their respective NPC.

[2] For the purposes of NPC 3 and NPC 4 in SPC 2, SPC 3 or SPC 4 buildings, all enumerated items within Table 11.1 shall meet the requirements of the 1998 CBC, Section 1630B or equivalent provision in later version of the CBC, by the specified timeframe. For the purposes of NPC 3R, all enumerated items within Table 11.1 shall meet the requirements of the 1995 CBC, Section 1630A, using $lp = 1.0$ or equivalent provision in later version of the CBC, by the specified timeframe.

1. The building is designated "NPC 1" in conformance with Table 11.1 "Nonstructural Performance Categories," or
2. The building is designated "NPC 4" in conformance with Table 11.1 "Nonstructural Performance Categories" and provided:
   a) The building was designed and constructed under a building permit issued by OSHPD;
   b) All subsequent repairs, remodels, additions and alterations were performed under a permit issued by OSHPD, and
   c) Fire sprinkler systems have been retrofitted in conformance with Table 11.1, "Nonstructural Performance Categories."

3. If a hospital owner elects to obtain a higher NPC at a future date, additional nonstructural evaluations as specified in Section 11.01.1 will be required.

   Exception: An engineering report may be submitted to the Office in lieu of the NPC 2 evaluation report required by Section 1.4.5.1.1 for nonstructural upgrades from NPC 1 to NPC 2,

   The engineering report shall comply with the following minimum requirements:

   1. The report shall be stamped and signed by a California licensed structural engineer certifying, in a form acceptable to the Office, compliance with the requirements of NPC 2.
   2. The report shall state that the systems and equipment listed in Table 11.1 for NPC 2 compliance either comply with or have been modified to comply with the requirements of Chapter 16A, 1995 *California Building Code* or equivalent provision in later version of the CBC.
   3. The report shall state what specific deficiencies have been addressed in the NPC 2 upgrade projects, and provide OSHPD project numbers for these projects.
   4. The report shall state that the corrective work required for NPC 2 compliance has been completed under permits issued by OSHPD.

   If the hospital owner or governing body has already submitted a revised or new NPC 2 evaluation report, and the Office has reviewed and made comments on this report, the engineering report shall include a statement that all comments pertaining to NPC 2 compliance in the OSHPD review have been resolved.

4. If a hospital owner sells or leases the hospital to another party, a complete nonstructural evaluation and list of all nonstructural deficiencies to achieve NPC 5 shall be submitted to the Office prior to the completion of the sale or lease.

11.1 Nonstructural performance categories. Each building shall be assigned a Nonstructural Performance Category (NPC), based upon the degree of anchorage and bracing of selected nonstructural elements and systems. This includes architectural, mechanical, electrical and hospital equipment in addition to associated conduit, ductwork, piping and machinery. NPCs are defined in Table 11.1.

11.1.1 Site visit and evaluation. The evaluator shall:

1. Visit the building to observe and record the type, nature and physical condition of the nonstructural elements and systems for the planned NPC;
2. Note the SPC of the buildings based on procedures followed in Article 2;
3. Assemble building design data including:
   a. Construction drawings, specifications and calculations, and
   b. All drawings, specifications and calculations for remodeling work.
4. During the visit, the evaluator shall:
   a. Verify existing data;
   b. Develop other needed data (e.g., measure and sketch building if necessary);
   c. Verify the critical nonstructural systems of the planned NPC;
   d. Verify the critical care areas/services; and
   e. Identify special conditions which may impact the nonstructural systems or endanger the function of the critical care areas/services.

If drawings are not available, the site visit and evaluation shall be performed as described in this section.

5. Review other data available such as assessments of building performance and function following past earthquakes;
6. Prepare a summary of data using an OSHPD approved format;
7. Perform the evaluation using the procedures in Section 11.2; and
8. Prepare a report of the findings of the evaluation using an OSHPD approved format.

11.2 Evaluation of buildings. Conforming and nonconforming buildings shall be placed in an NPC based upon the degree of anchorage and bracing for those systems and equipment specified in Table 11.1. The scope of the nonstructural evaluation may be limited to the nonstructural systems and elements specified in Table 11.1 for the planned NPC. Buildings which do not meet the requirements for NPC 2 as defined in Table 11.1 shall be placed in NPC 1.

11.2.1 Evaluation procedures for NPC 2. The following steps shall determine if the building meets the criteria for NPC 2:

a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 as specified in Table 11.1;
b) Conduct an inventory of components and equipment, noting whether the items are anchored or braced;
c) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:

1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or
2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing: a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval that begins with the "H" prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.1(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 2.

Installation is defined as that which shows the size and type of material for all components of the system, including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

d) If the components and equipment inventoried in 11.2.1(b) is anchored or braced, but does not meet the requirements of Section 11.2.1(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and

e) If any of the items inventoried in 11.2.1(b) are unanchored or inadequately braced as determined by Section 11.2.1(d), the building shall be placed in NPC 1.

11.2.2 Evaluation procedures for NPC 3 and NPC 3R. The following steps shall determine if the building meets the criteria for NPC 3 or NPC 3R:

a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 and NPC 3 or NPC 3R;

b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 3 and NPC 3 R, noting whether the components and equipment are anchored or braced;

Exception: Any general acute care hospital facility located in both a "rural area" as defined in Section 70059.1, Division 5, Title 22 and Seismic Zone 3 pursuant to 1995 *California Building Code* (CBC) or later version of the CBC shall comply with the fire sprinkler system anchorage and bracing requirements of NFPA 13, 1994 edition or subsequent standard by January 1, 2013.

c) Determine the level of NPC 3 conformance desired.

1. Buildings classified as SPC 1 or SPC 2 are permitted to meet the NPC 3 performance level, or the NPC 3R performance level. See also Section 11.2.3(c).
2. Buildings classified as SPC 3 or higher must meet the NPC 3 performance level.

d) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:

1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or
2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing: a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an "H" prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.2(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 2 and NPC 3 or NPC 3R.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

e) If the components and equipment inventoried in 11.2.2(b) are anchored or braced, but do not meet the requirements of Section 11.2.2(d), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1 for NPC 3 or NPC 3R. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete, or wood determined by approved tests. For NPC 3R, the investigation of the adequacy of anchorage and bracing may be limited to the connection of the component or equipment to the support when the total reaction at the point of support (including the application of F_p) is less than:

1. 250 pounds for components or equipment attached to light frame walls. For the purposes of this requirement, the sum of the absolute value of all reactions

due to component loads on a single stud shall not exceed 250 pounds.

2. 1,000 pounds for components or equipment attached to roofs, or walls of reinforced concrete or masonry construction.

3. 2,000 pounds for components or equipment attached to floors or slabs-on-grade.

Exception: If the anchorage or bracing is configured in a manner that results in significant torsion on a supporting structural element, the effects of the nonstructural reaction force on the structural element shall be considered in the anchorage design.

f) If any of the items inventoried in 11.2.2(b) are inadequately anchored or braced, as determined by Section 11.2.2(d), the building shall be placed in NPC 2.

11.2.3 Evaluation procedures for NPC 4. The following steps shall be followed to determine if the building meets the criteria for NPC 4:

a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 through NPC 4;

b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 2 through NPC 4, noting whether the components and equipment are anchored or braced;

c) Determine if the anchorage or bracing of the identified components and equipment complies with one of the following conditions:

1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24. Installation or retrofit of components that were designed to meet NPC 3R requirements must be shown to meet the anchorage and bracing requirements of the *California Building Code* for new construction. Components designed to meet NPC 3R requirements that do not meet the anchorage and bracing requirements for new construction shall be retrofitted to meet those requirements; or

2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing: a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an "H" prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.3(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 4.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

d) If the components and equipment inventoried in 11.2.3(b) are anchored or braced, but do not meet the requirements of Section 11.2.3(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and

e) If any of the items inventoried in 11.2.3(b)is unanchored or inadequately braced as determined by Section 11.2.3(d), the building shall be placed in NPC 3.

11.2.4 Evaluation procedures for NPC 5. The following steps shall determine if the building meets the criteria for NPC 5:

a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 through NPC 5;

b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 2 through NPC 5, noting whether the components and equipment are anchored or braced;

c) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:

1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or

2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing: a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an "H" prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.4(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 5.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

d) If the components and equipment inventoried in 11.2.4(b) are anchored or braced, but do not meet the requirements of Section 11.2.4(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and

e) If any of the items inventoried in 11.2.4(b) is inadequately anchored or braced as determined by 11.2.4(d), the building shall be placed in NPC 4.

11.3 Testing requirements for evaluating the performance of existing mechanical fasteners. A testing program shall be instituted to determine the capacity of mechanical fasteners used to anchor nonstructural components including the bracing of pipes, ducts and conduit, and the attachment of equipment and other components listed in the 1995 CBC, Part 2, Title 24, Table 16A-0. Anchors shall be categorized as either seismic bracing of pipes ducts or conduit or equipment and other component anchors.

11.3.1 Anchors used in the seismic bracing of pipes, ducts or conduit. For anchors used in the seismic bracing of pipes, ducts or conduit, the following shall apply:

1. Twenty percent of the anchors (20 minimum) of a given size and type (wedge, shell and sleeve for expansion bolts), at each level of the structure shall be tension tested to three times the maximum calculated design load specified in Section 1630B of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC but not less than 500 pounds. A minimum of one anchor in any 4-bolt group shall be tested assuming an equal distribution of the calculated force to the bolt group. One-quarter ($^1/_4$)-inch diameter anchors need not be tested. Where none of the anchors in the group have calculated tension, testing shall consist of torque testing.

   Exception: Internally threaded anchors, such as shell-type anchors, shall be tested to four times the maximum calculated design loads. Attachment hardware shall be shimmed or removed prior to testing so that it does not prevent the possible withdrawal of the anchor.

2. If an anchor fails the tension test, 20 anchors, installed by the same trade, in the immediate vicinity of the failed anchor shall be tested prior to resuming to a 20 percent sampling rate for testing.

11.3.2 Anchors used in the attachment of equipment and other components. For anchors used in the attachment of equipment and other components listed in the 1995 CBC, Part 2, Title 24, Table 16A-0, the following shall apply:

1. A minimum of one anchor of a given size shall be tension tested for each piece of equipment or other component under consideration. Where the number of anchors for the piece of equipment or component exceeds four, a minimum of 20 percent of the anchors shall be tension tested. Where none of the anchors in the group have calculated tension, testing shall consist of torque testing.
2. The tension test load shall be three times the maximum tension force calculated for an anchor in the attachment group using the design loads specified in Section 1630B of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC or 500 pounds minimum. One-quarter ($^1/_4$)-inch diameter anchors need not be tested.

   Exception: Internally threaded anchors, such as shell type anchors, shall be tested to four times the maximum calculated design loads. Attachment hardware shall be shimmed or removed prior to testing so that it does not prevent the possible withdrawal of the anchor.

3. If a single anchor fails, all anchors in the attachment group shall be tested. If two or more anchors fail, the component shall be retrofitted for the forces as for new construction.

11.3.3 Tension testing procedure.

1. Testing of anchors shall be accomplished by the application of externally applied direct tension force to the anchor. The testing apparatus shall not restrict the probable shear cone failure surface of the concrete or masonry.
2. Torque testing is not permitted in lieu of tension testing unless specifically allowed in these provisions.
3. A failure is defined when the tension load on the anchor produces a slip of $^1/_8$ inch, a shear cone failure in the concrete or masonry, concrete splitting, or fracture of the steel anchor itself prior to attaining the test load value.

   Exception: For internally threaded anchors, the allowable slip shall not exceed $^1/_{16}$ inch.

11.3.4 Alternate test criteria. In lieu of testing in accordance with Section 11.3.1 or 11.3.2, a test load may be established by the evaluating engineer. The allowable load that the anchor can resist shall be determined by dividing the test load by the appropriate factors noted in Section 11.3.1 or 11.3.2. No one-third increase is permitted for seismic or wind loads.

11.3.5 Allowable shear loads. Allowable shear loads on anchors shall be determined by either of the following:

1. Shear values listed in Table 19B-E of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC, or
2. Shear values shall be obtained by analysis using Strength Design of Anchorage to Concrete, Section A.6, published by the Portland Cement Association, 1999, with the specified reduction coefficient(s) to convert the "strength" values to allowable stress design values of 1.7.

APPENDIX

GENERAL SETS OF EVALUATION STATEMENTS

EVALUATION STATEMENTS FOR THE BASIC BUILDING SYSTEM

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

Building system

T F LOAD PATH: The structure contains a complete load path for seismic force effects from any horizontal direction that serves to transfer the inertial forces from the mass to the foundation. (Section 3.1)

T F REDUNDANCY: The structure will remain laterally stable after the failure of any single element. (Section 3.2)

Configuration

T F N/A WEAK STORY: Visual observation or a Quick Check indicates that there are no significant strength discontinuities in any of the vertical elements in the lateral-force-resisting system; the story strength at any story is not less than 80 percent of the strength of the story above. (Section 3.3.1)

T F N/A SOFT STORY: Visual observation or a Quick Check indicates that there are no significant stiffness discontinuities in any of the vertical elements in the lateral-force-resisting system; the lateral stiffness of a story is not less than 70 percent of that in the story above or less than 80 percent of the average stiffness of the three stories above. (Section 3.3.2)

T F N/A GEOMETRY: There are no significant geometrical irregularities; there are no setbacks (i.e., no changes in horizontal dimension of the lateral-force-resisting system of more than 30 percent in a story relative to the adjacent stories). (Section 3.3.3)

T F N/A MASS: There are no significant mass irregularities; there is no change of effective mass of more than 50 percent from one story to the next, excluding light roofs. (Section 3.3.4)

T F N/A VERTICAL DISCONTINUITIES: All shear walls, infilled walls and frames are continuous to the foundation. (Section 3.3.5)

T F TORSION: The lateral-force-resisting elements form a well-balanced system that is not subject to significant torsion. Significant torsion will be taken as any condition where the distance between the story center of rigidity and the story center of mass is greater than 20 percent of the width of the structure in either major plan dimension. (Section 3.3.6)

Adjacent buildings

T F ADJACENT BUILDINGS: There is no immediately adjacent structure that is less than half as tall or has floors/levels that do not match those of the building being evaluated. A neighboring structure is considered "immediately adjacent" if it is within 2 inches times the number of stories away from the building being evaluated. (Section 3.4)

Deflection incompatibility

T F DEFLECTION INCOMPATIBILITY: Column and beam assemblies that are not part of the lateral-force-resisting system (i.e., gravity load-resisting frames) are capable of accommodating imposed building drifts, including amplified drift caused by diaphragm deflections, without loss of vertical load-carrying capacity. (Section 3.5)

Short "captive" columns

T F SHORT "CAPTIVE" COLUMNS: There are no columns with height-to-depth ratios less than 75 percent of the nominal height-to-depth ratios of the typical columns at that level. (Section 3.6)

Materials and conditions

T F N/A DETERIORATION OF WOOD: None of the wood members shows signs of decay, shrinkage, splitting, fire damage or sagging, and none of the metal accessories is deteriorated, broken or loose. (Section 3.7.1)

T F N/A OVERDRIVEN NAILS: There is no evidence of overdriven nails in the shear walls or diaphragms. (Section 3.7.2)

T F N/A DETERIORATION OF STEEL: There is no significant visible rusting, corrosion or other deterioration in any of the steel elements in the vertical- or lateral-force-resisting system. (Section 3.7.3)

T F N/A DETERIORATION OF CONCRETE: There is no visible deterioration of concrete or reinforcing steel in any of the frame elements. (Section 3.7.4)

T F N/A POST-TENSIONING ANCHORS: There is no evidence of corrosion or spalling in the vicinity of post-tensioning or end fittings. Coil anchors have not been used. (Section 3.7.5)

T F N/A CONCRETE WALL CRACKS: All diagonal cracks in the wall elements are 1.0 mm or less in width, are in isolated locations, and do not form an X pattern. (Section 3.7.6)

T F N/A CRACKS IN BOUNDARY COLUMNS: There are no diagonal cracks wider than 1.0 mm in concrete columns that encase the masonry infills. (Section 3.7.7)

Materials and conditions—cont.

T F N/A PRECAST CONCRETE WALLS: There is no significant visible deterioration of concrete or reinforcing steel or evidence of distress, especially at the connections. (Section 3.7.8)

T F N/A MASONRY JOINTS: The mortar cannot be easily scraped away from the joints by hand with a metal tool, and there are no significant areas of eroded mortar. (Section 3.7.9)

T F N/A MASONRY UNITS: There is no visible deterioration of large areas of masonry units. (Section 3.7.10)

T F N/A CRACKS IN INFILL WALLS: There are no diagonal cracks in the infilled walls that extend throughout a panel or are greater than 1.0 mm wide. (Section 3.7.11)

EVALUATION STATEMENTS FOR VERTICAL SYSTEMS RESISTING LATERAL FORCES

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

MOMENT FRAMES

Frames with infill walls

T F N/A INTERFERING WALLS: All infill walls placed in the moment frames are isolated from the structural elements. (Section 4.1.1)

Steel moment frames

T F N/A DRIFT CHECK: The building satisfies the Quick Check of the frame drift. (Section 4.2.1)

T F N/A COMPACT MEMBERS: All moment frame elements meet the compact section requirements of the basic AISC documents. (Section 4.2.2)

T F N/A BEAM PENETRATIONS: All openings in frame-beam webs have a depth less than one fourth of the beam depth and are located in the center half of the frame beams. (Section 4.2.3)

T F N/A MOMENT CONNECTIONS: All beam-column connections in the lateral-force-resisting moment frame have full-penetration flange welds and a bolted or welded web connection. (Section 4.2.4)

T F N/A COLUMN SPLICES: All column splice details of the moment-resisting frames include connection of both flanges and the web. (Section 4.2.5)

T F N/A JOINT WEBS: All web thicknesses within joints of moment-resisting frames meet the AISC criteria for web shear. (Section 4.2.6)

T F N/A GIRDER FLANGE CONTINUITY PLATES: There are girder flange continuity plates at joints. (Section 4.2.7)

T F N/A STRONG COLUMN/WEAK BEAM: At least one half of the joints are strong column/weak beam (33 percent on every line of moment frame). Roof joints need not be considered. (Section 4.2.8)

T F N/A OUT-OF-PLANE BRACING: Beam-column joints are braced out-of-plane. (Section 4.2.9)

T F N/A PRE-NORTHRIDGE EARTHQUAKE WELDED MOMENT FRAME JOINTS: Welded steel moment frame beam-column joints are designed and constructed in accordance with recommendations in FEMA 267, Interim Guidelines: Evaluation, Repair, Modification, and Design of Welded Steel Moment Frame Structures, August 1995. (Section 4.2.10)

Concrete moment frames

T F N/A SHEARING STRESS CHECK: The building satisfies the Quick Check of the average shearing stress in the columns. (Section 4.3.1)

T F N/A DRIFT CHECK: The building satisfies the Quick Check of story drift. (Section 4.3.2)

T F N/A PRESTRESSED FRAME ELEMENTS: The lateral-load-resisting frames do not include any pre-stressed or post-tensioned elements. (Section 4.3.3)

T F N/A JOINT ECCENTRICITY: There are no eccentricities larger than 20 percent of the smallest column plan dimension between girder and column center-lines. (Section 4.3.4)

T F N/A NO SHEAR FAILURES: The shear capacity of frame members is greater than the moment capacity. (Section 4.3.5)

T F N/A STRONG COLUMN/WEAK BEAM: The moment capacity of the columns appears to be greater than that of the beams. (Section 4.3.6)

T F N/A STIRRUP AND TIE HOOKS: The beam stirrups and column ties are anchored into the member cores with hooks of 135 degrees or more. (Section 4.3.7)

T F N/A COLUMN-TIE SPACING: Frame columns have ties spaced at $d/4$ or less throughout their length and at $8d_b$, or less at all potential plastic hinge regions. (Section 4.3.8)

T F N/A COLUMN-BAR SPLICES: All column bar lap splice lengths are greater than $35d_b$, long and are enclosed by ties spaced at $8d_b$, or less. (Section 4.3.9)

T F N/A BEAM BARS: At least two longitudinal top and two longitudinal bottom bars extend continuously throughout the length of each frame beam. At least 25 percent of the steel provided at the joints for either positive or negative moment is continuous throughout the members. (Section 4.3.10)

Concrete moment frames—cont.

T F N/A BEAM-BAR SPLICES: The lap splices for the longitudinal beam reinforcing are located within the center half of the member lengths or in the vicinity of potential plastic hinges. (Section 4.3.11)

T F N/A STIRRUP SPACING: All beams have stirrups spaced at $d/2$ or less throughout their length and at $8d_b$ or less at potential hinge locations. (Section 4.3.12)

T F N/A BEAM TRUSS BARS: Bent-up longitudinal steel is not used for shear reinforcement. (Section 4.3.13)

T F N/A JOINT REINFORCING: Column ties extend at their typical spacing through all beam-column joints at exterior columns. (Section 4.3.14)

T F N/A FLAT SLAB FRAMES: The system is not a frame consisting of a flat slab/plate without beams. (Section 4.3.15)

Precast concrete moment frames

T F N/A PRECAST FRAMES: The lateral loads are not resisted by precast concrete frame elements. (Section 4.4.1)

T F N/A PRECAST CONNECTIONS: For buildings with concrete shear walls, the connection between precast frame elements such as chords, ties and collectors in the lateral-force-resisting system can develop the capacity of the connected members. (Section 4.4.2)

Frames not part of the lateral-force-resisting system

T F N/A COMPLETE FRAMES: The steel or concrete frames form a complete vertical load-carrying system. (Section 4.5.1)

SHEAR WALLS

Concrete shear walls

T F N/A SHEARING STRESS CHECK: The building satisfies the Quick Check of the shearing stress in the shear walls. (Section 5.1.1)

T F N/A OVERTURNING: All shear walls have h_w/l_w ratios less than 4 to 1. (Section 5.1.2)

T F N/A COUPLING BEAMS: The stirrups in all coupling beams are spaced at $d/2$ or less and are anchored into the core with hooks of 135 degrees or more. (Section 5.1.3)

T F N/A COLUMN SPLICES: Steel column splice details in shear wall boundary elements can develop the tensile strength of the column. (Section 5.1.4)

T F N/A WALL CONNECTIONS: There is positive connection between the shear walls and the steel beams and columns. (Section 5.1.5)

T F N/A CONFINEMENT REINFORCING: For shear walls with hw/lw greater than 2.0, the boundary elements are confined with spirals or ties with spacing less then $8d_b$. (Section 5.1.6)

T F N/A REINFORCING STEEL: The area of reinforcing steel for concrete walls is greater than 0.0025 times the gross area of the wall along both the longitudinal and transverse axes and the maximum spacing of reinforcing steel is 18 inches. (Section 5.1.7)

T F N/A REINFORCING AT OPENINGS: There is special wall reinforcement around all openings. (Section 5.1.8)

Precast concrete shear walls

T F N/A PANEL-TO-PANEL CONNECTIONS: Adjacent wall panels are not connected by welded steel inserts. (Section 5.2.1)

T F N/A WALL OPENINGS: Openings constitute less than 75 percent of the length of any perimeter wall with the wall piers having h_w/l_w ratios of less than 2.0. (Section 5.2.2)

T F N/A COLLECTORS: Wall elements with openings larger than a typical panel at a building corner are connected to the remainder of the wall with collector reinforcing. (Section 5.2.3)

Reinforced masonry shear walls

T F N/A SHEARING STRESS CHECK: The building satisfies the Quick Check of the shearing stress in the reinforced masonry shear walls. (Section 5.3.1)

T F N/A REINFORCING: The total vertical and horizontal reinforcing steel in reinforced masonry walls is greater than 0.002 times the gross area of the wall with a minimum of 0.0007 in either of the two directions, the spacing of reinforcing steel is less than 48 inches and all vertical bars extend to the top of the walls. (Section 5.3.2)

T F N/A REINFORCING AT OPENINGS: All wall openings that interrupt rebar have trim reinforcing on all sides. (Section 5.3.3)

Unreinforced masonry shear walls

T F N/A SHEARING STRESS CHECK: The building satisfies the Quick Check of the shearing stress in the unreinforced masonry shear walls. (Section 5.4.1)

T F N/A MASONRY LAY-UP: Filled collar joints of multi-wythe masonry walls have negligible voids. (Section 5.4.2)

Infill walls in frames

T F N/A PROPORTIONS: The height/thickness ratio of the wall panels is as follows (Section 5.5.1):

One-story building $h_w/t < 14$

Multistory building

Top story $h_w/t < 9$

Other stories $h_w/t < 20$

T F N/A SOLID WALLS: The infill walls are not of cavity construction. (Section 5.5.2)

T F N/A CONTINUOUS WALLS: The infill walls are continuous to the soffits of the frame beams. (Section 5.5.3)

T F N/A WALL CONNECTIONS: All infill panels are constructed to encompass the frames around their entire perimeter. (Section 5.5.4)

Walls in wood-frame buildings

T F N/A SHEARING STRESS CHECK: The building satisfies the Quick Check of the shearing stress in the wood shear walls. (Section 5.6.1)

T F N/A OPENINGS: Walls with garage doors or other large openings are braced with plywood shear walls or are supported by adjacent construction through substantial positive ties. (Section 5.6.2)

T F N/A WALL REQUIREMENTS: All walls supporting tributary area of 24 to 100 square feet per foot of wall are plywood sheathed with proper nailing, or rod braced and have a height-to-depth (H/D) ratio of 1 to 1 or less, or have properly detailed and constructed hold downs. (Section 5.6.3)

T F N/A CRIPPLE WALLS: All exterior cripple walls below the first floor level are braced to the foundation with shear elements. (Section 5.6.4)

T F N/A NARROW SHEAR WALLS: Narrow wood shear walls with an aspect ratio greater than 2 to 1 do not resist forces developed in the building. (Section 5.6.5)

T F N/A STUCCO (EXTERIOR PLASTER) SHEAR WALLS: Multistory buildings do not rely on exterior stucco walls as the primary lateral-force-resisting system. (Section 5.6.6)

T F N/A PLASTER OR GYPSUM WALLBOARD SHEAR WALLS: Interior plaster or gypsum wallboard is not being used for shear walls in buildings over one story in height. (Section 5.6.7)

BRACED FRAMES

Concentric braced frames

T F N/A STRESS CHECK: The building satisfies the Quick Check of the stress in the diagonals. (Section 6.1.1)

T F N/A STIFFNESS OF DIAGONALS: All diagonal elements required to carry compression have *Kl/r* ratios less than 120. (Section 6.1.2)

T F N/A TENSION-ONLY BRACES: Tension-only braces are not used as the primary diagonal bracing elements in structures over two stories in height. (Section 6.1.3)

T F N/A CHEVRON BRACING: The bracing system does not include chevron-, V- or K-braced bays. (Section 6.1.4)

T F N/A CONCENTRIC JOINTS: All the diagonal braces frame into the beam-column joints concentrically. (Section 6.1.5)

T F N/A CONNECTION STRENGTH: All the brace connections are able to develop the yield capacity of the diagonals. (Section 6.1.6)

T F N/A COLUMN SPLICES: All column splice details of the braced frames can develop the column yield capacity. (Section 6.1.7)

T F N/A CONCRETE BRACED FRAMES: None of the braces in the framing system are of reinforced concrete construction. (Section 6.1.8)

Eccentric braced frames

T F N/A LINK BEAM LOCATION: The link beams are not connected to the columns. (Section 6.2.1)

EVALUATION STATEMENTS FOR DIAPHRAGMS

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

General

T F N/A PLAN IRREGULARITIES: There is significant tensile capacity at reentrant corners or other locations of plan irregularities. (Section 7.1.1)

T F N/A CROSS TIES: There are continuous cross ties between diaphragm chords. (Section 7.1.2)

T F N/A REINFORCING AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50 percent of the building width in either major plan dimension. (Section 7.1.3)

T F N/A OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls constitute less than 25 percent of the wall length, and the available length appears sufficient. (Section 7.1.4)

General—cont.

T F N/A OPENINGS AT BRACED FRAMES: Diaphragm openings immediately adjacent to the braced frames extend less than 25 percent of the length of the bracing. (Section 7.1.5)

T F N/A OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry walls are no more than 8 feet long. (Section 7.1.6)

Wood diaphragms

T F N/A SHEATHING: None of the diaphragms consist of straight sheathing or have span/depth ratios greater than 2 to 1. (Section 7.2.1)

T F N/A SPANS: All diaphragms with spans greater than 24 feet have plywood or diagonal sheathing. Structures in Building Type 2 may have rod-braced systems. (Section 7.2.2)

T F N/A UNBLOCKED DIAPHRAGMS: Unblocked wood panel diaphragms consist of horizontal spans of less than 40 feet and have span/depth ratios less than or equal to 3 to 1. (Section 7.2.3)

T F N/A SPAN/DEPTH RATIO: If the span/depth ratios of wood diaphragms are greater than 3 to 1, there are nonstructural walls connected to all diaphragm levels at less than 40-foot spacing. (Section 7.2.4)

T F N/A DIAPHRAGM CONTINUITY: None of the diaphragms are composed of split-level floors or, in wood commercial or industrial buildings, have expansion joints. (Section 7.2.5)

T F N/A CHORD CONTINUITY: All chord elements are continuous, regardless of changes in roof elevation. (Section 7.2.6)

Metal deck diaphragms

T F N/A DECK TOPPING: All metal deck roofs have a reinforced concrete topping slab. (Section 7.3.1)

T F N/A UNTOPPED DIAPHRAGMS: Untapped metal deck diaphragms consist of horizontal spans of less than 40 feet and have span/depth ratios less than or equal to 3 to 1. (Section 7.3.2)

Precast concrete diaphragms

T F N/A TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a reinforced concrete topping slab. (Section 7.4.1)

T F N/A CONTINUITY OF TOPPING SLAB: The topping slab continues uninterrupted through the interior walls and into the exterior walls or is provided with dowels with a total area equal to the topping slab reinforcing. (Section 7.4.2)

Horizontal bracing

T F N/A HORIZONTAL BRACING: Horizontal bracing forms a complete system of adequate capacity. (Section 7.5.1)

Other systems

T F N/A OTHER SYSTEMS: The diaphragm system does not include thin planks and/or toppings of gypsum. (Section 7.6.1)

EVALUATION STATEMENTS FOR STRUCTURAL CONNECTIONS

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

Anchorage for normal forces

T F N/A WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers. (Section 8.2.1)

T F N/A WALL ANCHORAGE: The exterior concrete or masonry walls are anchored to each of the diaphragm levels for out-of-plane loads. (Section 8.2.2)

T F N/A MASONRY WALL ANCHORS: Wall anchorage connections are steel anchors or straps that are developed into the diaphragm. (Section 8.2.3)

T F N/A ANCHOR SPACING: The anchors from the floor and roof systems into exterior masonry walls are spaced at 4 feet or less. (Section 8.2.4)

T F N/A TILT-UP WALLS: Precast-bearing walls are connected to the diaphragms for out-of-plane loads; steel anchors or straps are embedded in the walls and developed into the diaphragm. (Section 8.2.5)

T F N/A PANEL-DIAPHRAGM CONNECTION: There are at least two anchors from each precast wall panel into the diaphragm elements. (Section 8.2.6)

T F N/A INADEQUATE STIFFNESS OF WALL ANCHORS: Anchors of walls to wood structural elements are installed taut and are stiff enough to prevent movement between the wall and roof. (Section 8.2.7)

Shear transfer

T F N/A TRANSFER TO SHEAR WALLS: Diaphragms are reinforced and connected for transfer of loads to the shear walls. (Section 8.3.1)

T F N/A TRANSFER TO STEEL FRAMES: The method used to transfer diaphragm shears to the steel frames is approved for use under lateral loads. (Section 8.3.2)

T F N/A TOPPING SLAB TO WALLS AND FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled into the shear wall or frame elements. (Section 8.3.3)

Vertical components

T F N/A STEEL COLUMNS: The columns in the lateral-force-resisting frames are substantially anchored to the building foundation. (Section 8.4.1)

T F N/A CONCRETE COLUMNS: All longitudinal column steel is doweled into the foundation. (Section 8.4.2)

T F N/A WOOD POSTS: There is positive connection of wood posts to the foundation and the elements being supported. (Section 8.4.3)

T F N/A WALL REINFORCING: All vertical wall reinforcing is doweled into the foundation. (Section 8.4.4)

T F N/A SHEAR-WALL-BOUNDARY COLUMNS: The shear wall columns are substantially anchored to the building foundation. (Section 8.4.5)

T F N/A WALL PANELS: The wall panels are connected to the foundation and/or ground floor slab with dowels equal to the vertical panel reinforcing. (Section 8.4.6)

T F N/A WOOD SILLS: All wall elements are bolted to the foundation sill at 6-foot spacing or less with proper edge distance for concrete and wood. (Section 8.4.7)

Interconnection of elements

T F N/A GIRDERS: Girders are supported by walls, or pilasters have special ties to secure the anchor bolts. (Section 8.5.1)

T F N/A CORBEL BEARING: If the frame girders bear on column corbels, the length of bearing is greater than 3 inches. (Section 8.5.2)

T F N/A CORBEL CONNECTIONS: The frame girders are not supported on corbels with welded elements. (Section 8.5.3)

Roof decking

T F N/A LIGHT-GAGE METAL, PLASTIC OR CEMENTITIOUS ROOF PANELS: All light-gage metal, plastic or cementitious roof panels are properly connected to the roof framing at not more than 12 inches on center. (Section 8.6.1)

T F N/A WALL PANELS: All wall panels (metal, fiberglass or cementitious) are properly connected to the wall framing. (Section 8.6.2)

EVALUATION STATEMENTS FOR FOUNDATIONS AND GEOLOGIC SITE HAZARDS

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

Condition of foundations

T F FOUNDATION PERFORMANCE: The structure does not show evidence of excessive foundation movement such as settlement or heave that would affect its integrity or strength. (Section 9.1.1)

T F DETERIORATION: There is no evidence that foundation elements have deteriorated due to corrosion, sulphate attack, material breakdown or other reasons in a manner that would affect the integrity or strength of the structure. (Section 9.1.2)

Capacity of foundations

T F OVERTURNING: The ratio of the effective horizontal dimension, at the foundation level of the seismic-resisting system to the building height (base/height) exceeds 1.4AV. (Section 9.2.1)

T F TIES BETWEEN FOUNDATION ELEMENTS: Foundation ties adequate for seismic forces exist where footings, piles and piers are not restrained by beams, slabs or competent soils or rock. (Section 9.2.2)

T F N/A LOAD PATH AT PILE CAPS: The pile caps are capable of transferring overturning and lateral forces between the structure and individual piles in the pile cap. (Section 9.2.3)

T F N/A LATERAL FORCE ON DEEP FOUNDATIONS: Piles and piers are capable of transferring the lateral forces between the structure and the soil. (Section 9.2.4)

T F N/A POLE BUILDINGS: Pole foundations have adequate embedment. (Section 9.2.5)

T F SLOPING SITES: The grade difference from one side of the building to another does not exceed one-half story. (Section 9.2.6)

Geologic site hazards

T F N/A LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in the foundation soils at depths within 50 feet under the building. (Section 9.3.1)

T F SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating small, predicted movements without failure. (Section 9.3.2)

T F SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Section 9.3.3)

EVALUATION STATEMENTS FOR ELEMENTS THAT ARE NOT PART OF THE LATERAL-FORCE-RESISTING SYSTEM

Address the following evaluation statements, marking each either true (T), false (F) or not applicable (N/A). Statements that are found to be true identify issues that are acceptable according to the criteria of these regulations; statements that are found to be false identify issues that need investigation. For guidance in the investigation, refer to the section number indicated in parentheses at the end of the statement.

NONSTRUCTURAL WALLS

Partitions

T F N/A MASONRY PARTITIONS: There are no unbraced unreinforced masonry or hollow clay tile partitions in critical care areas, clinical laboratory service spaces, pharmaceutical service spaces, radiological service spaces, and central and sterile supply areas, exit corridors, elevator shafts or stairwells. (Section 10.1.1.1)

T F N/A STRUCTURAL SEPARATIONS: At structural separations, partitions in exit corridors have seismic or control joints. (Section 10.1.1.2)

T F N/A PARTITION BRACING: In exit corridors, the tops of partitions that extend only to the ceiling line have lateral bracing. (Section 10.1.1.3)

Cladding and veneer

T F N/A MASONRY VENEER: Masonry veneer is connected to the back-up with corrosion-resistant ties spaced 24 inches on center maximum with at least one tie for every $2^2/_3$ square feet. (Section 10.1.2.1)

T F N/A CLADDING PANELS IN MOMENT FRAME BUILDINGS: For moment frame buildings of steel or concrete, panels are isolated from the structural frame to absorb predicted interstory drift without collapse. (Section 10.1.2.2)

T F N/A CLADDING PANEL CONNECTIONS: Where bearing connections are required, there are at least two bearing connections for each cladding panel, and there are at least four connections for each cladding panel capable of resisting out-of-plane forces. (Section 10.1.2.3)

T F N/A CLADDING PANEL CONDITION: Cladding panel connections appear to be installed properly. No connection element is severely deteriorated or corroded. There is no cracking in the panel materials indicative of substantial structural distress. There is no substantial damage to exterior cladding due to water leakage. There is no substantial damage to exterior wall cladding due to temperature movements. (Section 10.1.2.4)

Metal stud back-up systems

T F N/A GENERAL: Additional steel studs frame window and door openings. Corrosion of veneer ties, tie screws, studs and stud tracks is minimal. Stud tracks are adequately fastened to the structural frame. (Section 10.1.3.1)

T F N/A MASONRY VENEER WITH STUD BACK-UP: Masonry veneer more than 30 feet above the ground is supported by shelf angles or other elements at each floor level. Masonry veneer is adequately anchored to the back-up at locations of through-wall flashing. Masonry veneer is connected to the backup with corrosion-resistant ties spaced 24 inches on center maximum and with at least one tie for every $2^2/_3$ square feet. (Section 10.1.3.2)

T F N/A MASONRY VENEER WITH CONCRETE BLOCK BACK-UP—GENERAL: The concrete block back-up qualifies as reinforced masonry. (Section 10.1.4.1)

T F N/A MASONRY VENEER SUPPORT: Masonry veneer more than 30 feet above the ground is supported by shelf angles or other elements at each floor level. Masonry veneer is adequately anchored to the back-up at locations of through-wall flashing. Masonry veneer is connected to the back-up with corrosion-resistant ties spaced 24 inches on center maximum and with at least one tie for every 22/3 square feet. The concrete block back-up is positively anchored to the structural frame at 4-foot maximum intervals along the floors and roofs. (Section 10.1.4.2)

Other veneer/panel systems

T F N/A THIN STONE VENEER PANELS: Stone anchorages are adequate for computed loads. (Section 10.1.5.1)

T F N/A WOOD/AGGREGATE PANELS: There is no visible deterioration of screws or wood at panel attachment points. (Section 10.1.5.2)

Parapets, cornices, ornamentation and appendages

T F N/A PARAPETS, CORNICES, ORNAMENTATION AND APPENDAGES: There are no laterally unsupported unreinforced masonry parapets or cornices above the highest anchorage level with height/thickness ratios greater than 1.5. Concrete parapets with height/thickness ratios greater than 1.5 have vertical reinforcement. Cornices, parapets, signs and other appendages that extend above the highest anchorage level or cantilever from exterior wall faces and other exterior wall ornamentation are reinforced and well anchored to the structural system. (Section 10.1.6)

T F N/A MEANS OF EGRESS: Canopies are anchored and braced to prevent collapse and blockage of building exits. (Section 10.1.7)

APPENDIX H TO CHAPTER 6
HAZUS AEBM REGULATIONS

6-A1 HAZUS AEBM Technology. The Federal Emergency Management Agency (FEMA)/National Institute of Building Sciences (NIBS) Multi-Hazard Loss Estimation Technology (HAZUS-MH MR2) and, specifically, the HAZUS Advanced Engineering Building Module (AEBM) are used by the Office with building-specific parameters, described in this appendix, to evaluate the Probability of Collapse of SPC-1 buildings.

6-A2 Probability of Collapse. The Probability of Collapse, P[COL], is calculated by Equation (A6-1):

$$P[COL] = P[COL|STR_5] \times P[STR_5] \quad \text{(A6-1)}$$

where:

$P[COL|STR_5]$ = collapse factor of the HAZUS AEBM, as modified herein, and

$P[STR_5]$ = probability of Complete Structural Damage, based on HAZUS AEBM methods and parameters, as modified herein.

6-A3 Building-Specific Properties. Building-specific properties are based on the building type (structural system), or Model Building Type (MBT), building height (number of stories above seismic base), building age (pre-1933, 1933 – 1961 or post-1961 design vintage), availability of materials testing data, and Significant Structural Deficiencies.

Table A6-1 lists Significant Structural Deficiencies. Table A6-1 includes older buildings (pre-1933 buildings) and buildings that do not have available materials test data, and treats these conditions as Significant Structural Deficiencies.

SPC-1 buildings with no Significant Structural Deficiencies are evaluated using "Baseline" values of building-specific properties. SPC-1 buildings with one or more Significant Structural Deficiencies are evaluated using Sub-Baseline (SubBase), or Ultra-Sub-Baseline (USB) building-specific properties, as specified in Table A6-1.

Building-specific properties include parameters related to (1) building capacity, (2) building response, (3) Complete Structural Damage, and (4) building collapse. Appendix H Sections 6-A4 through 6-A7, define the parameters of interest related to building capacity, building response, Complete Structural Damage and building collapse, respectively, and specify appropriate values of these parameters.

6-A4. Building Capacity. Building-specific capacity properties of interest include the yield capacity control point (D_y, A_y) and the ultimate capacity control point (D_u, A_u), as calculated by Equations (A6-2 through A6-5, respectively):

$$A_y = C_s \cdot \gamma / \alpha_1 \quad \text{(A6-2)}$$

$$D_y = 9.8 \cdot A_y \cdot T_e^2 \quad \text{(A6-3)}$$

$$A_u = \lambda \cdot A_y \quad \text{(A6-4)}$$

$$D_u = \lambda \cdot \mu \cdot D_y \quad \text{(A6-5)}$$

where:

C_s = seismic design coefficient — values of C_s are given in Tables A6-2a and A6-2b, respectively,

α_1 = modal weight factor, Alpha 1 — values of α_1 are given in Table A6-4,

T_e = elastic period, in seconds — values of T_e are given in Table A6-3,

γ = yield strength factor, Gamma — values of γ are given in Table A6-5,

λ = "overstrength" factor, Lambda — values of λ are given in Table A6-5, and

μ = "ductility" factor, Mu — values of μ are given in Table A6-6.

6-A5 Building Response. Building-specific response parameters of interest include the elastic damping factor, β_E, and the degradation factor, Kappa. Values of β_E are given in Table A6-7 and values of the Kappa factor are given in Table A6-8.

6-A-6 Complete Structural Damage. Building-specific damage parameters of interest include the median spectral displacement of the Complete Structural Damage state, S_{dC}, and the associated lognormal standard deviation (Beta) factor, β_C. Values of β_C are given in Table A6-11. Median spectral displacement at the Complete Structural Damage state, S_{dC}, is calculated using Equation (A6-6):

$$S_{d,C} = \Delta_C \cdot H_R \cdot \alpha_2 / \alpha_3 \quad \text{(A6-6)}$$

where:

Δ_C = interstory drift ratio (of the story with maximum drift) at the threshold of Complete Structural Damage — values of Δ_C are given in Table A6-9,

H_R = height of building at the roof level, in inches — default values of H_R are given in Table A6-3 as a function of the number of stories above grade,

α_2 = modal height factor, Alpha 2 — values of α_2 are given in Table A6-4, and

α_3 = modal shape factor, Alpha 3, relating maximum-story drift and roof drift, values of α_3 are given in Table A6-10.

6-A-7 Building Collapse. Building-specific values of the collapse factor, $P[COL|STR_5]$, that describe the fraction of the building likely to be collapsed given that the building has reached the Complete Structural Damage state, STR_5, are given in Table A6-12.

TABLE A6-1—SIGNIFICANT STRUCTURAL DEFICIENCY MATRIX

Significant Structural Deficiency/Condition[1]	Capacity		Response		Structural Damage - Complete Damage State						Collapse	
	Over-Strength		Duration		Fragility Curve Median[4]				Fragility Curve Variability - Beta Factor ($_c$)		Collapse Factor (P[COL | STR $_5$])	
	Gamma and Lambda Factors		Degradation (Kappa) Factor		Maximum Story Drift Ratio ($_c$)		Mode Shape (Alpha 3) Factor					
	SubBase	USB	SubBase	USB[5]	SubBase	USB	SubBase	USB[6]	SubBase	USB[5]	SubBase	USB[6]
Age (Pre-1933 buidlings)	X	X[7]										
Materials Testing (None)	X								X			
No Redundancy									X		X	X[6]
Weak Story Irregularity					X		X	X[6]			X	X[6]
Soft Story Irregularity					X		X	X[6]			X	X[6]
Mass Irregularity					X							
Verticial Descontinuity	X				X							
Torsional Irregularity						X					X	X[6]
Deflection Incompatibility[2]					X				X		X	X[6]
Short Column[3]	X					X						
Wood Deterioration		X	X									
Steel Deterioration		X	X									
Concrete Deterioration		X	X									
Weak Column-Steel	X				X							
Weak Column-	X		X		X							
No Cripple Wall Bracing					X		X	X[6]			X	X[6]
Topping Slab	X		X						X		X	X[6]
Inadequate Wall Anchorage		X							X			
Load Path/Diaphragm Openings									X		X	X[6]

[1] Sub-Baseline (SubBase) and Ultra-Sub-Baseline (USB) properties are based on one, or more, significant structural deficiencies.
[2] The Deflection Incompatibility structural deficiency applies only to concrete systems (C1, C2 and C3).
[3] The Short Column structural deficiency applies only to concrete and masonry systems (C1, C2, C3, RM1 and RM2).
[4] Effects of deficiencies related to drift and mode shape limited to a combined factor of 5 reduction in Complete median (of HAZUS default value).
[5] Grey shading indicates USB performance is not defined/used for deficiencies related to degradation (kappa) and fragility curve (beta) factors.
[6] USB performance required for systems with multiple, SubBase deficiencies related to either the mode shape (Alpha 3) factor or the collapse rate.
[7] USB performance required for pre-1933 buildings with other over-strength-related deficiencies (else use SubBase performance for pre-1933 buildings).

TABLE A6-2a—SEISMIC DESIGN COEFFICIENT, Cs UBC SEISMIC ZONE 4

No. of Stories	Seismic Design Coefficient, C_s - UBC Seismic Zone 4 Locations (Zone 3 of older editions of the UBC)					
	Structural System (MBT)					
	S1 and C1		S2, S3, S4, S5, C2 and C3 (MH)		W1, W2, PC1, PC2, RM1, RM2, URM	
	Post-61	Pre-61	Post-61	Pre-61	Post-61	Pre-61
1	0.072	0.109	0.100	0.109	0.133	0.109
2	0.057	0.092	0.100	0.092	0.133	0.092
3	0.050	0.080	0.086	0.080	0.114	0.080
4	0.045	0.071	0.078	0.071	0.104	0.071
5	0.042	0.063	0.073	0.063	0.098	0.063
6	0.040	0.057	0.069	0.057	0.092	0.057
7	0.038	0.052	0.066	0.052	0.088	0.052
8	0.036	0.048	0.064	0.048	0.085	0.048
9	0.035	0.044	0.062	0.044	0.082	0.044
10	0.034	0.041	0.060	0.041	0.080	0.041
11	0.032	0.039	0.058	0.039	0.078	0.039
12	0.032	0.036	0.057	0.036	0.076	0.036
13	0.031	0.034	0.056	0.034	0.074	0.034
14	0.030	0.032	0.055	0.032	0.073	0.032
15	0.029	0.031	0.054	0.031	0.072	0.031
16	0.029	0.029	0.053	0.029	0.070	0.029
17	0.028	0.028	0.052	0.028	0.069	0.028
18	0.028	0.027	0.051	0.027	0.068	0.027
19	0.027	0.026	0.051	0.026	0.067	0.026
>= 20	0.027	0.024	0.050	0.024	0.067	0.024

TABLE A6-2b—SEISMIC DESIGN COEFFICIENT, Cs UBC SEISMIC ZONE 3

No. of Stories	Seismic Design Coefficient, C_s - UBC Seismic Zone 3 Locations (Zone 2 - older editions of the UBC)					
	Structural System (MBT)					
	S1 and C1		S2, S3, S4, S5, C2 and C3 (MH)		W1, W2, PC1, PC2, RM1, RM2, URM	
	Post-61	Pre-61	Post-61	Pre-61	Post-61	Pre-61
1	0.036	0.055	0.050	0.055	0.066	0.055
2	0.028	0.046	0.050	0.046	0.066	0.046
3	0.025	0.040	0.043	0.040	0.057	0.040
4	0.023	0.035	0.039	0.035	0.052	0.035
5	0.021	0.032	0.037	0.032	0.049	0.032
6	0.020	0.029	0.035	0.029	0.046	0.029
7	0.019	0.026	0.033	0.026	0.044	0.026
8	0.018	0.024	0.032	0.024	0.043	0.024
9	0.017	0.022	0.031	0.022	0.041	0.022
10	0.017	0.021	0.030	0.021	0.040	0.021
11	0.016	0.019	0.029	0.019	0.039	0.019
12	0.016	0.018	0.029	0.018	0.038	0.018
13	0.015	0.017	0.028	0.017	0.037	0.017
14	0.015	0.016	0.027	0.016	0.036	0.016
15	0.015	0.015	0.027	0.015	0.036	0.015
16	0.014	0.015	0.026	0.015	0.035	0.015
17	0.014	0.014	0.026	0.014	0.035	0.014
18	0.014	0.013	0.026	0.013	0.034	0.013
19	0.014	0.013	0.025	0.013	0.034	0.013
>= 20	0.013	0.012	0.025	0.012	0.033	0.012

TABLE A6-3—DEFAULT BUILDING HEIGHTS AND ELASTIC PERIODS

No. of Stories	Default Building Height, H_R, and Elastic Period, T_e, Properties													
	Structural System (MBT)													
	W1 and W2 (MH)		S1		C1		S2		S4 and S5		C2, C3, PC2, RM1, RM2, URM		S3 and PC1	
	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)	H_R (ft)	T_e (sec)
1	14	0.35	14	0.40	12	0.40	14	0.40	14	0.35	12	0.35	15	0.35
2	24	0.38	24	0.50	20	0.40	24	0.43	24	0.35	20	0.35	25	0.39
3	34	0.49	36	0.69	30	0.48	36	0.59	36	0.44	30	0.39	35	0.50
4	44	0.60	48	0.87	40	0.62	48	0.73	48	0.55	40	0.48		
5	54	0.70	60	1.04	50	0.76	60	0.86	60	0.65	50	0.57		
6			72	1.20	60	0.89	72	0.99	72	0.74	60	0.65		
7			84	1.36	70	1.03	84	1.11	84	0.84	70	0.73		
8			96	1.51	80	1.16	96	1.22	96	0.92	80	0.81		
9			108	1.66	90	1.29	108	1.34	108	1.01	90	0.88		
10			120	1.81	100	1.41	120	1.45	120	1.09	100	0.95		
11			132	1.95	110	1.54	132	1.55	132	1.17	110	1.02		
12			144	2.09	120	1.67	144	1.66	144	1.25	120	1.09		
13			156	2.23	130	1.79	156	1.76	156	1.33	130	1.16		
14			168	2.36	140	1.91	168	1.86	168	1.40	140	1.23		
15			180	2.50	150	2.04	180	1.96	180	1.48	150	1.29		
16			192	2.63	160	2.16	192	2.06	192	1.55	160	1.35		
17			204	2.76	170	2.28	204	2.15	204	1.62	170	1.42		
18			216	2.89	180	2.40	216	2.25	216	1.70	180	1.48		
19			228	3.02	190	2.52	228	2.34	228	1.77	190	1.54		
>= 20			240	3.14	200	2.64	240	2.43	240	1.84	200	1.60		

TABLE A6-4—ALPHA 1 AND ALPHA 2, MODAL FACTORS

No. of Stories	Alpha 1 (α_1) - Modal Weight Factor				Alpha 2 (α_2) - Modal Height Factor	
	Structural System (MBT)				Structural System (MBT)	
	S1 and C1	W1, W2, S2, S3, S4, C2, C3, PC2, RM1 and RM2	PC1 and URM	MH	MH	All Systems (except MH)
1	0.75	0.8	0.75	1.00	1.00	0.75
2	0.75	0.8	0.75			0.75
3	0.75	0.8	0.75			0.75
4	0.75	0.8				0.75
5	0.75	0.8				0.75
6	0.73	0.79				0.72
7	0.71	0.78				0.69
8	0.69	0.77				0.66
9	0.67	0.76				0.63
10	0.65	0.75				0.60
11	0.65	0.75				0.60
12	0.65	0.75				0.60
13	0.65	0.75				0.60
14	0.65	0.75				0.60
>= 15	0.65	0.75				0.60

TABLE A6-5—LAMBDA FACTOR

No. of Stories	Gamma Factor (γ)	Lambda Factor (λ)														
		Baseline Performance					SubBase Performance					USB Performance				
		Structural System (MBT)					Structural System (MBT)					Structural System (MBT)				
		W1, S1, C1	W2, C2	S4, C3	Other MBT	PC1, URM	W1, S1, C1	W2, C2	S4, C3	Other MBT	PC1, URM	W1, S1, C1	W2, C2	S4, C3	Other MBT	PC1, URM
1	2.70	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
2	2.50	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
3	2.25	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
4	2.00	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
5	1.88	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
6	1.80	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
7	1.75	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
8	1.71	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
9	1.69	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
10	1.67	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
11	1.65	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
12	1.65	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
13	1.65	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
14	1.65	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17
>= 15	1.65	2.00	2.00	1.83	1.67	1.33	1.75	1.75	1.63	1.50	1.25	1.50	1.50	1.42	1.33	1.17

TABLE A6-6—DUCTILITY FACTOR *Mu*

No. of Stories	*Mu* (μ) Factor (All Systems)
1	6.00
2	6.00
3	4.94
4	4.41
5	4.07
6	3.82
7	3.63
8	3.48
9	3.35
10	3.24
11	3.15
12	3.07
13	3.00
14	3.00
>= 15	3.00

TABLE A6-7—ELASTIC DAMPING

Structural System (MBT)	β_E Elastic Damping (% of Critical)
S1, S2, S3 and S4	5
C1, C2, PC1 and PC2	7
RM1 and RM2	7
C3 and S5	7
W1 and W2	10

TABLE A6-8—DEGRADATION KAPPA FACTORS

Scenario Earthquake Criteria		Degradation (Kappa) Factors - (κ_S, κ_M and κ_L)			
Minimum Distance Site to Fault[1] (km)	Maximum Magnitude[2]	Baseline Performance		SubBase Performance	
		Post-61	Pre-1961	Post-61	Pre-1961
< 5	All	0.8	0.7	0.6	0.5
5 - 10	M_{max} <= 6.5	0.8	0.7	0.6	0.5
5 - 10	M_{max} > 6.5	0.7	0.6	0.5	0.4
10 - 25	M_{max} <= 6.5	0.7	0.6	0.5	0.4
10 - 25	7.0 >= M_{max} > 6.5	0.6	0.5	0.4	0.3
10 - 25	M_{max} > 7.0	0.5	0.4	0.3	0.2
25 - 50	M_{max} <= 7.0	0.5	0.4	0.3	0.2
25 - 50	M_{max} > 7.0	0.4	0.3	0.2	0.1
> 50	All	0.4	0.3	0.2	0.1

1. Minimum distance to the fault that controls 1-second period ground motions at the building site.
2. Maximum magnitude (Mmax) of fault that controls 1-second ground motions at the building site

TABLE A6-9—INTERSTORY DRIFT RATIO — MEDIAN COMPLETE STRUCTURAL DAMAGE

Structural System (MBT)	Interstory Drift Ratio (max story) - Median Complete Structural Damage (Δ_C)					
	Baseline Performance		SubBase Performance		USB Performance	
	Post-61	Pre-61	Post-61	Pre-61	Post-61	Pre-61
W1, W2 (MH)	0.075	0.075	0.060	0.060	0.038	0.038
S1, C1, S2 and C2	0.060	0.050	0.050	0.040	0.030	0.025
S3, S4, PC1, PC2, RM1 and RM2	0.053	0.044	0.044	0.035	0.027	0.022
S5, C3 and URM		0.035		0.028		0.018

TABLE A6-10—ALPHA 3 (À3) MODAL SHAPE FACTOR

No. of Stories	Alpha 3 (α_3) Modal Shape Factor - Ratio of Maximum Interstory Drift to Average Interstory Drift								
	When Combined with Baseline Interstory Drift Ratios (Table A6-9)			When Combined with SubBase Interstory Drift Ratios (Table A6-9)			When Combined with USB Interstory Drift Ratios (Table A6-9)		
	Baseline Performance	SubBase Performance	USB Performance	Baseline Performance	SubBase Performance	USB Performance	Baseline Performance	SubBase Performance	USB Performance
1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	1.21	1.62	2.03	1.21	1.62	2.03	1.21	1.62	2.03
3	1.35	2.04	2.73	1.35	2.04	2.73	1.35	2.04	2.50
4	1.45	2.36	3.27	1.45	2.36	3.27	1.45	2.36	2.50
5	1.54	2.63	3.72	1.54	2.63	3.72	1.54	2.50	2.50
6	1.62	2.87	4.11	1.62	2.87	4.00	1.62	2.50	2.50
7	1.69	3.07	4.46	1.69	3.07	4.00	1.69	2.50	2.50
8	1.75	3.26	4.77	1.75	3.26	4.00	1.75	2.50	2.50
9	1.81	3.43	5.00	1.81	3.43	4.00	1.81	2.50	2.50
10	1.86	3.59	5.00	1.86	3.59	4.00	1.86	2.50	2.50
11	1.91	3.73	5.00	1.91	3.73	4.00	1.91	2.50	2.50
12	1.96	3.87	5.00	1.96	3.87	4.00	1.96	2.50	2.50
13	2.00	4.00	5.00	2.00	4.00	4.00	2.00	2.50	2.50
14	2.04	4.12	5.00	2.04	4.00	4.00	2.04	2.50	2.50
>= 15	2.08	4.23	5.00	2.08	4.00	4.00	2.08	2.50	2.50

TABLE A6-11—LOGNORMAL STANDARD DEVIATION (BETA) VALUES — COMPLETE STRUCTURAL DAMAGE

No. of Stories	Lognormal Standard Deviation (Beta) Values - Complete Structural Damage (β_C)			
	Baseline Performance		SubBase Performance	
	Post-61	Pre-61	Post-61	Pre-61
1	0.85	0.90	0.95	1.00
2	0.85	0.90	0.95	1.00
3	0.85	0.90	0.95	1.00
4	0.84	0.89	0.94	0.99
5	0.83	0.88	0.93	0.98
6	0.82	0.87	0.92	0.97
7	0.81	0.86	0.91	0.96
8	0.80	0.85	0.90	0.95
9	0.79	0.84	0.89	0.94
10	0.78	0.83	0.88	0.93
11	0.77	0.82	0.87	0.92
12	0.76	0.81	0.86	0.91
13	0.75	0.80	0.85	0.90
14	0.75	0.80	0.85	0.90
>= 15	0.75	0.80	0.85	0.90

TABLE A6-12—COLLAPSE FACTOR

Structural System (MBT)	Collapse Factor - Likelihood of Collapse given Complete Structural Damage - $P[COL\|STR_5]$		
	Baseline Performance	SubBase Performance	USB Performance
W1 and W2	0.05	0.10	0.20
S1, S2, S3, S4 and S5	0.08	0.15	0.30
C1, C2 and C3	0.13	0.25	0.50
RM1 and RM2	0.13	0.25	0.50
PC1 and PC2	0.15	0.30	0.60

HISTORY NOTE APPENDIX FOR CHAPTER 6

Administrative Regulations for the Office of Statewide Health Planning and Development (Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (OSHPD 1/96) Adoption of Chapter 6, Seismic Evaluation Procedures for Hospital Buildings, Part 1, Title 24, C.C.R. Filed with the secretary of state on April 8, 1997, effective April 8, 1997. Approved by the California Building Standards Commission on February 6, 1997.

2. (OSHPD 1/97) New Article 1-Definitions and Requirements based on SB 1953. Approved by the California Building Standards Commission on March 18, 1998. Filed with the Secretary of State on March 25, 1998, effective March 25, 1998.

3. (BSC 2/99) Article 1-7, Conflict of Interest Code. Amend Section 1-701. Approved by the Fair Political Practices Committee on October 29, 1999. Filed with the Secretary of State on December 31, 1999, effective January 30, 2000.

4. (OSHPD EF 1/00) Part 1, Chapter 6, Articles 1, 10, 11 and Appendix. Approved as submitted by the California Building Standards Commission on February 28, 2000. Filed with the Secretary of State on March 3, 2000, effective March 3, 2000. Permanent approval by California Building Standards Commission on May 24, 2000. Certification of Compliance filed with Secretary of State May 26, 2000.

5. (OSHPD EF 2/00) Part 1, Amend Chapter 6, Articles 1, 2, 10 and 11. Emergency approval by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on May 26, 2000, effective May 26, 2000. Permanent approval by California Building Standards Commission September 20, 2000. Certification of Compliance filed with Secretary of State November 15, 2000.

6. (OSHPD EF 5/01) Emergency adoption of amendments to hospital seismic safety evaluation regulations contained in Title 24, C.C.R., Part 1, Chapter 6. Approved by the California Building Standards Commission on November 28, 2001. Filed with the Secretary of State on December 4, 2001, effective December 4, 2001.

7. (OSHPD EF 01/02) Amend Chapter 6 and 7 of Part 1. Approved as emergency by the California Building Standards Commission on January 15, 2003, and filed with the Secretary of State on January 16, 2003. Effective January 16, 2003.

8. (OSHPD EF 01/02) Amend Chapters 6 and 7 of Part 1. Approved as permanent emergency by the California Building Standards Commission. Permanent approval on May 14, 2003. Certification of Compliance filed with the Secretary of State on May 15, 2003. Effective January 16, 2003.

9. (OSHPD EF 01/05) Amend Part 1, Chapter 6, Article 11 and Table 11.1. Approved as emergency by the California Building Standards Commission on December 13, 2005. Filed with the Secretary of State on December 14, 2005 with an effective date of December 14, 2005.

10. (OSHPD EF 01/05) Amend Part 1, Chapter 6, Article 11 and Table 11.1. Re-adopted/approved as emergency by the California Building Standards Commission on March 22, 2006. Filed with the Secretary of State on March 30, 2006 with an effective date of March 30, 2006.

11. (OSHPD 01/04) Amend Article 1 for nonconforming hospital buildings. Filed with Secretary of State on May 23, 2006, and effective on the 30th day after filing with the Secretary of State.

12. (OSHPD EF 01/05) Amend Title 24, Part 1, Chapter 6, Article 11 and Table 11.1. The language for the permanent rule will remain effective and unchanged from the readoption/approval of Emergency Finding (OSHPD EF 01/05) Supplement dated May 30, 2006. Approved as permanent by the California Building Standards Commission on July 27, 2006 and filed with the Secretary of State on July 28, 2006.

13. (OSHPD EF 01/07) Amend Title 24, Part 1, Chapter 6, Article 1, Article 2, Article 4, Article 6, Article 11, Table 11.1. Approved by the California Building Standards Commission on July 19, 2007. Filed with the Secretary of State July 20, 2007, effective January 1, 2008.

14. (OSHPD EF 01-07) Amend Title 24, Part 1, Chapter 6, Article 1, Article 2, Article 4, Article 6, Article 11 and Table 11.1. Approved by the California Building Standards Commission on July 19, 2007. Filed with the Secretary of State on July 20, 2007, effective January 1, 2008. It was approved as permanent by the California Building Standards Commission on May 21, 2008 and filed with the Secretary of State on May 23, 2008.

15. (OSHPD EF 02/07) Amend Title 24, Part 1, Chapter 6, definitions added and Chapter amended throughout with a new Appendix H to Chapter 6. Approved as an emergency regulation by the California Building Standards Commission on November 14, 2007, filed with the Secretary of State on November 29, 2007. Effective November 29, 2007. It was approved as permanent by the California Building Standards Commission on May 21, 2008 and filed with the Secretary of State on May 23, 2008.

16. (OSHPD 08/09) Amend Title 24, Part 1, Chapter 6 with amendments throughout. Effective on February 13, 2010.

17. (OSHPD EF 01/10) Amend Title 24, Part 1, Chapter 6 with updates to HAZUS standards pursuant to SB 499 (Chapter 601, Statutes of 2009). Effective on February 13, 2010.

CHAPTER 7

SAFETY STANDARDS FOR HEALTH FACILITIES

ARTICLE 1
GENERAL

7-101. Scope. The regulations in this part shall apply to the administrative procedures necessary to implement the Alfred E. Alquist Act of 1983 and to comply with State Building Standards Law.

Section 129680, Health and Safety Code, authorizes the OSHPD to enforce and amend the *California Building Standards Code* for the safety of hospitals, skilled nursing facilities and intermediate care facilities.

Unless otherwise stated, all references to sections of statute are sections found in the Health and Safety Code.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-101. Filed with the secretary of state on August 14, 1996, becomes effective September 18, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-103. Jurisdiction. The following are within the jurisdiction of Office of Statewide Health Planning and Development:

(a) For development of regulations in the *California Building Standards Code* and enforcement thereof.

1. Hospital buildings as defined by Section 129725, Health and Safety Code. Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.
2. Skilled nursing facilities as specified in paragraphs (2) and (3) of subdivision (b) of Section 129725, Health and Safety Code.
3. Intermediate care facilities as specified in paragraphs (2) and (3) of subdivision (b) of Section 129725, Health and Safety Code.

(b) For development of regulations in the *California Building Standards Code*.

1. Clinics, as defined by Section 1200 and 129725 (b) (1), Health and Safety Code, are under the jurisdiction of the local building official for enforcement, except as otherwise specified in Article 21, Section 7-2104 (d) of this chapter.

   Exception: When licensed under an acute care hospital and serving more than 25 percent inpatients pursuant to Sections 129725 (b) (1) and 129730, Health and Safety Code, the Office shall retain jurisdiction for enforcement.

2. Correctional Treatment Centers, as defined by Section 129725 (b) 6, 7 (A) or 7 (B), Health and Safety Code, operated by or to be operated by a law enforcement agency of a city, county or a city and county are under the jurisdiction of the local enforcing agency for enforcement.

   Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.

(c) For hospital buildings, skilled nursing facilities and intermediate care facilities, the Office shall also enforce the regulations of the *California Building Standards Code* as adopted by the Office of the State Fire Marshal and the Division of the State Architect/Access Compliance Section, for fire and life safety and accessibility compliance for persons with disabilities, respectively.

Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-103. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 2/96) 1996 Annual Code Adoption Cycle will amend Section 7-103, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-104. Alternate method of compliance. The provisions of the *California Building Standards Code* (CBSC) are not intended to prevent the use of any alternate method of compliance not specifically prescribed by the CBSC, provided written approval for such alternate method has been granted by the Office. Alternate methods include Alternate Means of Protection, Alternate Method of Compliance, Alternative System, designs required by regulations to be specifically approved by the enforcing agency, and Program Flexibility. A written request shall be submitted to the Office with an Alternate Method of Compliance form provided by the Office and supporting documentation as necessary to assist the Office in its review. The written request shall include substantiating evidence in support of the alternate. If the request is submitted prior to the submittal of construction documents, an Application for Plan Review form must also be submitted with a fee pursuant to Section 7-133 (a) 3. A request approved by the Office shall be limited to the specific request and shall not be construed as establishing a precedent for any future requests. The provisions of the following sections must also be met: Section 104.11 and Section 1224.2, California Building Code; Article 90.4, *California Electrical Code*; Section 105.0, *California Mechanical Code*; Section 301.4, *California Plumbing Code*; and Section 1.11.2.4, *California Fire Code*.

7-105. Authority. (Deleted)

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to delete Section 7-105. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-107. Interpretation. No regulation shall be construed to deprive the Office of its right to exercise the powers conferred upon it by law, or to limit the Office in such enforcement as is necessary to secure safety of construction, as required by Division 107, Chapter 7 (commencing with Section 129675), Health and Safety Code.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.

7-109. Application of regulations.

(a) Except as otherwise provided, these regulations and all applicable parts of the *California Building Standards Code* shall be the basis for design, plan review and observation of construction of hospital buildings, skilled nursing facilities and intermediate care facilities.

(b) Deleted.

(c) Additions, structural repairs or alterations to existing health facilities shall be made in accordance with the provisions of Part 2, Title 24, California Code of Regulations, *California Building Standards Code*.

(d) Before any health facility not previously licensed under Section 1250 of the Health and Safety Code can be licensed and used as a health facility, the applicant shall provide substantiating documentation from a structural engineer that the building is in full conformance with the requirements of the *California Building Standards Cod*e for new buildings; if not, the building shall be reconstructed to conform to the requirements of the *California Building Standards Code*.

(e) Routine maintenance and repairs shall not require prior approval by the Office but shall be performed in compliance with the applicable provisions of the *California Building Standards Code*.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-109. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

ARTICLE 2
DEFINITIONS

Unless otherwise stated, the words and phrases defined in this article shall have the meaning stated therein throughout Chapter 7, Part 1, Title 24.

7-111. Definitions.

ADDITION means any work which increases the floor or roof area or the volume of enclosed space of an existing building.

ALTERATION means any change in an existing building which does not increase and may decrease the floor or roof area or the volume of enclosed space.

ALTERNATE METHOD OF COMPLIANCE means the approved use of an alternative material, method of construction, device or design to comply with an architectural, electrical, mechanical or plumbing regulation.

ALTERNATE MEANS OF PROTECTION means the approved use of an alternative material, assembly or method of construction to comply with a fire and life safety regulation pursuant to Section 111.2.4, California Chapter 1, *California Fire Code*.

ALTERNATIVE SYSTEM means the approved use of an alternative material, design or method of construction to comply with a structural regulation.

APPROVED CONSTRUCTION DOCUMENTS means all plans, specifications, addenda, instruction bulletins, change orders and deferred submittals that have the written approval of the Office. The identification stamp of the Office shall not be construed to mean the written approval of plans required by Section 7-113.

ARCHITECT means a person licensed as an architect under Chapter 3 (commencing with Section 5500), Division 3, the California Business and Professions Code.

ASSIGNMENT means the project scope of services, expected results, completion time and the monetary limitation for the services.

ASSOCIATED STRUCTURAL ALTERATIONS means any change affecting existing structural elements or requiring new structural elements for vertical or lateral support of an otherwise nonstructural alteration.

CANDIDATE means an applicant who is accepted by the Office as eligible to participate in a Hospital Inspector Certification Examination pursuant to the qualification criteria described in these regulations.

CIVIL ENGINEER means a person licensed as a civil engineer under Chapter 7 (commencing with Section 6700), Division 3, the California Business and Professions Code.

CONFORMING BUILDING means a building originally constructed in compliance with the requirements of the 1973 or subsequent edition of the *California Building Code*.

CONSTRUCTION means any construction, reconstruction or alteration of, or addition or repair to any health facility.

DEFERRED SUBMITTALS see Section 7-126.

DIRECTOR means the Director of the Office of Statewide Health Planning and Development or the Director's designee authorized to act in his or her behalf.

ELECTRICAL ENGINEER means a person licensed as an electrical engineer under Chapter 7 (commencing with Section 6700), Division 3, the California Business and Professions Code.

ENGINEERING GEOLOGIST means a person certified as an engineering geologist under Chapter 12.5 (commencing with Section 7800), Division 3, the California Business and Professions Code, in that branch of engineering which is applicable.

EQUIPMENT

Equipment to be used in projects shall be classified as building service equipment, fixed equipment, or movable equipment.

(a) **BUILDING SERVICE EQUIPMENT** includes items such as heating, ventilating and air conditioning equipment; electrical power distribution equipment; emergency power generation equipment; energy/utility management systems; conveying systems; and other equipment with a primary function of building service. Examples include humidification equipment, filtration equipment, chillers, boilers and fire pumps.

(b) **FIXED EQUIPMENT** includes items that are permanently affixed to the building or permanently connected to a service distribution system that is designed and installed for the specific use of the equipment.

1. **FIXED MEDICAL EQUIPMENT** includes, but is not limited to, such items as fume hoods, sterilizers, communication systems, imaging equipment, radiotherapy equipment, lithotripters, hydrotherapy tanks, audiometry testing chambers, and surgical and special procedure lights.
2. **FIXED NONMEDICAL EQUIPMENT** includes, but is not limited to, items such as walk-in refrigerators, kitchen cooking equipment, serving lines, conveyors, central computer equipment, laundry and similar equipment.

(c) **MOVABLE EQUIPMENT** includes items that require floor space or electrical and/or mechanical connections but are portable, such as wheeled items, portable items, office-type furnishings, and diagnostic or monitoring equipment.

1. **MOVABLE MEDICAL EQUIPMENT** includes, but is not limited to, portable X-ray, electroencephalogram (EEG), electrocardiogram (EKG), treadmill and exercise equipment, pulmonary function equipment, operating tables, laboratory centrifuges, examination and treatment tables, and similar equipment.
2. **MOVABLE NONMEDICAL EQUIPMENT** includes, but is not limited to, personal computer stations, patient room furnishings, food service trucks, case carts and distribution carts, and other portable equipment.

FIRM includes any qualified corporation, legal entity, architect or engineer.

FREESTANDING as applied to structures that are adjacent to a licensed hospital building means a structure that meets the following criteria:

1. Structural separation shall comply with the applicable provisions of the *California Building Code*.
2. Fire-resistance-rated construction separations shall comply with the applicable provisions of the *California Building Code*.
3. Buildings on the same lot shall comply with the height and area limitations of the *California Building Code*.

HEALTH FACILITY as used in this part and all applicable parts of the *California Building Standards Code* means any health facility licensed pursuant to Section 1250 of the Health and Safety Code under the jurisdiction of the Office.

(a) Hospital building includes:

1. **HOSPITAL BUILDING** as used in this part and other applicable parts of the *California Building Standards Code* means any building used for a health facility of a type required to be licensed pursuant to Section 1250 of the Health and Safety Code.
2. Except as provided in paragraph (7) of subdivision (b), hospital building includes a correctional treatment center, as defined in subdivision (j) of Section 1250, the construction of which was completed on or after March 7, 1973.

(b) **HOSPITAL BUILDING** does not include any of the following:

1. Any building in which outpatient clinical services of a health facility licensed pursuant to Section 1250 are provided that is separated from a building in which hospital services are provided. If any one or more outpatient clinical services in the building provide services to inpatients, the building shall not be included as a "hospital building" if those services provided to inpatients represent no more than 25 percent of the total outpatient visits provided at the building. Hospitals shall maintain on an ongoing basis, data on the patients receiving services in these buildings, including the number of patients seen, categorized by their inpatient or outpatient status. Hospitals shall submit this data annually to the Department of Public Health.
2. Any building used, or designed to be used, for a skilled nursing facility or intermediate care facility, if the building is of single-story, wood-frame or light steel frame construction.
3. Any building of single-story, wood-frame or light steel frame construction in which only skilled nursing or intermediate care services are provided if the building is separated from a building housing other patients of the health facility receiving higher levels of care.
4. Any freestanding structures of a chemical dependency recovery hospital exempted under the provisions of subdivision (c) of Section 1275.2.
5. Any building licensed to be used as an intermediate care facility/developmentally disabled habilitative with six beds or less and any intermediate care facility/developmentally disabled habilitative of 7 to 15 beds that is a single-story, wood-frame or light-steel frame building.
6. Any building subject to licensure as a correctional treatment center, as defined in subdivision (j) of Section 1250, the construction which was completed prior to March 7, 1973.
7.

   A. Any building that meets the definition of a correctional treatment center pursuant to subdivision (j) of Section 1250, for which the final design documents were completed or the construction of which was begun prior to January 1, 1994, operated by or to be operated by the Department of Corrections, the Department of the Youth Authority, or by a law enforcement agency of a city, county, or a city and county.

B. In the case of reconstruction, alteration, or addition to, the facilities identified in this paragraph, and paragraph (6) or any other building subject to licensure as a general acute care hospital, acute psychiatric hospital, correctional treatment center, or nursing facility, as defined in subdivisions (a), (b), (j) and (k) of Section 1250, operated or to be operated by the Department of Corrections, the Department of the Youth Authority, or by a law enforcement agency of city, a county, or city and county, only the reconstruction, alteration, or addition, itself, and not the building as a whole, nor any other aspect thereof, shall be required to comply with this chapter or the regulations adopted pursuant thereto.

HOSPITAL BUILDING SAFETY BOARD means the Board which shall advise the Director and, notwithstanding Health and Safety Code Section 13142.6 and except as provided in Section 18945, shall act as a board of appeals in all matters relating to the administration and enforcement of building standards relating to the design, construction, alteration and seismic safety of hospital building projects submitted to the Office pursuant to this chapter.

Further, notwithstanding Section 13142.6, the Board shall act as the board of appeals in matters relating to all fire and panic safety regulations and alternate means of protection determinations for hospital building projects submitted to the Office pursuant to this chapter.

The Board shall consist of 16 members appointed by the Director of the Office. Of the appointive members, two shall be structural engineers, two shall be architects, one shall be an engineering geologist, one shall be a geotechnical engineer, one shall be a mechanical engineer, one shall be an electrical engineer, one shall be a hospital facilities manager, one shall be a local building official, one shall be a general contractor, one shall be a fire and panic safety representative, one shall be a hospital inspector of record and three shall be members of the general public.

There shall be six ex officio members of the Board, who shall be the Director of the Office, the State Fire Marshal, the State Geologist, the Executive Director of the California Building Standards Commission, the State Director of Health Services, and the Deputy Director of the Facilities Development Division in the Office, or their officially designated representatives.

HOSPITAL INSPECTOR means an individual who has passed the OSHPD certification examination and possesses a valid Hospital Inspector Certificate (or Construction Inspector for Health Facilities Certificate) issued by the Office.

HOSPITAL INSPECTOR OF RECORD means an individual who is:

(a) An OSHPD certified Hospital Inspector, pursuant to the provisions of these regulations and

(b) Employed by the hospital governing board or authority and

(c) Approved by the architect and/or engineer in responsible charge and the Office as being satisfactory to inspect a specified construction project.

LICENSE means the basic document issued by the Department of Health Services permitting the operation of a health facility under the provisions of Title 22, California Code of Regulations, Division 5.

LOCAL GOVERNMENT ENTITY means a building department of a city, city and county, or county.

MANAGED PROJECT means a project where schedules and deadlines relating to plan review and construction are negotiated between the Office and the governing board or authority of the health facility or their designated representative. Managed projects include, but are not limited to, projects approved by the Office for phased plan review, as described in Section 7-130, or incremental review, as described in Section 7-131.

MATERIALLY ALTER as applied to construction projects or approved construction documents means any change, alteration or modification, as determined by the Office, that alters the scope of a project, causes the project to be in noncompliance with the *California Building Standards Code*, or causes an unreasonable risk to the health and safety of patients, staff or the public.

MECHANICAL ENGINEER means a person licensed as a mechanical engineer under Chapter 7 (commencing with Section 6700), Division 3, the California Business and Professions Code.

MINORITY, WOMEN AND DISABLED VETERAN BUSINESS ENTERPRISE shall have the respective meanings set forth in Section 10115.1 of the Public Contract Code.

NONCONFORMING BUILDING means any building that is not a conforming building.

NONSTRUCTURAL ALTERATION means any alteration which neither affects existing structural elements nor requires new structural elements for vertical or lateral support and which does not increase the lateral force in any story by more than five percent.

OFFICE means the Facilities Development Division within the Office of Statewide Health Planning and Development.

PHASED PLAN REVIEW is the process that, at its sole discretion, engages the Office early in the project design and continues through the development and submission of documents during the conceptualization, criteria design, detailed design, implementation documents, Office review, construction and closeout phases. Within each phase, milestones are established for specific, agreed upon points where segments/elements of the design/building system are completely designed and/or defined in their entirety. The Office provides an agreed upon level of review that allows for written conditional acceptance of these elements and/or systems.

PRIMARY GRAVITY LOAD RESISTING SYSTEM (PGLRS) means assembly of structural elements in the building that resists gravity loads, including floor and roof beams/girders supporting gravity loads or any other members designed to support significant gravity loads. Foundations sup-

porting loads from the PGLRS shall be considered part of the PGLRS.

PROGRAM FLEXIBILITY means the approved use of an alternate space utilization, new concepts of design, treatment techniques or alternate finish materials. Program flexibility requests must be reviewed by the Department of Public Health and the Office, or other authority having jurisdiction.

RECONSTRUCTION means the rebuilding of any "existing building" to bring it into full compliance with these regulations and all applicable parts of the *California Building Standards Code*.

SEISMIC FORCE RESISTING SYSTEM (SFRS) means assembly of structural elements in the building that resists seismic loads, including struts, collectors, chords, diaphragms and trusses. Foundations supporting loads from the SFRS shall be considered part of the SFRS.

SIGN, SIGNED, SIGNATURE, SIGNATURES means to affix an individual's signature by manual, electronic or mechanical methods. Manual method includes, but is not limited to, a pen and ink signature. Electronic method includes, but is not limited to, scanned signature images embedded in construction documents, faxes or other electronic document files. Mechanical method includes, but is not limited to, rubber stamp signature.

SITE DATA means reports of investigation into geology, earthquake ground motion and geotechnical aspects of the site of a health facility construction project.

SMALL BUSINESS means a firm that complies with the provisions of Government Code Section 14837.

STRUCTURAL ELEMENTS means floor or roof diaphragms, decking, joists, slabs, beams or girders; columns; bearing walls; retaining walls; masonry or concrete nonbearing walls exceeding one story in height; foundations; shear walls or other lateral force resisting members; and any other elements necessary to the vertical and lateral strength or stability of either the building as a whole or any of its parts including connections between such elements.

STRUCTURAL ENGINEER means a person licensed as a structural engineer under Chapter 7 (commencing with Section 6700), Division 3, the California Business and Professions Code.

STRUCTURAL REPAIRS means any change affecting existing or requiring new structural elements primarily intended to correct the effects of deterioration or impending or actual failure, regardless of cause.

VOLUNTARY STRUCTURAL ALTERATION means any alteration of existing structural elements or provision of new structural elements which is not necessary for vertical or lateral support of other work and is initiated by the applicant primarily for the purpose of increasing the vertical or lateral load carrying strength or stiffness of an existing building.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-111. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 1/96) 1996 Annual Code Adoption Cycle will amend Section 7-111, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.
3. (OSHPD/EF 1/92) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state September 1, 1992; effective September 1, 1992. Approved as an emergency by the California Building Standards Commission on August 27, 1992.
4. (OSHPD/EF 1/92, permanent) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state on March 9, 1993; effective March 9, 1993. Approved as a permanent order by the California Building Standards Commission on March 5, 1993.

ARTICLE 3
APPROVAL OF CONSTRUCTION DOCUMENTS

7-113. Application for plan, report or seismic compliance extension review.

(a) Except as otherwise provided in this part, before commencing construction or alteration of any health facility, the governing board or authority thereof shall submit an application for plan review to the Office, and shall obtain the written approval thereof by the Office describing the scope of work included and any special conditions under which approval is given.

1. The application shall contain a definite identifying name for the health facility, the name of the architect or engineer who is in responsible charge of the work, pursuant to Section 7-115 (a), the names of the delegated architects or engineers responsible for the preparation of portions of the work pursuant to Section 7-115 (a) 3, the estimated cost of the project and all such other information required for completion of the application. The architect or engineer in responsible charge or having delegated responsibility may name one or more persons to act as an alternate(s), provided such persons are architects or engineers qualified under these regulations to assume the responsibility assigned.
2. Submission of documents to the Office may be in three consecutive stages:
   A. Geotechnical Review: One application for plan review and, when applicable, three copies of the site data must be attached.
   B. Preliminary Review: Two copies of reports or preliminary plans and outline specifications. Plans/drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/drawings shall not exceed 40 lbs in weight.
   C. Final Review: Two copies of final construction documents and reports. Plans/drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/drawings shall not exceed 40 lbs in weight.

(b) Application for seismic compliance extension requires submission of OSHPD Application Form #OSH-FD-384, "Application for 2008 Extension/Delay in Compliance." The submittal must comply with the applicable requirements of Chapter 6, Article 1, Section 1.5.2 "Delay in Compliance."

(c) For every project there shall be an architect or engineer in responsible charge of reviewing and coordinating all submittals, except as set forth in Section 7-115(c).

1. A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of the delegated architects or engineers pursuant to Section 7-115 (a) 3 may be made for the parts. Incremental projects pursuant to Section 7-131 shall consist of only one building.

(d) The assignment of the delegated architect or engineer pursuant to Section 70-115 (a) 3 and the responsibility for the preparation of construction documents and the administration of the work of construction for portions of the work shall be clearly designated on the application for approval of reports or construction documents.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-113. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-115. Preparation of construction documents and reports.

(a) All construction documents or reports, except as provided in (c) below shall be prepared under an architect or engineer in responsible charge. Prior to submittal to the office, the architect or engineer in responsible charge for a project shall sign every sheet of the drawings, and the title sheet, cover sheet or signature sheet of specifications and reports. A notation may be provided on the drawings indicating the architect's or engineer's role in preparing and reviewing the documents. Plans/drawings submitted to the office shall not exceed the size and weight described in Section 7-113 (a) (2).

1. Except as provided in paragraph 2 below, the architect or engineer in responsible charge of the work shall be an architect or structural engineer.
2. For the purposes of this section, a mechanical, electrical or civil engineer may be the engineer in responsible charge of alteration or repair projects that do not affect architectural or structural conditions, and where the work is predominately of the kind normally performed by mechanical, electrical or civil engineers.
3. The architect or engineer in responsible charge may delegate the preparation of construction documents and administration of the work of construction for designated portions of the work to other architects and/or engineers as provided in (b) below. Preparation of portions of the work by others shall not be construed as relieving the architect or engineer in responsible charge of his rights, duties and responsibilities under Section 129805 of the Health and Safety Code.

(b) Architects or engineers licensed in the appropriate branch of engineering, may be responsible for the preparation of construction documents and administration of the work of construction as permitted by their license, and as provided below. Architects and engineers shall sign and affix their professional stamp to all construction documents or reports that are prepared under their charge. All construction documents shall be signed and stamped prior to issuance of a building permit.

1. The structural construction documents or reports shall be prepared by a structural engineer.
2. A mechanical or electrical engineer may prepare construction documents or reports for projects where the work is predominately of the kind normally prepared by mechanical or electrical engineers.
3. A civil engineer may prepare construction documents or reports for the anchorage and bracing of nonstructural equipment.

(c) A licensed specialty contractor may prepare construction documents and may administer the work of construction for health facility construction projects, subject to the following conditions:

1. The work is performed and supervised by the licensed specialty contractor who prepares the construction documents,
2. The work is not ordinarily within the standard practice of architecture and engineering,
3. The project is not a component of a project prepared pursuant to 7-115 (a) and (b),
4. The contractor responsible for the design and installation shall also be the person responsible for the filing of reports, pursuant to Section 7-151,
5. The contractor shall provide with the application for plan review to the Office a written and signed statement stating that he or she is licensed, the number of the license, and that the license is in full force and effect, and
6. The work is limited to one of the following types of projects:
   A. Fire protection systems where none of the fire sprinkler system piping exceeds $2^1/_2$ inches (63.5 mm) in diameter.
   B. Low voltage systems not in excess of 91 volts. These systems include, but are not limited to, telephone, sound, cable television, closed circuit video, nurse call systems and power limited fire alarm systems.
   C. Roofing contractor performing reroofing where minimum $^1/_4$ inch (6.4 mm) on 12 inch (305 mm) roof slopes are existing and any roof mounted equipment needing remounting does not exceed 400 pounds.
   D. Insulation and acoustic media not involving the removal or penetration of fire-rated walls, or ceiling and roof assemblies.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-115. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-117. Site data.

(a) The site data reports shall be required for all proposed construction except:

1. As provided in Part 2, Title 24.
2. One-story, wood-frame or light steel frame buildings of Type II or V construction and 4,000 square feet or less in floor area not located within Earthquake Fault Zones or Seismic Hazard Zones as shown in the most recently published maps from the California Geological Survey (CGS).
3. Nonstructural alterations.
4. Structural repairs for other than earthquake damage.
5. Incidental structural additions or alterations.

(b) Three copies of site data reports shall be furnished to the Office for review and evaluation prior to the submittal of the project documents for final plan review. Site data reports shall comply with the requirements of these regulations and Part 2, Title 24. Upon the determination that the investigation of the site and the reporting of the findings was adequate for the design of the project, the Office will issue a letter stating the site data reports are acceptable.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7.117. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-121. Presubmittal meeting.

(a) A presubmittal meeting between the Office and the design professionals is required for construction or alteration projects for hospital buildings and buildings described in paragraphs (2) and (3) of Subdivision (b) of Section 129725 of the Health and Safety Code with estimated construction costs of twenty million dollars ($20,000,000) or more. The presubmittal meeting shall be held prior to the submittal of preliminary plans and specifications or final construction documents. Prior to scheduling a presubmittal meeting, the architect or engineer in responsible charge shall submit the following information to the Office:

1. Meeting agenda listing major points of discussion
2. New and if applicable, existing floor plans
3. Description and scope of the project
4. Description of structural systems—vertical, lateral, foundation, etc.
5. Alternate Method of Compliance and Program Flexibility issues
6. Type of construction
7. Occupancy—existing and proposed, with justification
8. Accessibility considerations, including path of travel
9. Preliminary means of egress plan
10. Architectural, structural, mechanical, plumbing, electrical, and fire and life safety issues

(b) The architect or engineer in responsible charge shall record all resolutions of substantive issues in a letter of understanding that shall be submitted to the Office for acceptance prior to the submittal of final construction documents. The letter of understanding shall be based on the assumptions presented at the presubmittal meeting. Subsequent changes in design, program requirements, project delivery, or other unforeseen issues may necessitate modifications to the letter of understanding.

(c) For phase plan review projects, the project start meeting with the Office, which occurs during the conceptual phase, satisfies the presubmittal meeting requirements of this section.

Authority: Health and Safety Code Section 18929 and 129675–130070
Reference: Health and Safety Code Section 129850
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-121. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-123. Preliminary plans and outline specifications.

(a) The governing board or authority or their designated representative may submit preliminary plans and outline specifications to the Office for review prior to submittal of the final construction documents.

(b) The Office's review of the preliminary plans and outline specifications shall be limited to the content of the preliminary plans and outline specifications submitted. A copy of the marked-up preliminary plans and outline specifications or of the approved preliminary plans and outline specifications shall accompany the submittal of the final construction documents.

Authority: Health and Safety Code Section 18929 and 129675–130070
Reference: Health and Safety Code Section 129850

7-125. Final review of construction documents.

(a) Final construction documents shall be submitted in accordance with Section 107, Part 2. Title 24. Final construction documents that are incomplete shall be returned to the applicant for completion prior to acceptance by the Office for plan review.

(b) Local government entity zoning approvals or clearances shall be furnished to the Office, when applicable, prior to approval of the final construction documents by the Office.

(c) When the Office finds items on the final construction documents that do not comply with these regulations and/or applicable sections of the *California Building Standards Code*, the noncomplying items shall be noted in writing with a proper code citation. The marked-up set of construction documents will be returned to the architect or engineer in responsible charge. A set of prints from corrected construction documents shall be filed for backcheck when the original check or subsequent backchecks(s) indicates that extensive changes are necessary. Where necessary corrections are of a minor nature, corrected original construction documents may be filed for backcheck. The architect or engineer in responsible charge must provide a written response to all comments made by the Office. The written response must include a description and a location of the corrections made to the construction documents. The written response may be provided as a letter, or may be provided as responses written directly on the marked-up set of drawings. Changes in construction documents, other than changes necessary for correction, made after submission for approval, shall be brought to the attention of the Office in writ-

ing or by submission of revised construction documents identifying those changes. Failure to give such notice voids any subsequent approval given to the construction documents.

(d) The Office's approval of the final construction documents shall be in accordance with Section 107.3.1, Part 2, Title 24.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129850.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-125. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 7/96) 1996 Annual Code Adoption Cycle will amend Section 7-125, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-126. Deferred submittals.

(a) **Conditions.** Where a portion of the design cannot be fully detailed on the approved construction document because of variations in product design and manufacture, the approval of the construction documents for such portion may be deferred until the material suppliers are selected under the following conditions:

1. The construction documents clearly describe the deferred submittals that shall be approved by the Office prior to fabrication and installation for the indicated portions of the work.
2. The construction documents fully describe the performance and loading criteria for such work.
3. After the construction documents are approved and within 30 calendar days after commencement of construction, the architect or engineer in responsible charge shall submit a schedule to the Office indicating when the deferred submittals will be submitted to the Office for review.

   Exception: Seismic Force Resisting System (SFRS), Primary Gravity Load Resisting System (PGLRS) and stairs shall not be deferred.

(b) **Submittal process and notation.** Submittal documents for deferred submittal items shall be submitted to the architect or engineer to whom responsibility has been delegated for preparation of construction documents, as listed on the application, for review prior to submittal to the Office. The architect or engineer to whom responsibility has been delegated for preparation of construction documents, as listed on the application, shall review and forward submittal documents for deferred submittal items to the Office with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the project.

(c) **Stamping and signing.** Stamping and signing of deferred submittals shall comply with Section 7-115 (a) and (b).

(d) **Fabrication and installation.** The deferred submittal items shall not be fabricated or installed until their design and submittal documents have been approved by the Office.

(e) **Limitations.** The Office shall have sole discretion as to the portions of the design that may be deferred.

7-127. Projects exempt from plan review process.

(a) The Office may exempt from the plan review process construction or alteration projects for hospitals, skilled nursing facilities and intermediate care facilities, if the project meets the following criteria:

1. The estimated construction cost is $50,000 or less. For the purpose of determining eligibility for exemption from the plan review process, the estimated construction cost excludes imaging equipment costs; design fees; inspection fees; off-site work; and fixed equipment costs, including but not limited to sterilizers, chillers and boilers.
2. The construction documents are stamped and signed pursuant to Section 7-115 (a) and (b).
3. The entire project or an element of the project shall not pose a clear and significant risk to the health and safety of the patients, staff or public.

(b) Projects subdivided into smaller projects for the purpose of evading the cost limitation requirement shall not be exempt from the plan review process.

(c) All requirements of Article 4, Construction must be met, except Section 7-135 (a) 1.

7-129. Time limitations. <

(a) Final construction documents shall be submitted to the Office within one year of the date of the Office's report on preliminary plans and outline specifications or the application shall become void unless an extension has been requested and approved. The architect or engineer in responsible charge may request one extension of up to 180 calendar days; however, the Office may require that the construction documents meet current regulations. The extension must be requested in writing and justifiable cause demonstrated.

(b) The procedures leading to obtaining written approval of final construction documents shall be carried to conclusion without suspension or unnecessary delay. Unless an extension has been approved by the Office, the application shall become void when either paragraph 1 or 2 occurs:

1. Prints from corrected construction documents are not filed for backcheck within 90 calendar days after the date of return of checked construction documents to the architect or engineer in responsible charge. Backcheck submittals that do not contain a written response to all comments in accordance with Section 7-125 (d) shall not be considered an official submittal to the Office. The architect or engineer in responsible charge may request one extension of up to 90 calendar days; however, the Office may require the construction documents be revised to meet current regulations. The extension must be requested in writing and justifiable cause demonstrated.
2. A set of prints of the stamped construction documents are not submitted to the Office within 45 calendar days after the date shown with the identification stamp by the Office.

(c) Construction, in accordance with the approved construction documents, shall commence within one year after obtaining the written approval of construction documents, or this approval shall become void. Prior to the approval becoming void, the applicant may apply for one extension of up to one year. The Office may require that the construction documents be revised to meet current regulations before granting an extension. The extensions must be requested in writing and justifiable cause demonstrated.

(d) If the work of construction is suspended or abandoned for any reason for a period of one year following its commencement, the Office's approval shall become void. Prior to the approval becoming void, the applicant may apply for one extension of up to one year. The Office may require that the construction documents be revised to meet current regulations before granting an extension. The extensions must be requested in writing and justifiable cause demonstrated.

Exception: The time limitations and deadlines specified in Section 7-129 shall not apply to managed projects as defined in Section 7-111. This includes, but is not limited to, projects approved for phased plan review, as described in Section 7-130, or incremental review, as described in Section 7-131.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-129. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-130. Phased submittal, review and approval.

The Office, in its sole discretion, may enter into a written agreement with the hospital governing board or authority for the phased submittal, review and approval of construction documents.

7-131. Incremental design, bidding and construction.

(a) In accordance with Section 107.3.3, Part 2, Title 24, the Office is authorized to review and approve construction documents and issue a permit for increments of a building or structure prior to the construction documents for the entire building or structure have been submitted and approved, provided that adequate information and detailed statements have been filed complying with pertinent requirements of applicable codes. For other regulations pertaining to incremental design, bidding and construction, see Section 107.3.3, Part 2, Title 24.

(b) Increments shall be limited to complete phases of construction, such as demolition, site work and utilities, foundations and basement walls, structural framing, architectural work, mechanical work, electrical work, etc. A master plan indentifying the work to be completed in each increment and a chart showing the proposed coordination of the design, bidding and construction schedules, state and local plan review times, and estimated completion and occupancy of the project shall be submitted with the first increment.

(c) The incremental submittals and construction shall be continuous to conclusion without suspension or unnecessary delay unless specifically approved by the Office.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-131. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-132. Design/build method.

Projects prepared under the design/build delivery method shall comply with all applicable requirements of Title 24, Part 1, California Administrative Code including but not limited to Sections 7-115, 7-141, 7-143, 7-144, 7-145, 7-149, 7-151, 7-153 and 7-155.

Authority: Health and Safety Code Section 18929 and 129675–130070
Reference: Health and Safety Code Section 129850

7-133. Fees.

(a) **Plan review and field observation.** The fee for plan review and field observation shall be based on the estimated cost of construction as specified below. If the actual construction cost for a hospital or skilled nursing facility project exceeds the estimated construction cost by more than five percent (5%), a further fee shall be paid to the Office, based on the applicable schedule specified in (a) (1) or (2) and computed on the amount by which the actual cost exceeds the estimated cost.

1. The fee for hospital buildings is 1.64 percent of the estimated construction cost. The estimated construction cost shall include fixed equipment but exclude imaging equipment, design fees, inspection fees and off-site construction work. The fee for imaging equipment (X-ray, MRI, CT Scan, etc.) shall be 0.164 percent of the equipment cost or estimated value. In any event, the minimum fee for review of imaging equipment shall be $250.00.
   A. The Office shall charge actual costs for review and approval of seismic evaluations and compliance plans prepared pursuant to Article 8, Chapter 1, Part 7, Division 107, (commencing with Section 130000) of the Health and Safety Code. Total cost paid for these review services shall be nonrefundable and shall be deducted from the fee for a future project involving seismic retrofit or new construction pursuant to the hospital building compliance plan approved by the Office.
2. The fee for skilled nursing and intermediate care facilities, as defined in Subdivision (c), (d), (e) or (g) of Section 1250, Health and Safety Code, is 1.5 percent of the estimated construction cost. The estimated construction cost shall include fixed equipment but exclude design fees, inspection fees and off-site work.
3. The minimum filing fee shall be $250.00. This filing fee is nonrefundable and shall be applied toward the total fee for plan review and field observation.

(b) The fee for submitting an amended seismic evaluation report or compliance plan is $250. The fee for review and approval of the amended report or compliance plan shall be subject to Section 7-133 (a) 1A above.

(c) The fee for submitting an application for extension to seismic compliance is $250.

(d) **Preliminary review.** The fee for review of preliminary plans and outline specifications pursuant to Section 7-121 is 10% of the fee indicated in Section 7-133 (a) and shall be due upon the submission of preliminary plans and outline specifications. The preliminary review fee shall be deducted from the application fee specified in Section 7-133 (a).

(e) **Incremental projects.** The fee for incremental projects pursuant to Section 7-131 is (70%) of the fee, based upon the estimated construction cost of the entire facility, as calculated in accordance with Section 7-133 (a), and shall be due upon the submission of the construction documents of the first construction increment. The final fee shall be based upon the determination of the final actual construction cost.

(f) A**nnual permit for hospital projects.** A hospital may choose to apply for an annual permit for one or more small projects of $50,000 or less in cumulative total estimated construction cost. The annual permit is applicable to only the project(s) submitted within the state's fiscal year in which the Office issues the annual permit. An application filing fee of $500.00 is due upon submittal of the annual permit and is in lieu of an application filing fee specified in (a) of this Section.

(g) **Annual permit for skilled nursing facility projects.** A skilled nursing facility may choose to apply for an annual permit for one or more small projects of $25,000 or less in cumulative total estimated construction cost. The annual permit is applicable to only the project(s) submitted within the state's fiscal year in which the Office issues the annual permit. An application filing fee of $250.00 is due upon submittal of the annual permit and is in lieu of an application filing fee, as specified in (a) of this Section.

(h) **Phased submittal review.** The fee for phased submittal, review and approval pursuant to Section 7-130 shall be based on the written agreement, which shall include a schedule for payment. The phased review fee shall not exceed the fee required by Section 7-133 (a).

(i) **Geotechnical/Geohazard reports.** The fee for review of a geotechnical/geohazard report shall be $5,000.00.

(j) **Deferral of fee payment for disaster-related projects.**

1. A health facility may request to defer payment of the filing fee, as described in this section, for up to one year, for a construction or alteration project to repair damage resulting from an event which the governor has declared as a disaster. The request for payment deferral must be submitted to the Office, in writing, and accompany the application for plan review. The request may be on a form, as provided by the Office, or other written format and shall identify the facility name, project number, estimated construction cost and shall certify to the following:
   A. The repair project is necessary due to damage sustained by the [name of the specified event] which was declared to be a disaster by the governor on [date of the declaration].
   B. The facility cannot presently afford to pay the filing fee.
   C. On [date of application], the health facility applied for federal disaster relief from the Federal Emergency Agency (FEMA) with respect to the disaster identified in this request.
   D. The facility expects to receive financial assistance within one year of the date of the application for disaster relief.

   Payment deferral requests shall be signed by the health facility's chief executive officer or chief financial officer.
2. Within ten business days of receipt of a facility's payment deferral request, the facility will be given written notice by the deputy director either approving or denying the deferral of the project plan review fee. Incomplete requests will be returned to the facility by facsimile within five business days, accompanied by a statement describing what is needed for the request to be complete.
3. If the deferral request is denied by the deputy director, the health facility may appeal this decision to the director of the Office. The appellant must submit a written appeal to the Office within ten business days of receipt of the denial. If an appeal is not received by the Office within the ten busines days, the project will be returned to the health facility as incomplete.
4. The plan review fees deferred under this section shall be due and paid in full by the applicant facility within one year from the date of the Office's approval of the project plans. Failure to submit the deferred fee payment will result in an offset against any amount owed by the state to the health facility.

(k) **SPC-1 hospital building reassessment.** The Office shall charge actual costs for the seismic collapse probability assessment of a hospital building, pursuant to Section 129835 of the Health and Safety Code. The total cost paid for these services shall be nonrefundable.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129850.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-133. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD/EF 1/91) Emergency order by the Office of Statewide Health Planning and Development to amend Section 7-133, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state September 25, 1991; effective September 25, 1991. Approved as an emergency by the California Building Standards Commission on September 20, 1991.
3. (OSHPD/EF 1/91) Permanent order by the Office of Statewide Health Planning and Development to amend Section 7-133, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state February 25, 1992; effective September 25, 1991. Approved as an emergency by the California Building Standards Commission on February 24, 1992.

7-134. Fee refund

(a) Upon written request from the applicant, a fee refund may be issued pursuant to this section.

1. The written refund request must be submitted to the Office within:
   a. One year of the date that a project is closed,

b. One year of the date the project is withdrawn by the applicant, or

c. One year of the date when an application may become void, based on the requirements of Section 7-129, Time Limitations for Approval.

2. No refund shall be issued before the date the project is closed or withdrawn or the application is voided.
3. If delinquent fees are owed to the Office for any health facility construction project at the subject facility, no refund shall be issued until the delinquent fees are paid.
4. Refunds, pursuant to Section 7-134, shall be exclusive of the $250 filing fee.
5. Refunds shall be calculated pursuant to Sections 7-134 (b) or (c).

(b) **Refunds for projects that are completed.** If the estimated construction cost of a project exceeds the actual construction cost by more than five percent (5%), the excess portion of the fees paid pursuant to Section 7-133 (a) (1) or (2) shall be refunded to the applicant health facility. The refund amount shall be computed based on the amount by which the estimated cost exceeds the actual construction cost.

Exception: The Office will not issue a refund if the applicant did not complete construction of at least 75% of the square footage included in the original approved construction documents for the project, or if the applicant reduces the scope of the project shown on the original approved plans by more than 25%.

(c) **Refunds for projects that are withdrawn or cancelled.**A portion of the fees paid to the Office, pursuant to Section 7-133, may be refunded to the applicant under the following specified circumstances:

1. If the applicant withdraws a project prior to commencement of plan review, the total fee, exclusive of the $250 filing fee, shall be refunded to the applicant.
2. If the applicant withdraws a project after commencement of plan review and prior to commencement of construction, 30% of the fee submitted for that project shall be refunded to the applicant.
3. If the applicant cancels a project after commencement of construction, the Office shall not issue a refund.
4. If a project submitted under an annual permit is withdrawn by the applicant, the $250 filing fee shall not be refunded by the Office.
5. If fees are paid for a project that is determined by the Office to be exempt from the plan review process or otherwise not reviewable under the Office's jurisdiction, the total fee, exclusive of the $250 filing fee, shall be refunded to the applicant.

(d) If the applicant is able to demonstrate extraordinary circumstances, the Director of the Office may authorize refunds in addition to those specified above.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129785.

ARTICLE 4
CONSTRUCTION

7-135. Time of beginning construction.

(a) Construction shall not commence until the health facility has applied for and obtained from the Office:

1. Written approval of the construction documents.
2. A building permit.
3. Written approval of the testing, inspection and observation program.
4. Written approval of the inspector of record for the project pursuant to Section 7-212 (a).

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129850.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-135. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-137. Notice of start of construction.

(a) As soon as a contract has been awarded, the governing board or authority of the health facility shall provide to the Office, on a form provided by the Office, the following:

1. Name and address of the contractor.
2. Contract price.
3. Date on which contract was awarded.
4. Date of construction start.

Authority: Health and Safety Code Sections 127015, 129785 and 129850; and Government Code, Section 11152.

Reference: Health and Safety Code Section 129785.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-137. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-139. Notice of suspension of construction.

(a) When construction is suspended for more than two weeks, the governing board or authority of the hospital shall notify the Office in writing.

(b) If the work of construction is suspended or abandoned for any reason for a period of one year following its commencement, the Office's approval shall become void. The Office may reinstate the approval as described in Section 7-129 (c).

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-139. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-141. Administration of construction.

(a) The administration of the work of construction shall be under the responsible charge of an architect or structural engineer. Where neither structural nor architectural elements are substantially involved, a mechanical or electrical engineer registered in the branch of engineering most applicable to the pro-

ject may be in responsible charge of the administration of the work of construction.

(b) All architects and engineers to whom responsibility has been delegated for preparation of construction documents as listed on the application shall observe the work of construction for their portion of the project. They shall consult with the architect or engineer in responsible charge in the interpretation of the approved construction documents, the preparation of addenda, change orders, instruction bulletins, deferred submittals and the selection of inspectors and testing laboratories.

(c) The architect or engineer in responsible charge or having delegated responsibility may name one or more persons to act as alternate(s) for observation of the work of construction provided such persons are architects or engineers qualified under these regulations to assume the responsibility assigned.

(d) The architect or engineer in responsible charge of the work shall prepare a testing, inspection and observation program which shall be submitted to the Office for approval prior to the issuance of the building permit.

(e) The testing program shall identify materials and tests to be performed on the project. The firm(s) and/or individual(s) to perform each of the required tests shall also be identified. The testing program shall include, at a minimum, those tests required by applicable sections of the *California Building Standards Code*.

(f) The inspection program shall include a completed application for inspector(s) of record for the project. If a project has more than one inspector of record, the distribution of responsibilities for the work shall be clearly identified for each inspector of record. The inspection program shall also identify all special inspections to be performed on the project and the individual(s) to perform the inspections. The special inspections shall include, at a minimum, those special inspections required by applicable sections of the *California Building Standards Code*.

(g) The observation program shall identify each professional that must, through personal knowledge as defined in Section 7-151, verify that the work is in compliance with the approved construction documents. The contractor or owner/builder and the inspector(s) of record shall verify that the work is in compliance with the approved construction documents in accordance with the requirements for personal knowledge as it applies to each participant or discipline. The program shall give specific intervals or project milestones at which such observation is to occur for each affected participant or discipline. Each required observation shall be documented by a compliance verification report prepared by each participant or discipline and submitted to the Office.

(h) The tests, inspection and observation program shall include samples of test and inspection reports and provide time limits for the submission of reports.

(i) All completed test, inspection and observation reports shall be submitted to the Office.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-141. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-143. Responsibility of the contractor.

(a) The contractor shall complete the work in accordance with the approved construction documents. The contractor shall not be relieved of any responsibility by the activities of the architect, engineer, inspector or the Office in the performance of their duties.

(b) The contractor shall submit verified compliance reports to the Office in accordance with Section 7-151.

(c) Where no general contractor is involved, the governing body or authority of a health facility shall designate an agent who shall be responsible for the construction of the project in accordance with the approved contract documents and such agent shall submit the verified reports to the Office.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-143. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-144. Inspection.

(a) The hospital governing board or authority shall provide for competent, adequate and continuous inspection by one or more inspectors satisfactory to the architect or structural engineer or both, in responsible charge of the work, or the engineer in responsible charge of the work and the Office.

(b) When the hospital governing board or authority proposes more than one inspector for a construction project, a lead inspector may be identified to coordinate construction inspection and communication with the Office. If identified, the lead inspector shall be certified in a class appropriate to the scope of the project.

(c) Inspector(s) for a hospital construction project shall be approved by the Office in accordance with the provisions of Section 7-212. If an inspector on a project is not competently or adequately performing inspection or has violated a provision of these regulations, as determined by the Office, the provisions of Sections 7-213 and, if necessary, Section 7-214 shall be applicable.

Authority: Health and Safety Code Sections 18929 and 129675 - 130070.
Reference: Health and Safety Code Section 129825.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-144. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 1/96) 1996 Annual Code Adoption Cycle will amend Section 7-144, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-145. Continuous inspection of the work.

(a) The general duties of the inspector shall be as follows:

1. The inspector shall have personal knowledge, obtained by continuous inspection of all parts of the work of construction in all stages of its progress to ensure that the

work is in accordance with the approved construction documents.

2. Continuous inspection means complete inspection of every part of the work. Work, such as concrete or masonry work which can be inspected only as it is placed or assembled, shall require the constant presence of the inspector. Other types of work which can be completely inspected after the work is installed may be carried on while the inspector is not present. In no case shall the inspector have or assume any duties which will prevent continuous inspection.
3. The inspector shall work under the direction of the architect or engineer in responsible charge. All inconsistencies or seeming errors in the approved construction documents shall be reported promptly to the architect or engineer in responsible charge for interpretation and instructions. In no case, however, shall the instructions of the architect or engineer in responsible charge be construed to cause work to be done which is not in conformity with the approved construction documents.
4. The inspector shall maintain a file of approved construction documents on the job at all times including all reports of tests and inspections required by the construction documents and shall immediately return any unapproved documents to the architect or engineer in responsible charge for proper action. The inspector shall also maintain on the job at all times, all codes and regulations referred to in the approved construction documents.
5. The inspector shall notify the Office:
   A. When the work is started or resumed on the project.
   B. At least 48 hours in advance of the time when foundation trenches will be complete, ready for footing forms.
   C. At least 48 hours in advance of the first placing of concrete.
   D. When work has been suspended for a period of more than two weeks.
6. The inspector(s) of record shall maintain field records of construction progress for each day or any portion of a day that they are present at the project site location. The field record shall state the time of arrival, time of departure, a summary of work in progress and noted deficiencies in the construction or deviations from the approved construction documents. This field record shall document the date, time and method of correction for any noted deficiencies or deviations. In addition, this record shall contain the following as applicable:
   A. The time and date of placing concrete; time and date of removal of forms and shoring in each portion of the structure; location of defective concrete; and time, date and method of correction of defects.
   B. Identification marks of welders, lists of defective welds, and manner of correction of defects and other related events.
   C. A list of test reports of all nonconforming materials or defective workmanship and shall indicate the corrective actions taken.
   D. When driven piles are used for foundations, the location, length and penetration under the last ten blows for each pile. It shall also include a description of the characteristics of the pile driving equipment.
7. All field records of construction progress shall be retained on the job until the completion of the work and shall, upon request, be made available to the Office, the architect or engineer in responsible charge and the owner. Upon completion of the project, these original field records shall be submitted to the hospital governing board or authority.

(b) The inspector shall notify the contractor, in writing, of any deviations from the approved construction documents or new construction not in compliance with the *California Building Standards Code*, which have not been immediately corrected by the contractor. Copies of such notice shall be forwarded immediately to the architect or engineer in responsible charge, owner and to the Office.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:
1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-145. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-147. Observation by the Office.

(a) During the construction, of any health facility, the Office shall make such observation as in its judgment is necessary or proper for the enforcement of these regulations and all applicable parts of the *California Building Standards Code*.

Whenever the Office finds a violation of these regulations and/or applicable parts of the *California Building Standards Code* that requires correction, the citation of the violation shall be issued to the hospital governing board or authority in writing and shall include a proper reference to the regulation or statute being violated.

Authority: Health and Safety Code Sections 127015, 129825 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:
1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-147. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-149. Tests.

(a) Pursuant to Section 7-141, the architect or engineer in responsible charge shall establish and administer the testing program. Where job conditions warrant, the architect or engineer may waive certain specified tests contingent upon the approval of the Office. The Office shall be notified as to the disposition of materials noted on laboratory reports. One copy of all test reports shall be forwarded to the Office by the testing agency. The reports shall state definitely whether the material tested complies with the approved contract documents.

(b) The governing board or authority of a health facility shall select a qualified person or testing laboratory as the testing agency to conduct the tests. The selected person or testing laboratory must be approved by the architect or engineer in responsible charge. The governing board or authority shall pay for all tests.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-149. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-151. Verified compliance reports.

(a) In accordance with Section 7-151 (e), or when required by the Office, the architect(s), engineers(s), inspector(s) of record, special inspector(s) and contractor or owner/builder shall each submit to the Office a verified compliance report, with their signature and based on their own personal knowledge, as defined by this section. The report shall:

1. Verify that the work during the period, or a portion of the work, covered by the report has been performed and materials used and installed are in accordance with the construction documents.
2. Set forth detailed statements of fact as are required by the Office.

(b) The term "personal knowledge," as used in this section and as applied to the licensed architect or engineer or both, means personal knowledge that is obtained by periodic visits to the project site, of reasonable frequency, for the purpose of general observation of the work. It also includes knowledge that is obtained from the reporting of others as to the progress of the work, testing of materials, and inspection and supervision of the work that is performed between the periodic visits of the architect or the engineer. Reasonable diligence shall be exercised in obtaining the facts.

(c) The term "personal knowledge," as applied to the inspector, means the actual personal knowledge that is obtained from the inspector's personal continuous inspection of the work of construction, in all stages of its progress at the site where the inspector is responsible for inspection. Where work is carried out away from the site, personal knowledge is obtained from the reporting of others on the testing or inspection of materials and workmanship, for compliance with plans, specifications or applicable standards. Reasonable diligence shall be exercised in obtaining the facts.

(d) The term "personal knowledge," as applied to the contractor, means the personal knowledge that is obtained from the construction of the building. Reasonable diligence is required to obtain the facts.

(e) Verified compliance reports shall be submitted to the Office at the intervals or stages of the work as stated in the approved testing, inspection and observation program. In no case shall the submittal of verified compliance reports be less than:

1. One copy prepared and signed by each required participant or discipline at the completion of the work.
2. One copy prepared and signed by any participant or discipline at any time a special verified compliance report is required by the Office.

(f) The architect or engineer in responsible charge of the work shall be responsible for ensuring all required verified compliance reports are submitted to the Office.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-151. Filed with the secretary of state on August 4, 1996, becomes effective September 13, 1996. Approved by the California B uilding Standards Commission on March 19, 1996.

7-152. Replacement of an architect, engineer, inspector of record, special inspector or contractor.

(a) When replacing any of the listed individuals, the following shall be submitted to the Office:

1. Prior to plan approval
   A. Revised application(s) listing the new responsible individuals).
2. Following construction document approval
   A. Revised application(s) listing the new responsible individual(s).
   B. An initial report, prepared by the new responsible individual(s), based on field observation(s) that the work performed and materials used and installed to date are in accordance with the project's construction documents. Any observed issues of nonconformance shall be listed in the report. The new individual(s) shall be responsible for verification of project compliance, pursuant to Section 7-151, for the remainder of the project.
   C. A final verified report from the individual(s) being replaced.

      Exception to (C): In the event that the individual(s) being replaced refuse to, or cannot provide a final verified report, the owner shall submit a letter to the Office verifying that the work performed and materials used and installed are in accordance with the project's construction documents. The letter shall also list the reason the verified report could not be obtained.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-153. Addenda, change orders and instruction bulletins.

(a) **Changes in the work.** Work shall be executed in substantial conformance with the construction documents approved by the Office. Changes in the work shall be made by addenda, change orders or instruction bulletins approved by the Office. Changes in the work include, but are not limited to, the following: Correction of errors in design and/or construction to bring the construction documents and/or construction into compliance with applicable codes; change(s) in the scope of the work; and additional work required because of discovered conditions. Only changes that materially alter the work shall be submitted to the Office for review and approval as

either an addendum, change order or instruction bulletin. Changes in the work that do not require an addendum, change order or instruction bulletin shall not be deemed to grant authorization for any work to be done in violation of the provisions of all applicable codes.

1. **Addendum.** Changes or alterations of the approved construction documents prior to awarding a construction contract, or similar instrument of agreement for the work involved, shall be made by means of addendum. Addenda shall be submitted with a form provided by the Office and shall state the reason for the change. The form shall be signed by the architect or engineer in responsible charge or delegated architect or engineer as allowed by Section 7-115. The form shall be accompanied by supplementary construction documents, when necessary. The construction documents shall be stamped and signed pursuant to Section 7-115. Two copies of addenda shall be submitted for review and approval by the Office.
2. **Change orders.** Changes or alterations of the approved construction documents after a contract or similar instrument of agreement has been awarded shall be made by means of change orders. Change orders shall be submitted with a form provided by the Office and shall state the reason for the change, show the related addition to or deduction from the current contract price. The form shall be signed by the architect or engineer in responsible charge, or delegated architect or engineer as allowed by Section 7-115, and shall be accompanied by supplementary construction documents, when necessary. The construction documents shall be stamped and signed pursuant to Section 7-115. Two copies of the form and construction documents shall be submitted for review and approval by the Office. All change orders shall be approved by the Office prior to installation of the work.
3. **Instruction bulletins.** To prevent undue delay in construction as determined by the Office, changes in the work may be commenced following approval of an instruction bulletin by the Office. Instruction bulletins shall be submitted with a form provided by the Office and shall state the reason for the change but is not required to show the related addition to or deduction from the current contract price. The form shall be signed by the architect or engineer in responsible charge, or delegated architect or engineer as allowed by Section 7-115, and shall be accompanied by supplementary construction documents when necessary. The construction documents shall be stamped and signed pursuant to Section 7-115. Two copies of the form and construction documents shall be submitted for review and approval by the Office. Instruction bulletins shall be documented by subsequent change orders within 30 calendar days after approval.
4. **Emergencies.** Emergency changes in the work relating to the safety of persons at the construction site may be made immediately. Such emergency changes shall be documented by subsequent change orders and may require modification to comply with these regulations.

(b) **Changes in scope.** At the discretion of the Office, a change order for construction that is outside the scope of the original project may be required to be submitted as a separate project.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-153. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 7/96) 1996 Annual Code Adoption Cycle will amend Section 7-153, of Part 1, Title 24, C.C.R. Filed with the secretary of state on February 19, 1997; effective March 21, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-155. Final approval of the work.

(a) The Office shall schedule a final state agency inspection of the work subsequent to the receipt of the responsible architect's or engineer's statement that the contract is performed or substantially performed.

(b) The final approval of the construction shall be issued by the Office when:

1. All work has been completed in accordance with the approved construction documents.
2. The required verified compliance reports and test and inspection reports have been filed with the Office.
3. All remaining fees have been paid to the Office.

(c) Final approval shall be confirmed by a letter sent to the Department of Public Health with a copy to the applicant. The letter shall state that the work has been constructed in accordance with the *California Building Standards Code*, Title 24, California Code of Regulations.

(d) Upon completion of the project, all copies of construction procedure records as required by Section 7-145 (a) 6 shall be transmitted to the Office.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-155. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-156. Certification of correctional treatment centers.

(a) Construction documents prepared by or under the supervision of the Department of Corrections and Rehabilitation for the new construction, reconstruction, alteration or addition of any hospital building and/ or correctional treatment center, as defined in Section 1250, Health and Safety Code, or any building specified in Section 129875, Health and Safety Code shall be certified to the Office by the Department of Corrections and Rehabilitation. Construction documents and construction of these facilities shall be in full compliance with all applicable building standards including, but not limited to, architectural, structural, mechanical, plumbing, electrical, and fire and life safety.

The Department of Corrections and Rehabilitation shall use a secondary peer review procedure to review the design of new construction, reconstruction, alteration or addition in order to

ensure that the construction documents are in compliance with the building standards of Title 24, Parts 2, 3, 4, 5 and 9. The secondary peer review shall be performed by a California licensed architect, structural engineer, mechanical engineer and electrical engineer, as applicable.

Upon completion of construction, a written certification signed by the Director or designee of the Department of Corrections and Rehabilitation shall be submitted to the Office and shall include:

1. Description of the project scope;
2. Certification that construction documents and construction are in full compliance with all applicable building standards of Title 24, Parts 2, 3, 4, 5 and 9;
3. Certification that a secondary peer review has been completed and the peer review indicates that the design for new construction, reconstruction, alteration or addition to the facility adheres to all building standards of Title 24, Parts 2, 3, 4, 5 and 9;
4. Certification that construction inspection was performed by a competent on-site inspector and that all work was completed in accordance with the complying construction documents; and
5. Attachments which include the final as-built construction documents.

(b) Construction documents prepared by or under the supervision of a city, county or city and county law enforcement agency for the new construction, reconstruction, alteration or addition of any hospital building and/or correctional treatment center, as defined in Section 1250, Health and Safety Code, or any building specified in Section 129875, Health and Safety Code shall be certified to the Office by the law enforcement agency. Construction documents and construction of these facilities shall be in full compliance with all applicable building standards including, but not limited to, architectural, structural, mechanical, plumbing, electrical and fire and life safety.

Upon completion of construction a written certification signed by the law enforcement agency head or designee shall be submitted to the Office and shall include:

1. Description of the project scope;
2. Certification that construction documents and construction are in full compliance with all applicable building standards of Title 24, Parts 2, 3, 4, 5 and 9; and
3. Attachments which include the final as-built construction documents.

Authority: Health and Safety Code Sections 1275, 127010, 127015, 129790 and 129850.

Reference: Health and Safety Code Section 15076.

HISTORY:

1. (OSHPD 2/96) 1996 Annual Code Adoption Cycle will add Section 7-156, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997: effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-157. Records. (Deleted)

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to delete Section 7-157. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

ARTICLE 5
APPEALS TO THE HOSPITAL BUILDING SAFETY BOARD

7-159. Appeals.

(a) The Hospital Building Safety Board, except as provided in Section 18945 of the Health and Safety Code, shall act as a board of appeals in all matters relating to the administration and enforcement of building standards relating to the design, construction, alteration and seismic safety of health facility projects submitted to the Office pursuant to Chapter 1, Division 107, Health and Safety Code.

Further, notwithstanding Section 13142.6 of the Health and Safety Code, the board shall act as the board of appeals in matters relating to all fire and panic safety regulations and alternate means of protection determinations for health facility projects submitted to the Office pursuant to Chapter 1, Division 107, Health and Safety Code.

(b) In the event of disagreement with the rulings, orders, decisions or acts of the Office acting within the scope of Division 107 (commencing with Section 129675) of the Health and Safety Code, an appeal may be made by the current or prospective licensee or their authorized agent, hereafter known as the appellant, of a health facility to the Hospital Building Safety Board. Such appeal shall be considered by the Hospital Building Safety Board only following the failure of an informal conference, held to resolve the appeal in accordance with Section 7-161.

Authority: Health and Safety Code Sections 127015, 129850 and 129925.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-159. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-161. Informal conference.

(a) Within six months of a ruling, order, decision or act of the Office acting within the scope of Division 107 (commencing with Section 129675) of the Health and Safety Code, the appellant may issue a written request for an informal conference upon such ruling, order, decision or act to the Office.

(b) Within 15 business days of receipt of a written request for an informal conference, the Office shall give notice of the date, time and place of such conference to review the ruling, order, decision or act being questioned. The informal conference shall be in a convenient place mutually agreeable to the parties. The informal conference shall be held within 25 business days of receipt by the Office of the written request for an informal conference.

(c) The informal conference shall be conducted by an Office representative. Parties to such conference may include the appellant, architects and engineers and other appropriate consultants under contract to the appellant or the appellant's legal counsel.

(d) The purpose of the informal conference shall be to discuss the ruling, order, decision or act of the Office with the intent to resolve the issue.

(e) Within 10 business days following the informal conference, the Office shall notify the appellant in writing as to the Office's action on the ruling, order, decision or act. Such action shall be to confirm, modify, or reverse the original ruling, order, decision or act.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129955.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-161. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-163. Formal hearing request.

(a) If the appellant wishes to continue an appeal after the Office's decision following the informal conference, a formal hearing may be requested of the Hospital Building Safety Board. The appellant shall submit a written request for an appeal to the Hospital Building Safety Board through the Office within 15 business days of receipt of the notice of the result of the informal conference.

(b) The notice of appeal shall be followed within 60 business days by documents supporting the request for a formal hearing before the Hospital Building Safety Board. Such documents shall be submitted to the Office and shall contain specific information regarding the Office's ruling, order, decision or act and the basis for the appeal.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129955.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-163. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-165. Formal hearing.

(a) The Hospital Building Safety Board, or a committee of the Board, appointed by the Chair of the Board, shall act as the hearing body and shall conduct a public hearing on the appeal.

(b) The Chair of the Hospital Building Safety Board shall call a hearing on an appeal. The hearing shall be convened at a location selected by the Chair which, where possible, is reasonably close to the appellant.

(c) The hearing shall be held within 45 business days of the receipt of documents supporting the request for an appeal hearing. Within 20 business days of the Office's receipt of the supporting documentation, the parties to the appeal shall be notified in writing of the time and place of the hearing and the composition of the hearing body.

(d) The Chair of the Hospital Building Safety Board shall develop, and have sent to each member, an agenda listing the matters to be considered and, insofar as practicable, copies of all written reports which are to be presented to the Board. The agenda and written reports shall be provided to the members of the Board at least 10 business days before the date of the hearing.

(e) Whenever notice of an appeal hearing for decision of an appeal is issued by the Hospital Building Safety Board or a committee of the Board, such notice shall be provided to the appellant, the Office and all parties to the action at least 10 business days before the date of the hearing.

(f) If a committee of the Board is appointed to hear the appeal, at least five voting members of the Board shall be appointed to such committee. The Chair of the hearing committee shall be appointed by the Chair of the Hospital Building Safety Board. The appeal shall be heard by at least three of the voting members appointed to an appeal committee. The decision shall bear the endorsement of a simple majority of the committee members present.

(g) If the Board is to hear the appeal, at least nine voting members of the Board shall be present to hear the matter. The decision shall bear the endorsement of a simple majority of the Board members present.

(h) The proceedings shall be recorded by tape recorder. Transcripts shall be made available to anyone making a request therefor upon deposit with the Hospital Building Safety Board of the amount of money which the Board has determined necessary to cover the costs of transcript preparation. In addition to the tape recording of the proceedings, decisions of the Board or a committee of the Board shall be recorded by stenographic recording and shown in the minutes of the meeting. The minutes shall show how each Board or committee member voted on the decision.

(i) The appellant may, at his own expense, arrange for stenographic recording and transcription of the hearings.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129955.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-165. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-167. Rights of the appellant.

(a) The appellant shall have the right to counsel, to submit documentary evidence and exhibits, and to have witnesses appear and testify. These rights shall be executed by the appellant at the appellant's own expense.

(b) The appellant shall have the right to question representatives of the Office and other witnesses presenting testimony or documents in the hearing.

(c) The appellant shall have the right to question potential conflicts of interest of any voting member of the Hospital Building Safety Board or committee of the Board hearing an appeal. The Chair of the hearing will rule on such potential conflict and the ruling shall be entered in the record of the hearing.

Authority: Health and Safety Code Sections 127015 and 129850.
Reference: Health and Safety Code Sections 129675–129998.
HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-167. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-169. Appeal hearing procedure.

(a) An appeal hearing conducted by the Hospital Building Safety Board or a committee of the Board shall not be con-

ducted in accordance with strict rules of evidence or courtroom procedure. During the hearing, the Chair may accept into the record without formal proof any generally accepted technical or scientific matter related to seismic, architectural, structural, mechanical, electrical, fire and life safety of health facilities. Hearsay evidence may be allowed for the purpose of supplementing or explaining other evidence, but shall not be sufficient in itself to support the findings.

(b) The Chair of the hearing shall determine the order of witnesses and presentation and introduction of documents, evidence and exhibits into the record of the hearing. The Chair may impose reasonable time limits, rule on admissibility of evidence, maintain decorum in the hearings, call recesses and rule on continuation of the hearings.

(c) The Chair may request counsel from the Office for advice on points of law.

(d) Prior to the closing of the hearing, the Chair shall announce either of the following:

1. The recommended decision of the committee of the Board.
2. The decision of the Board.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-169. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-171. Decision on appeal.

(a) Decision on an appeal heard by a committee of the Board shall be reached as follows:

1. If all parties agree to the decision recommended by a committee of the Board, the agreement and the names of parties to the appeal shall be entered in the record. The appeal action shall be considered terminated when all parties to the appeal have stipulated to the agreement in writing.
2. If all parties to the appeal do not agree with the decision recommended by a committee, the findings of fact, supporting documents, evidence, exhibits and decision recommended by the committee shall be transmitted to the Hospital Building Safety Board.
3. Within 30 business days after the findings of fact, supporting documents, evidence exhibits and a recommended decision are received, the Board shall hear final arguments from the appellant and render a decision on the appeal. The appellant, the appellant's counsel or the appellant's representatives may not introduce new evidence without approval of the Board.

(b) Decision on an appeal heard by or referred to the Hospital Building Safety Board shall be reached as follows:

1. The Board shall render a decision in public meeting and transmit such decision in writing to each party to the appeal hearing within 15 business days after the close of the hearing.
2. The Board may affirm, reverse or amend the ruling, order, decision or act being appealed or remand the issue for further study.
3. If the Board remands all or a portion of the issues at appeal for further study, the Board shall specify the issues or matters to be studied, who is to study the issues and completion dates for such further study.
4. Findings and recommendations from further study will be transmitted to all parties to the action prior to the Hospital Building Safety Board's public hearing for decision.
5. Within 30 business days of receipt of the findings and recommendations from further study of the issues, the Hospital Building Safety Board shall convene a public hearing to consider the findings and recommendations and arguments from the appellant or the appellant's representatives. The decision of the Hospital Building Safety Board shall be announced in a public hearing and transmitted in writing to all parties involved within 30 business days of the conclusion of the public hearing.
6. Decisions of the Hospital Building Safety Board shall become effective immediately upon their announcements by the Chair of the Board, unless otherwise specified by the Chair.

(c) Should the appellant determine he or she has been adversely affected by the decision of the Hospital Building Safety Board, the appellant may further appeal the issue for resolution by the California Building Standards Commission, in accordance with Health and Safety Code Section 18945.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129955.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-171. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

ARTICLE 6
CONTRACTS

7-191. Contract qualification criteria.

(a) Individuals performing services under contracts entered into with the Office pursuant to Health and Safety Code, Section 129855 shall meet the following qualifications:

1. Plan reviews shall be performed only by architects or engineers validly certified under Division 3 of the Business and Professions Code as follows:

   A. **Selection criteria.** The director shall establish selection criteria which will comprise the basis for the selection of eligible firms or local government entities to independently perform the required architectural and engineering services. The criteria will include such factors as:

      (1) Professional experience in performing services of similar nature.

(2) Knowledge of applicable codes, regulations and technology associated with the services required.

(3) Quality and relevance of recently completed or ongoing work.

(4) Reliability, continuity and proximity of firm or local government entity to the Office.

(5) Demonstrated competence.

(6) Staffing capability.

(7) Education and experience of key personnel to be assigned.

(8) Current workload and ability to meet review deadlines according to schedule.

(9) Other technical factors the director deems relevant to the specific service to be performed.

These factors shall be weighed by the director according to the nature of the proposed project or service, the complexity and special requirements of the specific services and the needs of the Office.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4527.

B. **Announcement.**

(1) A statewide announcement of specific services sought from firms shall be published in the California State Contracts Register, in accordance with the Government Code (commencing with Section 14825), and whenever possible, in the publications of the respective professional societies. Failure of any professional society to publish the announcement shall not invalidate any contract. Services sought from the local government entities are exempt from advertising in the California State Contracts Register pursuant to standard State of California operating procedures.

(2) The announcement for each proposed project or service shall include, at a minimum, a brief description of the project or services required, location, duration, submittal requirements, contact person for the Office, and the final response date for receipt of statements from firms of their demonstrated competence and professional qualifications.

(3) The director shall identify potentially qualified minority, women and disabled veteran business enterprises and small businesses interested in contracting with the Office, and shall provide copies of announcements to those businesses that have indicated an interest in receiving the announcements. Failure of the director to send a copy of an announcement to any business shall not invalidate any contract.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4527.

C. **Selection of qualified firms.**

(1) After the expiration of the final response date in the published announcement, the director shall review and evaluate the written responses to the announcement, using the selection criteria contained in Section 7-191 (a) 1 A, and rank, in order of qualifications, the firms determined as eligible to perform the required services.

(2) The director shall conduct discussions with at least the three most eligible firms, or a lesser number if fewer than three eligible firms have responded, to further expand on those qualifications and experience required to perform the services sought. From the firms with which discussions are held, the director shall select, in order of qualification, not less than three firms, or lesser number if fewer than three eligible firms responded, deemed to be the most highly qualified to perform the required services.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4527.

D. **Selection of qualified local government entities.**

(1) For specific services to be performed by local government entities, the director shall solicit, review and evaluate the qualifications of the local government entities using the selection criteria contained in Section 7-191 (a) 1 A.

(2) The director shall select, in order of qualification, those local government entities deemed to be the most highly qualified to perform the required services.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4528.

E. **Estimate of value of services.**

(1) Before entering into fee negotiations with any firm or local government entity selected pursuant to Section 7-191 (a) 1 C (2) or D, the Office shall prepare an estimate of the value of the proposed services based on accepted billable rates for comparable services.

(2) At any time the director determines the Office's estimate to be unrealistic, the director shall require the estimate to be reevaluated and, if deemed necessary, modified. If the director modifies an estimate, negotiations will resume with the best qualified firm or local government entity.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129855 and Government Code Section 4526.

F. **Fee Negotiation with firms.**

(1) The director shall ask firms selected pursuant to Section 7-191 (a) 1 C (2) to submit a fee schedule of hourly billable rates. The director shall then attempt to negotiate hourly billable rates

determined to be fair and reasonable with the firms, beginning with the best qualified and continuing with the remaining firms, in order of qualifications.

(i) The firm negotiating with the director shall be given two opportunities to respond to the Office's request to meet the fair and reasonable estimate for hourly billable rates for the contract services;

(ii) The firm must respond within 7 business days to each request by the Office for a new estimate which either meets or does not exceed by more than 10 percent the Office's fair and reasonable estimate for hourly billable rates; and

(iii) If after the second attempt, the firm is nonresponsive or a satisfactory hourly billable rate cannot be negotiated, the director shall terminate negotiations with that firm.

(2) After successful negotiations, a retainer contract will be executed with the firm. There may be multiple contracts awarded and each shall specify a contract period and monetary limitation. Work shall commence only upon execution of an assignment. Assignments will be negotiated pursuant to Section 7-191(a)1G.

(3) For firms selected pursuant to Section 7-191 (a) 1 C (2) to provide services for a specific project where the scope of work is extremely complex or unusual, fee negotiations will proceed in accordance with Section 7-191 (a) 1 G.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129855 and Government Code Sections 4526 and 4528.

G. **Services negotiations with firms.**

(1) From among the firms selected in Section 7-191 (a) 1 C (2), as most highly qualified to perform services required, the director shall attempt to negotiate a satisfactory assignment or contract with the best qualified firm at a compensation which the Office determines to be fair and reasonable.

(i) The firm negotiating with the director shall be given two opportunities to respond to the Office's request to meet the fair and reasonable estimate for assignment or contract services;

(ii) The firm must respond within 7 business days to each request by the Office for a new estimate which either meets or does not exceed by 10 percent the Office's fair and reasonable estimate;

(iii) If after the second attempt, the firm is nonresponsive or a satisfactory rate cannot be negotiated, the director shall terminate negotiations with that firm; and

(iv) Negotiations with the next best-qualified firm shall commence.

(2) The director shall continue the negotiation process with the remaining qualified firms, if any, in order of qualifications, until a satisfactory assignment or contract is reached. If unable to negotiate a satisfactory assignment or contract with any of the qualified firms, the director shall abandon the negotiation process for the required services.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129855 and Government Code Sections 4526 and 4528.

H. **Fee and services negotiation with local government entities.**

(1) From among the local government entities selected in Section 7-191 (a) 1 D (2), as most highly qualified to perform services required, the director shall attempt to negotiate a satisfactory contract with the best qualified local government entity at a compensation which the Office determines to be fair and reasonable.

(2) If the director is unable to negotiate a satisfactory contract with the best qualified local government entity at a compensation which is determined to be fair and reasonable, negotiations with that local government entity shall be terminated and negotiations undertaken with the second best qualified local government entity. If unable to negotiate a satisfactory contract with the second best qualified local government entity at a compensation which the Office determines is fair and reasonable, negotiations with that local government entity shall be terminated and negotiations undertaken with the third best qualified local government entity. If unable to negotiate a satisfactory contract with the third best qualified local government entity at a compensation which the Office determines is fair and reasonable, negotiations with that local government entity shall be terminated.

The director shall continue the negotiation process with the remaining qualified local government entities, if any, in order of qualifications, until a satisfactory contract is reached. If unable to negotiate a satisfactory contract with any of the qualified local government entities, the director shall abandon the negotiation process for the required services.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4528.

I. **Amendments.** When the director determines that a change in the assignment or contract is necessary during the performance of the services, the parties may, by mutual consent, in writing, agree to modifications, additions or deletions in the general terms,

conditions and specifications for the services involved, with an appropriate adjustment in the firm's or local government entity's compensation, if necessary.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Sections 4526 and 4528.

J. **Contracting in phases.**When the director determines it is necessary or desirable for a project to be performed in separate phases, increments or stages due to a change in design or scope of work, the director may negotiate compensation for the initial phase, increment or stage of the services required; provided, however, the director first determines that the firm selected is best qualified to perform the entire project. The assignment shall include a provision that the Office may, at its option, utilize the firm to perform other phases, increments or stages of the services under terms which the Office determines to be fair and reasonable, to be later negotiated and included in a mutual written agreement. In the event that the Office exercises its option under the contract to utilize the firm to perform other phases, increments or stages of the project, the procedures of this article regarding estimates of value of services and negotiation shall be followed.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129855 and Government Code Sections 4526 and 4528.

K. **Statewide participation goals.** In the negotiation of a satisfactory contract as provided in Section 7-191 (a) 1 F and G, qualified firm(s) must meet the statewide participation goals for minority, women and disabled veteran business enterprises or demonstrate that a good faith effort was made to meet them. The best qualified firm shall comply with the statewide participation goals or demonstrate a good faith effort as required by the regulations contained in Title 2, California Code of Regulations, Sections 1896.61-1896.67 and 1896.90-1896.96.

Authority: Government Code Section 4526; Public Contract Code Section10115.3.

Reference: Government Code Section 4528; Public Contract Code Sections 10115, 10115.1, 10115.2 and 10115.3.

L. **Emergency.** When the director makes a finding that the public health, safety or welfare would be adversely affected in a significant way because insufficient time exists within which to implement the foregoing procedure to secure necessary services, the director may negotiate a contract for such services without the necessity of following such procedure, or any part thereof.

Authority: Health and Safety Code Sections 129850, 129855 and 18949.3; Government Code Section 4526.

Reference: Government Code Section 4526.

M. **Unlawful considerations.** Each contract shall include a provision by which the firm or local government entity warrants that the contract was not obtained or secured through rebates, kickbacks or other unlawful considerations either promised or paid to any Office employee. Failure to adhere to this warranty may be cause for contract termination and recovery of damages under the rights and remedies due the Office under the default provision of the contract.

Authority: Government Code Section 4526.

Reference: Government Code Section 4526.

N. **Prohibited relationships.** No Office employee who participates in the evaluation or selection process leading to award of a contract shall have a relationship with any of the firms or local government entity seeking that contract, if that relationship is subject to the prohibition of Government Code Section 87100.

Authority: Government Code Section 4526.

Reference: Government Code Sections 4526, 87100 and 87102.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-191. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD/EF 1/92) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state September 1, 1992; effective September 1, 1992. Approved as an emergency by the California Building Standards Commission on August 27, 1992.
3. (OSHPD/EF 1/92, permanent) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state on March 9, 1993; effective March 9, 1993. Approved as a permanent order by the California Building Standards Commission on March 5, 1993.

ARTICLE 7
TESTING AND INSPECTION

Testing and inspection requirements are found in the *California Building Standards Code*.

ARTICLE 8
CALIFORNIA BUILDING STANDARDS

Architectural, mechanical, electrical, structural, and fire and life safety and accessibility standards are found in the *California Building Standards Code*.

ARTICLE 19
CERTIFICATION AND APPROVAL OF HOSPITAL INSPECTORS

7-200. Administration of hospital inspector examination and certification.

(a) The Office shall test and certify inspectors in one or more of the following classes:

1. Class "A" Hospital Inspector may inspect all areas of construction, including: architectural, mechanical, plumbing, electrical, fire and life safety, and structural elements.

2. Class "B" Hospital Inspector may inspect only the following areas of construction: architectural, mechanical, plumbing, electrical, fire and life safety, and anchorage of nonstructural elements.
3. Class "C" Hospital Inspector may inspect one or more areas of construction specialty, including but not limited to the areas listed in Section 7-204(c)l, but may not inspect the complete scope of construction authorized for "A" or "B" inspectors.

(b) In order to be certified in and perform the scope of responsibilities of a hospital inspector as specified in paragraph (a) (1), (2) or (3), an individual must be successful in the examination for that classification.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129825.

7-201. Location of office. All correspondence, applications and remittances related to the certification or recertification of Hospital Inspector shall be directed to: Office of Statewide Health Planning and Development, Facilities Development Division, Hospital Inspector Certification Program, 400 R Street, Suite 200, Sacramento, CA 95811.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-202. Filing change of name, address or telephone number. An applicant for the certification examination or a Hospital Inspector possessing a valid certificate issued by the Office, shall file name, mailing address or telephone number changes with the Office in Sacramento within 10 working days of that change. The information filed shall include both the new and former name, mailing address or telephone number.

Authority: Health and Safety Code Sections 1275, 127010, 127015, 129680 and 129825.
Reference: Health and Safety Code Sections 129680 and 129825.

7-203. Applying for the certification examination.

(a) An applicant may apply for the Hospital Inspector Certification Exam by submitting, to the Office, the following items prior to the final filing date announced for a scheduled exam:

1. A completed application, provided by the Office, shall be submitted to the Office in Sacramento and shall include the exam title, preferred examination location, applicant's name, mailing address and telephone number. An application for an examination is valid for one year commencing with the first available examination date. If applicant has not taken an exam within that one-year period, a new application and exam fee must be submitted to participate in a future exam.
2. Certificates or transcripts indicating educational courses completed by the applicant which relate to the minimum qualifying requirements stated in Section 7-204.
3. Work verification form or letter from current and/or previous employer(s) regarding any job which meets the minimum qualifications for the certification examination and which includes the applicant's name, dates of employment, job description and employer's signature.
4. An "Application Review Fee" in the amount specified on a certification examination announcement for a scheduled exam and pursuant to Section 7-206.

(b) Incomplete submittals may be rejected by the Office. The application, documents and fees will be returned to the applicant with a statement of reason for nonacceptance.

(c) Upon review, verification and evaluation of the applicant's qualifications, the Office will notify the applicant, in writing, of eligibility or ineligibility for entrance to the requested certification examination.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-204. Minimum qualification for examination.

An applicant must meet the following criteria to be eligible to participate in the certification examination for a Class "A," "B," or "C" Hospital Inspector:

(a) **Minimum qualifications for Class "A" Hospital Inspector Exam:**

1. High school graduation or the equivalent and six years experience involving building projects of Type I or II construction as an architect's, engineer's, owner's, local building official's or general contractor's representative in technical inspection or inspection supervision [Note: Experience in subsection (a) 1 may be substituted with college education with major work in architecture, engineering, building inspection and/or construction on a year-for-year basis for a maximum of two years.]; or
2. Possess a valid California registration/license as a mechanical, electrical, or civil engineer and two years experience involving building projects of Type I or II construction as an architect's, engineer's, owner's, local building official's or general contractor's representative in technical inspection or inspection supervision; or
3. High school graduation or the equivalent and two years of working experience as a Class "B" Hospital Inspector; or
4. Possess a valid California registration/license as a structural engineer or a valid California license as an architect.

(b) **Minimum qualifications for Class "B" Hospital Inspector Exam:**

1. High school graduation or the equivalent and four years experience involving building projects of Type I or II construction as an architect's, engineer's, owner's, local building official's or general contractor's representative in technical inspection or inspection supervision [Note: Experience in subsection (b) 1 may be substituted with college education with major work in architecture, engineering, building inspection and/or construction on a year-for-year basis for a maximum of two years.]; or
2. Possess a valid California registration/license as a civil engineer and two years experience involving building projects of Type I or II construction as an architect's, engineer's, owner's, local building official's or general

contractor's representative in technical inspection or inspection supervision; or

3. Possess a valid California registration/license as a structural, mechanical or electrical engineer, or a valid California license as an architect.

(c) **Minimum qualifications for Class "C" Hospital Inspector Exam:**

1. High school graduation or the equivalent and four years experience involving building projects as the representative in testing, inspection or observation of construction for an architect, engineer, owner, local building official, local fire authority, testing lab, specialty contractor or general contractor and possess a valid certificate issued by:

   Fire Alarm—National Institute for the Certification of Engineering Technologies (NICET), Level III

   Fire Extinguishing Systems—NICET, Level III

   Fire Resistive Construction—International Code Council (ICC) Building Inspector Certification

   Medical Gas Systems—National Inspection Testing Certification (NITC) Certification

   Plumbing—International Association of Plumbing and Mechanical Officials (IAPMO) Certification

   Mechanical—IAPMO Certification

   Electrical—ICC Certification

   Concrete (Prestressed and Reinforced)—ICC Certification

   Masonry—ICC Certification

   Steel—ICC, Structural Steel Certification

   Welding—American Welding Society (AWS) Certification

   Framing and Drywall—ICC Commercial Building Inspector Certification

   Roofing—National Roofing Contractors Association

   Anchorage/Bracing of Nonstructural Components—Certification to be administered by the Office

   Architectural—Certification to be administered by the Office

In addition to these certification organizations listed, the Office may accept the equivalent certification by a state- or nationally-recognized organization. [Note: Experience in subsection (c) (1) may be substituted with college education with major work in architecture, engineering, building inspection and/or construction on a year-for-year basis for a maximum of two years.]; or

2. Possess a valid California registration/license as an engineer and two years experience involving building projects as an architect's, engineer's, owner's, local building official's, local fire authority's, specialty contractor's or general contractor's representative in testing inspection or observation of construction and must posess at least one valid certificate issued by an organization that is listed or described in (c) (1) above; or
3. Possess a valid California registration/license as a structural, mechanical or electrical engineer, or a valid California license as an architect and must possess at least one valid certificate issued by an organization that is listed or described in (c) (1) above.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129825.

7-206. Fees.

(a) Fees required pursuant to subsection (b), shall be transmitted by credit card, money order, cashier check, certified check or personal check, and payable to the Office of Statewide Health Planning and Development.

(b) The prescribed fees relative to the Hospital Inspector Certification Program shall be specifically charged to the applicant to recover reasonable costs of administering the certification program. Fees shall be charged as follows:

Application review	$100.00 (nonrefundable)
Exam for Class "A" Inspector Certification	$300.00
Exam for Class "B" Inspector Certification	300.00
Exam for Class "C" Inspector Certification	100.00 (for each specialty certificate)
Recertification exam	100.00
Delinquency fee	100.00
Duplicate certificate	25.00

(c) An application review fee must accompany an application for a certification examination. This fee is nonrefundable.

(d) An exam fee shall be submitted by an applicant for a specified examination prior to participation in the examination.

(e) An applicant shall forfeit the exam fee if the applicant fails to appear for any portion of the exam for which the applicant is scheduled.

(f) If the Office has a need to reschedule an exam, a qualified applicant who has submitted the exam fee prior to the reschedule will be either reimbursed or credited for the exam fee amount.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129825.

7-207. Examination for certification.

(a) The Office shall administer an exam not less than once in every calendar year in the Sacramento and Los Angeles areas. The certification exam will consist of a written exam.

(b) The scope of the written certification examinations is as follows:

1. The examinations for Class "A" and "B" Hospital Inspectors will measure the applicant's ability to read and understand construction documents; ability to identify and understand the application of various *California Building Standards Code* requirements; knowledge of appropriate inspector duties and ability to communicate in writing. The test will be divided into sections covering the following code enforcement areas of construction inspection, where applicable: structural, architectural, mechanical, electrical, fire and life safety, and administrative.
2. The examination for Class "C" Hospital Inspectors will measure the applicant's ability to identify and understand the application of various *California Building*

Standards Code requirements; knowledge of appropriate inspector duties and ability to communicate in writing. The candidate's inspection certification, pursuant to Section 7-204(c)(l) above, may be substituted for the technical aspect of the written certification examination for Class "C" Hospital Inspector.

(c) In order to be successful in the Class "A," "B" or "C" certification exam, a candidate must obtain a passing score of at least 75 percent in each section of the written exam.

(d) It is not necessary for a candidate who has passed the administrative section of the Class "C" certification exam to retake this section if the candidate applies for additional certification(s) within three years of passing the administrative section of the exam.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-208. Conduct relative to the examination.

(a) An applicant who participates in any of the following acts before, during or after the administration of the examination, shall be disqualified by the Office. The applicant shall not:

1. Copy any portion of the exam.
2. Participate in collusion regarding the exam.
3. Disclose the contents of the examination questions to anyone other than a person authorized by the Office.
4. Solicit, accept or compile information regarding the contents of the examination.
5. Falsify documents required for exam entrance.

(b) If an applicant is disqualified from the exam, it shall result in denial of the application and forfeiture of fees submitted to the Office as specified in Section 7-206.

Authority: Health and Safety Code Sections 1275, 127010, 127015, 129680 and 129825.
Reference: Health and Safety Code Sections 129680 and 129825.

7-209. Reexamination.

(a) A candidate who has failed an examination may participate in a reexamination no sooner than six months from the exam previously taken by the candidate. In order to participate in a reexamination, the candidate must submit an application for a retest accompanied by the examination fee pursuant to Section 7-206.

(b) An applicant or candidate who is disqualified from an examination may not participate in an examination or reexamination for a period of one year from the date of disqualification.

(c) The applicant may refile for an examination by submitting an application, documents and fees pursuant to Sections 7-203 and 7-206.

(d) A candidate who passes all sections of the Class "A" or "B" exam except one and obtains a score of at least 50 percent in the one failed section, may retest that section within six weeks of the original exam date. Failure to achieve a minimum score of 75 percent on the retested section, will be considered failure of the entire exam. The candidate may apply for a new exam pursuant to subsections (a) and (c).

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-210. Issuance of certification.

(a) If a candidate is successful in the certification or recertification examination, a certificate will be issued to the Hospital Inspector by the Office. Certificates will expire three years from the date of issuance with the following exception:

1. Certification may be revoked or suspended pursuant to Section 7-214.

(b) A duplicate certificate will be granted to a Hospital Inspector for replacement of an original certificate that is lost, destroyed or mutilated upon written request and payment of the duplication fee, as required in Section 7-206.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129825.

7-211. Renewal of a hospital inspector certificate.

(a) A Hospital Inspector shall participate in a written recertification exam prior to the expiration of the certification in order to renew and maintain valid certification.

(b) To be eligible for the recertification exam, a Hospital Inspector shall meet the following minimum criteria:

1. Possess a valid unexpired Hospital Inspector Certificate or an expired certificate that meets the delinquency criteria in subsection (c).
2. Complete a seminar conducted, sponsored, or cosponsored by the Office within the three-year certification period.
3. Submit a recertification exam fee pursuant to Section 7-206.

(c) Expired certification may be renewed after the expiration date, but within six months past that date. The Hospital Inspector will be required to pay a delinquency fee, pursuant to Section 7-206, in order to recertify during the six-month delinquency period. If an inspector fails to recertify within this time frame, the inspector will be required to pass a certification exam to obtain new certification as a Hospital Inspector.

(d) The scope of the recertification exam will be a written test measuring the Hospital Inspector's knowledge of new and/or revised *California Building Standards Codes*, new construction materials and inspection procedures.

(e) If a Hospital Inspector fails the recertification exam, the inspector must meet the requirements of provision (b) to maintain a valid certificate.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-212. Approval of hospital inspector of record for construction projects.

(a) It is incumbent upon the hospital governing board or authority and the architect or structural engineer, or both, in responsible charge of the work, or the engineer in responsible charge of the work, to select the appropriate inspector(s) for a project. The hospital governing board or authority shall submit to the Office an application for each Hospital Inspector of Record proposed to perform construction inspection on a specified hospital construction project. The hospital governing board or authority shall obtain Office approval of proposed Hospital Inspector(s) of Record prior to commencement of the

hospital construction project in accordance with Section 7-135.

(b) The Office shall not approve a proposed Hospital Inspector of Record for a specified hospital construction project if the Office determines one of the following:

1. The Hospital Inspector of Record applicant does not hold a valid Hospital Inspector certificate pursuant to the provisions of these regulations.
2. The Hospital Inspector is not appropriately certified in the class of inspection required for the scope of the construction project. The Class "C" inspector does not possess a current certificate for the area of inspection proposed per Section 7-204(c)l.
3. The Hospital Inspector is a former Office employee pursuant to subsection (c) and is within the one year restriction period governing the Office's approval of an inspector.
4. The Hospital Inspector is committed to a workload outside the specified hospital construction project and is unable to allot adequate time to perform the work on the specified construction project, as determined by the process set forth in subsection (d).
5. The Hospital Inspector is the architect or engineer in responsible charge of the work for the construction project specified on the Hospital Inspector of Record application.

   Exception: The Office may approve the architect or engineer in responsible charge of the work, when in the determination of the Office: (A) the project scope, duration and complexity do not merit a separate individual to serve as the Hospital Inspector of Record, and (B) the ability of the Office to obtain accurate and impartial inspection will not be jeopardized.

(c) A former employee of the Office who performed field inspections/observations or supervised staff performing field inspections/observations during employment with the Office shall not be approved for a project by the Office as a Hospital Inspector of Record within one year from the effective date of separation from the Office.

(d) When the Office determines that the cumulative workload of a Hospital Inspector of Record applicant appears excessive and may hinder competent and adequate inspection of a specified hospital construction project, the Office may request that the Hospital Inspector of Record applicant submit a written plan including a work schedule and indicating a means to perform inspection on the specified hospital construction project.

The Office will consider specific work-related factors when reviewing the Hospital Inspector's work schedule to determine approval, pursuant to subsection (b) 4. These work-related factors are limited to the following:

1. The geographic location of current work sites,
2. The scope of current projects,
3. The current phase of each project, and
4. The number of current projects.

(e) When an inspector is approved by the Office, written notification will be sent to the hospital governing board or authority; the architect and/or engineer in responsible charge of the construction project; and the inspector of record applicant. The inspector must be in possession of this approval notice prior to commencement of construction.

(f) A Hospital Inspector of Record who has been approved by the Office must maintain valid certification throughout the term of the specified project in order to remain a Hospital Inspector of Record on the project. The Office shall rescind approval of a Hospital Inspector of Record on a project if the inspector does not comply with this provision.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129825.

7-213. Monitoring of the hospital inspector of record's performance. When the Office determines that a Hospital Inspector of Record has violated a provision of these regulations or that the inspector is not competently or adequately providing inspection of a facility to ensure the hospital construction is in compliance with the construction documents, the Office will notify that inspector, the hospital governing board or authority, and the architect and/or engineer in responsible charge. The written notification will include the Office's findings, reference to the statute and/or regulation being violated, and statement of the Office's intent to issue a "stop work" order unless the violation ceases and is rectified immediately.

Authority: Health and Safety Code Sections 1275, 127010, 127015, 129680 and 129825.
Reference: Health and Safety Code Sections 129680, 129825 and 129998.

7-214. Suspension or revocation of certification. A Hospital Inspector Certificate issued by the Office may be suspended or revoked, by written notice from the Office, if the certificate holder: misrepresents or falsifies any facts presented to the Office, pursuant to these regulations; demonstrates incompetence while performing inspection duties; and/or demonstrates malfeasance, including but not limited to bribery, relating to the performance of inspection duties .

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.

7-215. Appeals.

The applicant, candidate or certificate holder may appeal any determination of the Office pursuant to this Article to the Hospital Building Safety Board, pursuant to Section 7-159 of these regulations.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129850.
HISTORY:

1. (OSHPD 1/96) 1996 Annual Code Adoption Cycle will add Article 19, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

ARTICLE 20
REPAIR OF DAMAGE AFTER AN EMERGENCY

7-300. Plan review and approval.

(a) All repair projects are subject to prior plan review, plan approval and construction permit by the Office except as noted in subsection (b).

(b) For emergency repairs carried out without the Office plan review and permit the aftermath of an emergency, an

application for plan review must be submitted with construction documents, fees and a letter of transmittal stating the reasons for emergency repairs. Photographs, if available, and reports of damage and repairs should also be submitted with the application. Additional repairs may be required if the emergency repairs do not comply with the code. For alternate fee payment methodology, see Section 129787 of the Health and Safety Code.

(c) Plan reviews for emergency damage repairs will be performed on a priority basis. The application for plan review should clearly state that the scope of the project is to repair the damage from the emergency. Where possible, reviews will be made over the counter.

(d) Plan review fees shall be payable for all damage repair projects per the following:

1. 1.64 percent of estimated construction costs for hospitals.
2. 1.50 percent of estimated construction cost for skilled nursing facilities (SNF) or intermediate care facilities (ICF).
3. For alternate fee payment methodology, see Section 129787 of the Health and Safety Code.
4. An examination fee where review of existing plans is required. The fee will be calculated on a time and material basis at the prevailing hourly rates applicable for the review personnel.

(e) Office recommends predesign conference with architects/ engineers to resolve code issues relevant to the repair projects.

Authority: Health and Safety Code Section 129850.
Reference: Health and Safety Code Sections 129785, 129787 and 129820.

7-301. Appeals. The Hospital Building Safety Board shall act as a board of appeals with regard to disagreements between the Office and hospital/SNF/ICF authorities on interpreting the repair policy or the establishment of the degree of damage. (Section 7-159 of Administrative Regulations for the Office)

Authority: Health and Safety Code Section 129850.
Reference: Health and Safety Code Section 129925.

7-305. All buildings.

Where the repairs to damage caused by an emergency are required, facilities may reopen, after temporary repairs, for a limited period of time subject to the following:

1. **Temporary repairs:** The hazard resulting from damage to the facility is abated and the facility is at least restored to its pre-emergency condition or its equivalent.
2. **Permanent repairs/retrofit:** The owner successfully negotiates with the Office a time bound plan for the permanent repairs/retrofit of the damaged facilities required by these regulations.

Authority: Health and Safety Code Section 129850.
Reference: Health and Safety Code Sections 129725 and 129820.
HISTORY:

1. (OSHPD/EF 1/95) Emergency order by the Office of Statewide Health Planning and Development to add Sections 7-300 through 7-305, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state on September 8, 1995; effective September 8, 1995. Approved as an emergency by the California Building Standards Commission on September 7, 1995.
2. (OSHPD/EF 1/95, permanent) Emergency order by the Office of Statewide Health Planning and Development to add Sections 7-300 through 7-305, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state on November 30, 1995. Since there were no changes, effective date remains September 8, 1995.

ARTICLE 21
PLAN REVIEW, BUILDING INSPECTION AND CERTIFICATION OF SURGICAL CLINICS, CHRONIC DIALYSIS CLINICS AND OUTPATIENT SERVICES CLINICS

7-2100. Scope of responsibilities.

(a) Except as otherwise provided in these regulations, a city or county building jurisdiction shall be responsible for plan review and building inspection of new construction or alteration of clinic facilities specified in 7-2100 (a) (1), (2), (3) and (4) and shall also provide certification that the clinic facilities identified in 7-2100 (a) (1), (2) and (3) are in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code*. For clinic facilities identified in 7-2100 (a) (1), (2) or (3), construction or alteration shall include buildings converted to the specific purpose.

1. Surgical clinic as defined in Health and Safety Code, Section 1204 (b) (1).
2. Chronic dialysis clinic as defined in Health and Safety Code, Section 1204 (b) (2).
3. Surgical and/or chronic dialysis clinic building which is freestanding from a building where hospital services are provided and as defined in Health and Safety Code, Section 129725 (b) (1).
4. Any building where hospital outpatient clinical services are provided that is freestanding from a hospital building, as defined in Health and Safety Code, Section 129725 (a), except those buildings identified in 7-2100 (a) (3).

(b) The city or county shall not establish or apply building standards for the construction or alteration of hospital licensed freestanding clinics, as described in Section 7-2100 (a) (3) and (4), which are more restrictive or comprehensive than comparable building standards established or applied to clinic facilities which are not hospital licensed pursuant to Health and Safety Code, Chapter 1 (commencing with Section 1200) of Division 2.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129885.

7-2101. Surgical clinic and chronic dialysis clinic project submittal to the local building jurisdiction.

(a) The governing authority or owner of a clinic, as described in Section 7-2100 (a) 1 and 2, shall submit construction plans to the city or county, as applicable, for plan review, building inspection and certification. Certification by the local building jurisdiction shall indicate that the project clinic is in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

Exception: Notwithstanding Section 7-2100 (a) (1) and (2), the governing authority or owner may request the Office to

perform the plan review and certification, pursuant to Section 7-2102.

(b) Upon the clinic's initial submittal of project plans, the city or county shall advise the governing authority or owner, in writing, of its decision that plan review services will either include certification or not include certification.

(c)If the city or county indicates to the governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:

1. Review plans to all applicable provisions in the latest edition of the *California Building Standards Code* and;
2. Provide written certification to the applicant within 30 days of completion of construction that the applicable clinic provisions have been met.

(d) If the city or county indicates to the applicant that it will not include certification with plan review of the specified clinic project, the city or county shall review the plans to the provisions of the latest edition of the *California Building Standards Code*, excluding the clinic provisions. The governing authority or owner shall also submit the following items to the Office:

1. A completed application and construction documents for the clinic project, pursuant to Section 7-113, and;
2. A fee, pursuant to Section 7-2106.

(e) The Office shall review the construction documents to determine whether or not the clinic project meets the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(f) Upon completion of plan review and receipt of all applicable fees, the Office shall provide the clinic applicant with written certification that the project construction documents meet the clinic provisions in the latest edition of the *California Building Standards Code*.

(g) Building construction inspection for the clinic project shall be performed by the local jurisdiction.

7-2102. Request for the office to provide plan review for surgical clinics and chronic dialysis clinics.

(a) If the governing authority or owner of a clinic, as described in Section 7-2100 (a) (1) or (2), elects to request the Office to provide plan review services for a clinic project, in lieu of the city or county, the request shall be submitted to the Office in writing. The Office will consult with the applicable local building jurisdiction prior to acceptance or nonacceptance of the plan review request and subsequently notify the clinic, in writing, of its decision.

(b) If the Office agrees to provide plan review and certification services for the governing authority or owner, the applicant shall submit the following items to the Office:

1. A completed application and design construction documents for the clinic project, pursuant to Section 7-113, and;
2. A fee, pursuant to Section 7-2106.

(c) The Office shall review the plans to all applicable provisions in the latest edition of the *California Building Standards Code*.

(d) Upon completion of plan review and receipt of all applicable fees, the Office shall provide the applicant with written certification that the project construction documents meet the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(e) Building construction inspection for the project clinic shall be performed by the local building jurisdiction. Therefore, the governing authority or owner shall submit to the city or county applicable project documents required for these building inspection services.

7-2103. Hospital outpatient services clinic project submittal to local building jurisdiction.

(a) The hospital governing authority or owner of a freestanding outpatient services clinic, as described in Section 7-2100 (a) (3) or (4), shall submit construction plans to the city or county, as applicable, for plan review and building inspection, pursuant to this section or may request the Office to perform plan review and building inspection, pursuant to Section 7-2104. Certification by the local building jurisdiction that the project clinic is in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code* is also required for clinics described in 7-2100 (a) (3).

(b) If the hospital governing authority or owner of a clinic, as described in Section 7-2100 (a) (3), initially submits clinic plans to the city or county for plan review, the city or county shall respond to the clinic owner, in writing, stating its decision of whether or not the plan review will include certification.

(c) If the city or county indicates to the hospital governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:

1. Review plans to all applicable provisions in the latest edition of the *California Building Standards Code* and;
2. Provide written certification to the applicant within 30 days of completion of construction that the applicable clinic provisions have been met.

(d) If the city or county indicates to the hospital governing authority or owner that it will not include certification with plan review of the specified clinic project, the city or county shall review the plans to the provisions of the latest edition of the *California Building Standards Code*, excluding the clinic provisions. The applicant shall also submit the following items to the Office:

1. A completed application, construction documents for the clinic project, pursuant to Section 7-113, and;
2. A fee, pursuant to Section 7-2106.

(e) The Office shall review the construction documents for certification to determine whether or not the clinic project meets the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(f) Upon completion of plan review and receipt of all applicable fees, the Office shall provide the clinic applicant with certification that the project construction documents meet the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(g) Building construction inspection for the project clinic shall be performed by the local building jurisdiction.

7-2104. Plan review and building inspection by the office for hospital outpatient services clinics.

(a) The hospital governing authority, as described in Section 7-2100 (a) (3) or (4), may request that the Office perform plan review and building inspection for a clinic project, in lieu of the city or county performing these services. This request shall be submitted to the Office in writing.

(b) The Office shall perform the requested plan review and building inspection services when the hospital governing authority submits the following items to the Office:

1. A completed application, construction documents for the clinic project, pursuant to Section 7-113; and
2. A fee, pursuant to Section 7-2106.

(c) For clinic facilities described in Section 7-2100 (a) (3), upon completion of the building construction and receipt of all applicable fees, the Office will provide certification that the construction documents and construction comply with the applicable provisions in the *California Building Standards Code*.

(d) A clinic building which has been accepted by the Office, pursuant to paragraph (a) of this section, shall remain under the jurisdiction of the Office for plan review and building inspection of any subsequent alterations, unless the hospital governing authority or owner submits written notification to the Office, requesting the applicable city or county building jurisdiction to conduct plan review and building inspection for subsequent construction projects of the specified clinic.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129885.

7-2105. "Hospital Building" designation of a freestanding hospital-owned clinic.

(a) A building which is under the Office's jurisdiction, pursuant to Section 7-2104 (d) may be designated as a "hospital building" by the hospital governing authority or owner under the following conditions:

1. The hospital governing authority or owner submits written notification to the Office indicating the determination to designate the building as a "hospital building" and;
2. The subject building remains under the jurisdiction of the Office for plan review and building inspection.

(b) A building designated as a "hospital building," pursuant to Section 7-2105 (a), shall be reviewed and inspected to verify compliance with the standards and requirements for a hospital building, as defined in Health and Safety Code, Part 7, Chapter 1, (commencing with Section 129675).

7-2106. Fees for review of specified clinics.

(a) Fees for plan review services of clinic buildings described in Section 7-2100 (a) 1, 2 and 3, shall be in an amount not to exceed the actual cost of performing the services.

Exception: When the Office accepts a request from the hospital governing authority or owner to perform plan review and building inspection services for those buildings described in Section 7-2100 (a) 3, the fee requirements of Section 7-133 (a) (1) which apply to hospital buildings shall also apply to the project building.

(b) When the Office accepts a request from the hospital governing authority or owner to perform plan review and building inspection services for those buildings described in Section 7-2100 (a) (4), the fee requirements of Section 7-133 (a) (1) which apply to hospital buildings shall also apply to the project building.

(c) Fees shall be paid as follows:

1. A nonrefundable filing fee of $250.00 shall accompany the application for plan review. This filing fee will be applied toward the total fees due for the project.
2. After a preliminary review of the required documents received and determination of the services to be performed, the Office will provide an estimate of the total review fee due based on costs to be incurred.
3. The applicant shall submit payment of the estimated fee prior to start of the plan review and building inspection services.
4. If during the review/inspection process it appears that actual costs will exceed the estimate by more than five percent (5%), the applicant will be informed that additional fees, not to exceed the actual cost will be due and payable immediately upon project completion.
5. All applicable fees for a completed project shall be paid prior to certification by the Office.

Authority: Health and Safety Code Sections 18929 and 129675–130070.
Reference: Health and Safety Code Section 129885.

7-2107. Fee refund.

(a) Upon written request from the applicant, a fee refund may be issued pursuant to this section.

1. The written request must be submitted to the office within:
   a. One year of the date of written certification of compliance with the applicable clinic provisions.
   b. One year of the date the project is withdrawn by the applicant.
   c. The time limits specified in Section 7-134 for building(s) as described in Section 7-2104.
2. No refund shall be issued before written certification is provided, or the project is withdrawn or closed.
3. Refunds shall be exclusive of the $250 filing fee.
4. Refunds shall be calculated pursuant to Section 7-2107(b), (c)or(d).

(b) Fees paid for a project, involving a building(s) as described in Section 7-2100 (a) (1), (2) or (3), which exceed the actual cost for performing plan review and inspection services by more than five percent (5%), shall be refunded by the Office.

Exception: Refunds for building(s) described in Section 7-2104 shall be calculated pursuant to the applicable requirements of Section 7-134.

(c) If an applicant withdraws a project that has been submitted to the Office for plan review of a building(s), as described in

Section 7-2100 (a) (1), (2) or (3), the unexpended balance of fees paid to the Office for actual cost of plan review services provided shall be refunded to the applicant.

Exception: Refunds for building(s) described in Section 7-2104 shall be calculated pursuant to the applicable requirements of Section 7-134.

(d) If an applicant requests a refund of fees for a project that has been submitted to the Office for plan review and building inspection, as described in Section 7-2100(a) (4), a fee may be refunded to the applicant pursuant to the applicable requirements of Section 7-134.

Authority: Health and Safety Code Sections 1226, 18929 and 129675–130070.
Reference: Health and Safety Code Section 129885.

HISTORY NOTE APPENDIX FOR CHAPTER 7

Administrative Regulations for the
Office of Statewide Health Planning and Development
(Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (OSHPD 1/97) Regular order by the Office of Statewide Health and Planning and Development to amend Chapters 6 and 7 as a result of SB 1953. Filed at the secretary of state on March 25, 1998; effective March 25, 1998. Approved by the California Building Standards Commission on March 18, 1998.

2. (OSHPD-EF 1/98) Emergency order by the Office of Statewide Health Planning and Development to adopt administrative regulations specific to Hospital Inspector Citizenship/Alien Certification. Filed at the secretary of state on March 25, 1998; effective March 25, 1998. Approved by the California Building Standards Commission on March 18, 1998.

3. BSC 1997 Triennial Code Adoption Cycle (OSHPD 1/97, OSHPD 2/97, OSHPD 3/97). Approved by the California Building Standards Commission on May 6, 1998. Filed at the secretary of state's office on September 29, 1998, effective October 29, 1998.

4. Erratum to correct printing errors. Correction to Section 7-101 to change the date of the Alfred E. Alquist Act to 1983. Correction of grammatical error in Section 7-111. Publication date February 15, 2001.

5. (OSHPD 9/99) Testing, Inspection, and Observation Program. Various sections in Chapter 7. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.

6. (OSHPD 10/99) Filing Fee/Personal Knowledge Verified Reports. Amend Sections 7-103, 7-111, 7-113, 7-133, 7-151. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.

7. (OSHPD 3/99) Class C Hospital Inspector. Amend Sections 7-200, 7-204, 7-206. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.

8. (OSHPD 01/01) 7-115 Preparation of Plans and Specifications. 7-152 Supplantation of an Architect, Engineer or Inspector of Record, Special Inspector or Contractor. Approved as submitted by the California Building Standards Commission on September 25, 2001. Files with the Secretary of State on November 6, 2001, effective December 6, 2001.

9. October 1, 2002 Errata adding Number 8 above.

10. (OSHPD EF 01/02) Amend Chapter 6 and 7 of Part 1. Approved as emergency by the California Building Standards Commission on January 15, 2003, and filed with the Secretary of State on January 16, 2003. Effective January 16, 2003.

11. (OSHPD 4/02) Chapter 7, amend various sections. Safety Standards for Health Facilities. Article 3, Section 7-125, Final Review of Plans and Specification. Article 3, Section 7-129, Time Limitations for Approval. Article 4, Section 7-135, Time of Beginning Construction. Article 4, Section 7-141, Administration of Construction. Article 4, Section 7-155, Final Approval of the Work. Article 19, Section 7-203, Applying for the Certification Examination. Article 21, Section 7-2100 through 7-2106, Scope of Responsibilities. Approved by the Building Standards Commission on May 14, 2003 and effective June 13, 2003.

12. (OSHPD EF 01/02) Amend Chapters 6 and 7 of Part 1. Approved as permanent emergency by the California Building Standards Commission. Permanent approval on May 14, 2003. Certification of Compliance filed with the Secretary of State on May 15, 2003. Effective January 16, 2003.

13. (OSHPD 01/04) Amend Chapter 6, Article 1 for change in Seismic Performance Category nonconforming building. Amend Chapter 7, Article 3 for plan review, Article 4 for construction inspection, Article 5 for appeals to the Hospital Building Safety Board, Article 6 for contract services, Article 19 for certification of hospital inspectors, and Article 21 for fees for review of specified clinics. Filed with Secretary of State on May 23, 2006, and effective on the 30th day of filing with the Secretary of State.

14. (OSHPD 01/06) Amendments to administrative standards for the review and construction of health facilities: preparation of plans and specifications, Hospital Inspector certification, and plan review and inspection of outpatient clinics. Filed with the Secretary of State on February 15, 2007, and effective 30 days thereafter.

15. (OSHPD EF 01/07) Amend Title 24, Part 1, Chapter 7, Article 1, Article 2, Article 3, Article 20. Approved by the California Building Standards Commission on July 19, 2007. Filed with the Secretary of State on July 20, 2007, effective on January 1, 2008.

16. (OSHPD 01/07) Amend Chapter 7, Safety Standards for Health Facilities. Approved by the California Building Standards Commission on July 17, 2008. Filed with the Secretary of State on July 18, 2008, and effective 30 days thereafter.

17. (OSHPD 04/09) Amend Chapter 7, Safety Standards for Health Facilities. Effective on February 13, 2010.

18. (OSHPD EF 01/10) Amend Chapter 7 with HAZUS updates pursuant to SB 499 (Chapter 601, Statutes of 2009). Effective on February 13, 2010.

CHAPTER 8

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF HEALTH SERVICES (DHS)

ARTICLE 1
PUBLIC SWIMMING POOLS

8-100. Plans and specifications.

(a) A person proposing to construct, reconstruct or alter a swimming pool or auxiliary structure or equipment shall submit legible plans and specifications to the enforcing agent for review and written approval prior to commencing the work and in advance of the issuance of any building, plumbing or electrical permit.

(b) Plans submitted for approval pursuant to this section shall be drawn to a scale of 1 centimeter equals 0.48 meters ($^1/_4$ inch equals 1 foot), except that plans for spa pools shall be drawn to a scale of 1 centimeter equals 0.12 meters (1 inch equals 1 foot).

(c) The enforcing agent may require the submission of such additional information as may be required to determine the compliance of plans and specifications submitted for approval.

(d) Within 30 days of the receipt of plans and specifications, the enforcing agent shall notify the person submitting the plans and specifications of their approval or disapproval.

Authority: Health and Safety Code Sections 208 and 24102.
Reference: Health and Safety Code Section 24101.1.

8-101. Construction.

(a) Swimming pools shall be constructed, reconstructed or altered in compliance with plans approved pursuant to Section 8-100, unless written approval of variance from such plans is obtained from the enforcing agent.

(b) Swimming pools shall conform to the requirements of Chapter 90, Part 2, Title 24, California Code of Regulations.

Authority: Health and Safety Code Sections 208 and 24102.
Reference: Health and Safety Code Section 24101.1.

ARTICLE 2
RETAIL FOOD ESTABLISHMENTS

8-200. Adoption of the most recent edition of the *Uniform Mechanical Code*. Chapter 5, Part 2, Title 24, California Code of Regulations, shall be the commercial hood and kitchen ventilation standards for retail food establishments as defined in Title 17, California Code of Regulations, Section 12100 (a).

Authority: Health and Safety Code Sections 208, 28694, 28694.5 and 28863.
Reference: Health and Safety Code Sections 28196, 28545 and 28826.
HISTORY:

1. New Article 10.4 (Sections 13670-13671) filed 9-18-80; effective thirtieth day thereafter (Register 80, No. 38).

8-201. Building plan approval.

(a) Building plans for new construction or remodeling of kitchen ventilation systems in retail food establishments shall be submitted for review and approval to either the local health officer or a duly authorized registered sanitarian.

(b) Construction or installation shall not begin without prior written approval that the building plan complies with the requirements of Section 8-200.

Authority: Health and Safety Code Sections 208, 28694, 28694.5 and 28863.
Reference: Health and Safety Code Sections 28196, 28545, 28826 and 28865.

ARTICLE 3
ORGANIZED CAMPS

8-300. Building structures.

(a) Plans and specifications shall be approved by the local enforcing agency prior to start of any construction.

(b) Every building or structure shall be designed and constructed in accordance with the *California Building Code*, Part 2, Title 24, California Code of Regulations and Section 19150 of the Health and Safety Code.

(c) Every building or structure shall be inspected during its construction. Upon completion of construction, the person, firm or corporation responsible for its design, shall certify in writing to the local enforcing agency that the building or structure was, in fact, constructed in accordance with the approved plans and specifications therefor.

(d) Nothing in this section shall prohibit the Department of Health Services or local enforcing agency, from contracting with the Office of the State Architect of the Department of General Services or any private or other governmental agency for the review of design and performance of inspection of construction of camp buildings and structures, in accordance with the provisions of this section.

Authority: Health and Safety Code Sections 208 and 18897.2.
Reference: Health and Safety Code Sections 18897.2 and 18944 (a).
HISTORY:

1. Amendment filed 3-5-71; effective thirtieth day thereafter. Approved by State Building Standards Commission 2-26-71 (Register 71, No. 10).
2. Amendment filed 11-28-80; effective thirtieth day thereafter (Register 80, No. 48).
3. Amendment filed 4-28-86; effective thirtieth day thereafter (Register 86, No. 18).

ARTICLE 4
HOSPITALS

8-400. Alterations to existing buildings or new construction.

(a) Alterations to existing buildings licensed as hospitals or new constructions shall be in conformance with Chapter 4A, Part 2, Title 24, California Code of Regulations.

(b) Hospitals licensed and in operation prior to the effective date of changes in these regulations shall not be required to institute corrective alterations or construction to comply with such changes except where specifically required or where the

Department determines that a definite hazard to health and safety exists. Any hospital for which preliminary or working drawings and specifications have been approved by the Department prior to the effective date of changes to these regulations shall not be required to comply with such changes provided substantial, actual construction is commenced within one year after the effective date of such changes.

8-401. Application for architectural plan review.

(a) Drawings and specifications for alterations to existing buildings or new construction shall be submitted to the Department for approval and shall be accompanied by an application for plan review on forms furnished by the Department. The application shall:

1. Identify and describe the work to be covered by the plan review for which the application is made.
2. Describe the land on which the proposed work is to be done, by lot, block, tract or house and street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Show the present and proposed use or occupancy of all parts of the building or buildings.
4. State the number of square meters (feet) of floor area involved in new construction and in alterations.
5. Give such other information as may be required by the Department for unusual design circumstances.
6. Be signed by the person designing the work or the owner of the work.

(b) The application for plan review shall also include a written statement that a description of the proposed work has been submitted to the Area Comprehensive Health Planning Agency approved by the State Advisory Health Council pursuant to Section 437.7 of the Health and Safety Code.

ARTICLE 5
ACUTE PSYCHIATRIC HOSPITALS

8-500. Alterations to existing buildings or new construction.

(a) Alterations to existing buildings licensed as hospitals or new construction shall be in conformance with Chapter 4A, Part 2, Title 24, California Code of Regulations.

(b) Hospitals licensed and in operation prior to the effective date of changes in these regulations shall not be required to institute corrective alterations or construction to comply with such changes except where specifically required or where the Department determines that a definite hazard to health and safety exists. Any hospital for which preliminary or working drawings and specifications have been approved by the Department prior to the effective date of changes to these regulations shall not be required to comply with such changes provided substantial, actual construction is commenced within one year after the effective date of such changes.

8-501. Application for plan review.

(a) Drawings and specifications for alterations to existing buildings or new construction shall be submitted to the Department for approval and shall be accompanied by an application for plan review on forms furnished by the Department. The application shall:

1. Identify and describe the work to be covered by the plan review for which the application is made.
2. Describe the land on which the proposed work is to be done, by lot, block, tract or house and street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Show the present and proposed use or occupancy of all parts of the building or buildings.
4. State the number of square meters (square feet) of floor area involved in new construction and in alterations.
5. Give such other information as may be required by the Department for unusual design circumstances.
6. Be signed by the person designing the work or the owner of the work.

(b) The application for plan review shall also include a written statement that a description of the proposed work has been submitted to the Area Comprehensive Health Planning Agency approved by the State Advisory Health Council pursuant to Section 437.7 of the Health and Safety Code.

ARTICLE 6
SKILLED NURSING

8-600. Alterations to existing buildings or new construction.

(a) Alterations to existing buildings licensed as skilled nursing facilities or new construction shall be in conformance with Chapter 4A, Part 2, Title 24, California Code of Regulations and requirements of the State Fire Marshal.

(b) Facilities licensed and in operation prior to the effective date of changes in construction regulations shall not be required to institute corrective alterations or construction to comply with such new requirements except where specifically required or where the Department determined in writing that a definite hazard to health and safety exists. Any facility for which preliminary or working drawings and specifications have been approved by the Department prior to the effective date of changes to construction regulations shall not be required to comply with such new requirements provided substantial actual construction is commenced within one year of the effective date of such new requirements.

(c) All facilities shall maintain in operating condition all buildings, fixtures and spaces in the numbers and types as specified in the construction requirements under which the facility or unit was first licensed.

Authority: Health and Safety Code Sections 208 (a) and 1275.
Reference: Health and Safety Code Section 1276.

ARTICLE 7
INTERMEDIATE CARE FACILITIES

8-700. Safety, zoning and building clearance.

(a) Architectural plans shall not be approved and a license shall not be originally issued to any intermediate care facility which does not conform to these requirements or other state

requirements on seismic safety, fire and life safety, and environmental impact, and to local fire safety, zoning and building ordinances, evidence of which shall be presented in writing to the Department.

(b) It shall be the responsibility of the licensee to maintain the intermediate care facility in a safe structural condition. If the Department determines in a written report submitted to the licensee that an evaluation of the structural condition of an intermediate care facility building is necessary, the licensee may be required to submit a report by a licensed structural engineer which shall establish a basis for eliminating or correcting the structural conditions which may be hazardous to occupants.

(c) The facility shall meet the seismic safety requirements, if any, prescribed by Section 15001 of the Health and Safety Code.

8-701. Alterations to existing buildings or new construction.

(a) Alterations to existing buildings licensed as intermediate care facilities or new construction shall be in conformance with Chapter 4A, Part 2, Title 24, California Code of Regulations.

(b) Intermediate care facilities licensed and in operation prior to the effective date of changes in construction regulations shall not be required to institute corrective alterations or construction to comply with such new requirements except where specifically required or where the Department determines that a definite hazard to health and safety exists. Any intermediate care facility for which preliminary or working drawings and specifications have been approved by the Department prior to the effective date of changes to construction regulations shall not be required to comply with such new requirements provided substantial actual construction is commenced within one year of the effective date of such new requirements.

(c) All intermediate care facilities shall maintain in operating condition all buildings, fixtures and spaces in the numbers and types as specified in the construction requirements under which the intermediate care facility or unit was first licensed.

8-702. Application for plan review.

(a) Drawings and specifications for alterations to existing buildings or new construction shall be submitted to the Department for approval and shall be accompanied by an application for plan review on forms furnished by the Department. The application shall:

1. Identify and describe the work to be covered by the plan review for which the application is made.
2. Describe the land on which the proposed work is to be done, by lot, block, tract or house and street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Show the present and proposed use or occupancy of all parts of the building or buildings.
4. State the number of square meters (square feet) of floor area involved in new construction and in alterations.
5. Give such other information as may be required by the Department for unusual design circumstances.
6. Be signed by the person designing the work or the owner of the work.

(b) The application for plan review shall also include a written statement that a description of the proposed work has been submitted to the Area Comprehensive Health Planning Agency approved by the State Advisory Health Council pursuant to Section 437.7 of the Health and Safety Code.

ARTICLE 8
INTERMEDIATE CARE FACILITIES FOR THE DEVELOPMENTALLY DISABLED

8-800. Alterations to existing buildings or new construction.

(a) Alterations to existing buildings licensed as intermediate care facilities for the developmentally disabled or new construction shall be in conformance with Chapter 4A, Part 2, Title 24, California Code of Regulations.

(b) Facilities licensed or exempt from licensure and in operation prior to the effective date of changes in construction regulations shall not be required to institute corrective alterations or construction to comply with such new requirements except where specifically required or where the Department determines in writing that a definite hazard to health and safety exists. Any facility for which preliminary or working drawings and specifications have been approved by the Department prior to the effective date of changes to construction regulations shall not be required to comply with such new requirements provided substantial actual construction is commenced within one year of the effective date of such new requirements.

(c) All facilities shall maintain in operating condition all buildings, fixtures and spaces in the numbers and types as specified in the construction requirements under which the facility or unit was first licensed.

Authority: Health and Safety Code Section 208 (a).
Reference: Health and Safety Code Sections 1276 and 15007.

8-801. Application for plan review. Drawings and specifications for alterations to existing buildings or new construction shall be submitted to the Department for approval and shall be accompanied by an application for plan review on forms furnished by the Department. The application shall meet the requirements of California Code of Regulations, Title 22, Division 7, Chapter 6, Article 1, Sections 93001 through 93019.

Authority: Health and Safety Code Section 208 (a).
Reference: Health and Safety Code Sections 1276 and 15007.

CHAPTER 9

ADMINISTRATIVE REGULATIONS FOR THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD (OSHA)

(RESERVED)

CHAPTER 10

ADMINISTRATIVE REGULATIONS FOR THE CALIFORNIA ENERGY COMMISSION (CEC)

ARTICLE 1
ENERGY BUILDING REGULATIONS

10-101. Scope.

(a) This article contains administrative regulations relating to the energy building regulations in Title 24, Part 6. This article applies to all residential and nonresidential buildings.

(b) Nothing in this article lessens any necessary qualifications or responsibilities of licensed or registered building professionals or other designers or builders, or the duties of enforcement agencies, that exist under state or local law.

Authority: Sections 25402 and 25402.1, Public Resources Code.
Reference: Sections 25402 and 25402.1, Public Resources Code.
HISTORY:

1. New Article 1 (Section 1401) filed 5-3-76; effective thirtieth day thereafter (Register 76, No. 19).
2. Amendment filed 8-17-77; designated effective 3-11-78 (Register 77, No. 34).
3. Repealer of Article 1 (Section 1401) and new Article 1 (Sections 1401-1408, not consecutive) filed 12-9-81; designated effective 7-1-82 (Register 81, No. 50).
4. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).

10-102. Definitions. In this article the following definitions apply:

ACCEPTANCE REQUIREMENTS are "acceptance requirements for code compliance" as defined in Section 101(b) of Part 6.

ALTERNATIVE CALCULATION METHOD APPROVAL MANUAL or "ACM Manual" is the Alternative Calculation Method (ACM) Approval Manual for the Energy Efficiency Standards for Nonresidential Buildings for nonresidential buildings, hotels and multifamily residential buildings with four or more stories and the Alternative Calculation Method (ACM) Approval Manual for the Energy Efficiency Standards for Residential Buildings for all single-family and low-rise multifamily residential buildings.

APPLIANCE EFFICIENCY REGULATIONS are the regulations in Title 20, Section 1601 et Seq. of the California Code of Regulations.

APPROVED CALCULATION METHOD is a Public Domain Computer Program approved under Section 10-109 (a), or any Alternative Calculation Method approved under Section 10-109(b).

BUILDING PERMIT is an electrical, plumbing, mechanical, building or other permit or approval, that is issued by an enforcement agency, and that authorizes any construction that is subject to Part 6.

COMMISSION is the State Energy Resources Conservation and Development Commission.

COMPLIANCE APPROACH is any one of the allowable methods by which the design and construction of a building may be demonstrated to be in compliance with Part 6. The compliance approaches are the performance compliance approach and the prescriptive compliance approach. The requirements for each compliance approach are set forth in Section 100(e)2 of Part 6.

CONDITIONED FLOOR AREA is "conditioned floor area" as defined in Section 101(b) of Part 6.

CRRC-1 is the Cool Roof Rating Council document entitled "Product Rating Program."

ENERGY BUDGET is the "energy budget" as defined in Section 101(b) of Part 6.

ENFORCEMENT AGENCY is the city, county or state agency responsible for issuing a building permit.

EXECUTIVE DIRECTOR is the executive director of the Commission.

HVAC SYSTEM is the "HVAC system" as defined in Section 101(b) of Part 6.

MANUFACTURED DEVICE is "manufactured device" as defined in Section 101(b) of Part 6.

NFRC 100 is the National Fenestration Rating Council document entitled "NFRC 100: Procedure for Determining Fenestration Product U-factors." (2007; NFRC 100 includes procedures for site built fenestration formerly included in a separate document, NFRC 100-SB).

NFRC 200 is the National Fenestration Rating Council document entitled "NFRC 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence." (2007)

NFRC 400 is the National Fenestration Rating Council document entitled "NFRC 400: Procedure for Determining Fenestration Product Air Leakage." (2007)

NSHP GUIDEBOOK is the California Energy Commission document entitled "New Solar Home Partnership Guidebook" that is in effect at the time of application for the building permit.

PART 6 is Title 24, Part 6 of the California Code of Regulations.

PUBLIC ADVISER is the Public Adviser of the Commission.

***R*-VALUE** is the measure of the thermal resistance of insulation or any material or building component expressed in ft^2-hr° F/Btu.

RECORD DRAWINGS are drawings that document the as installed location and performance data on all lighting and space conditioning system components, devices, appliances and equipment, including but not limited to wiring sequences, control sequences, duct and pipe distribution system layout and sizes, space conditioning system terminal device layout and air flow rates, hydronic system and flow rates, and connections for

the space conditioning system. Record drawings are sometimes called "as builts."

REFERENCE APPENDICES is the support document for the Building Energy Efficiency Standards and the ACM Approval Manuals. The document consists of three sections: the Reference Joint Appendices (JA), the Reference Residential Appendices (RA), and the Reference Nonresidential Appendices (NA).

Authority: Sections 25402 and 25402.1, Public Resources Code.

Reference: Sections 25402 and 25402.1, Public Resources Code.

HISTORY:

1. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
2. Amendment filed 12-4-86; effective thirtieth day thereafter (Register 87, No. 1).
3. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-102, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.
4. (CEC 1/94) Regular order by the California Energy Commission to amend Section 10-102, Part 6, Title 24, California Code of Regulations. Filed with the secretary of state May 24, 1995; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on May 23, 1995.

10-103. Permit, certificate, informational and enforcement requirements for designers, installers, builders, manufacturers and suppliers.

(a) **Documentation.** The following documentation is required to demonstrate compliance with Part 6. This documentation shall meet the requirements of Section 10-103(a) or alternatives approved by the Executive Director.

1. **Certificate of Compliance.** For all buildings, the Certificate(s) of Compliance described in Section 10-103 shall be signed by the person(s) eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design to certify conformance with Part 6. If more than one person has responsibility for building design, each person shall sign the Certificate of Compliance document(s) applicable to that portion of the design for which the person is responsible. Alternatively, the person with chief responsibility for design shall prepare and sign the Certificate of Compliance document(s) for the entire design. The signatures shall be original signatures on paper documents or electronic signatures on electronic documents.

   For newly constructed low-rise residential buildings demonstrating compliance under the Section 151(c)2 multiple orientation alternative for which compliance requires HERS field verification, the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) for retention to a HERS provider data registry. Submittals to the HERS provider data registry shall be made electronically

   Beginning on October 1, 2010, for all low-rise residential buildings for which compliance requires HERS field verification, the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) for retention to a HERS provider data registry. Submittals to the HERS provider data registry shall be made electronically.

   Subject to the requirements of this section, persons who prepare energy compliance documentation shall sign a statement that the documentation is accurate and complete.

2. **Application for a building permit.** Each application for a building permit subject to Part 6, shall contain at least one copy of the documents listed in Sections 10-103(a)2A, 10-103(a)2B and 10-103(a)2C.

   A. For all newly constructed buildings, additions, alterations or repairs regulated by Part 6, the applicant shall file the applicable Certificate(s) of Compliance on the plans. The certificate(s) shall indicate the features and performance specifications needed to comply with Part 6, and shall be approved by the local enforcement agency by stamp or authorized signature.

      For newly constructed low-rise residential buildings demonstrating compliance under the Section 151(c)2 multiple orientation alternative for which compliance requires HERS field verification, the certificate that appears on the plans shall be a copy of the registered Certificate of Compliance from a HERS provider data registry.

      Beginning on October 1, 2010, for all low-rise residential buildings for which compliance requires HERS field verification, the certificate that appears on the plans shall be a copy of the registered Certificate of Compliance from a HERS provider data registry.

      The Certificate(s) of Compliance and supporting documentation shall be readily legible and of substantially similar format and informational order and content to the applicable Certificate(s) of Compliance and supporting documentation in the applicable Residential or Nonresidential Compliance Manual, as defined in Part 6.

   B. Plans and specifications submitted with each application for a building permit shall show the characteristics of each feature, material, component and manufactured device proposed to be installed in order to have the building meet the requirements of Part 6, and of any other feature, material, component or manufactured device that Part 6 requires be indicated on the plans and specifications. Plans and specifications submitted with each application for a building permit for nonresidential buildings, high-rise residential buildings, and hotels/motels shall provide acceptance requirements for code compliance of each feature, material, component or manufactured device when acceptance requirements are required under Part 6. Plans and specifications for nonresidential buildings, high-rise residential buildings, and hotels/motels shall require, and indicate with a prominent note on the plans, that within 90 days after the enforcement agency issues a permanent final occupancy permit, record drawings be

provided to the building owner. If any characteristic is materially changed before final construction and installation, such that the building may no longer comply with Part 6, the building must be brought back into compliance and so indicated on amended plans, specifications, and Certificate(s) of Compliance that shall be submitted to the enforcement agency. Such characteristics shall include the efficiency (or other characteristic regulated by Part 6) of each device.

C. All documentation necessary to demonstrate compliance for the building, and of the sections of Part 6 with which the building is intended to comply shall be submitted with each application for a building permit. The forms used to demonstrate compliance shall be readily legible and of substantially similar format and informational order and content to the applicable forms in the Residential or Nonresidential Compliance Manual, as defined in Part 6.

3. **Installation Certificate and Certificate of Acceptance.**

A. **Installation Certificate.** For all buildings, the person with overall responsibility for construction or the person(s) responsible for the installation of features, materials, components or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations shall submit Installation Certificate(s) as specified in this section.

For newly constructed low-rise residential buildings demonstrating compliance under the Section 151(c)2 multiple orientation alternative for which compliance requires HERS field verification, the person(s) responsible for the installation(s) that requires HERS field verification, or their authorized representative(s), shall submit the applicable sections of the Installation Certificate(s) for retention to a HERS provider data registry in accordance with procedures specified in Reference Residential Appendix RA2. Submittals to the HERS provider data registry shall be made electronically.

Beginning on October 1, 2010, for all low-rise residential buildings for which compliance requires HERS field verification, the person(s) responsible for the installation(s) that requires HERS field verification, or their authorized representative(s), shall submit the applicable sections of the Installation Certificate(s) for retention to a HERS provider data registry in accordance with procedures specified in Reference Residential Appendix RA2. Submittals to the HERS provider data registry shall be made electronically.

For all buildings, a copy of the Installation Certificate(s) shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. For installations that require HERS field verification, registered copies from a HERS provider data registry of the applicable sections of the Installation Certificate(s) shall be posted or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Installation Certificate(s) to be posted upon completion of that portion. A copy of the Installation Certificate(s) as specified in this section shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

These certificates shall:

i. Identify the features, materials, components or manufactured devices required to verify compliance with the Appliance Efficiency Regulations and Part 6.

ii. State the number of the building permit under which the construction or installation was performed. Sections of the certificate(s), for which submittal to a HERS provider data registry is required, shall display the unique registration number assigned by the HERS provider data registry.

iii. Include a certification statement indicating that the installed features, materials, components or manufactured devices conform to the Appliance Efficiency Regulations and Part 6 and the requirements for such features, materials, components or manufactured devices given in the plans and specifications and the Certificate(s) of Compliance approved by the local enforcement agency.

iv. Be signed by the individual eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or by their authorized representative. If more than one person has responsibility for building construction, each person shall prepare and sign the part of the document applicable to the portion of the construction for which they are responsible; alternatively, the person with chief responsibility for construction shall prepare and sign the document for the entire construction. The signatures shall be original signatures on paper documents or electronic signatures on electronic documents in accordance with applicable requirements specified in Section 10-103(a)3A, Reference Residential Appendix RA2, and Reference Nonresidential Appendix NA1.

B. **Certificate of Acceptance.** For all new nonresidential buildings, high-rise residential buildings and hotels/motels designated to allow use of an occupancy group or type regulated by Part 6, the applicant shall submit a Certificate(s) of Acceptance to the enforcement agency prior to receiving a final occupancy permit. A copy of the Certificate(s) of

Acceptance shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Acceptance to be posted upon completion of that portion. A copy of the Certificate(s) of Acceptance shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

These certificates shall:

i. Identify the acceptance requirements to which the applicant must conform as indicated in the plans and specifications submitted under Section 10-103(a), and as specified in the Reference Nonresidential Appendix NA7.

ii. State the number of the building permit under which the construction or installation was performed.

iii. Include a certification statement indicating that the applicant has demonstrated compliance with the acceptance requirements as indicated in the plans and specifications submitted under Section 10-103(a) and in accordance with applicable acceptance requirements and procedures specified in the Reference Nonresidential Appendix NA7, and confirms that Installation Certificate(s) described in Section 10-103(a)3A are posted, or made available with the building permit(s) issued for the building.

iv. Be signed by the individual eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or by their authorized representative. If more than one person has responsibility for building construction, each person shall prepare and sign the part of the document applicable to the portion of construction for which they are responsible; alternatively, the person with chief responsibility for construction shall prepare and sign the document for the entire construction.

4. **Insulation Certificate.** After installing wall, ceiling or floor insulation, the installer shall make available to the enforcement agency or post in a conspicuous location in the building a certificate signed by the installer stating that the installation is consistent with the plans and specifications described in Section 10-103(a)2A and for which the building permit was issued and conforms with the requirements of Part 6. The certificate shall also state the manufacturer's name and material identification, the installed *R*-value, and (in applications of loose-fill insulation) the minimum installed weight per square foot consistent with the manufacturer's labeled installed design density for the desired *R*-value.

5. **Certificate of Field Verification and Diagnostic Testing.** For all buildings for which compliance requires HERS field verification, a certified HERS rater shall conduct all required HERS field verification and diagnostic testing in accordance with applicable procedures specified in Reference Appendices RA2, RA3, NA1 and NA2. Certificates of Field Verification and Diagnostic Testing shall be completed, signed and dated by the certified HERS rater who performed the field verification and diagnostic testing services. The Certificate(s) of Field Verification and Diagnostic Testing shall be submitted for retention to a HERS provider data registry in accordance with procedures in Reference Residential Appendix RA2 and Reference Nonresidential Appendix NA1. Submittals to the HERS provider data registry shall be made electronically. A copy of the registered Certificate(s) of Field Verification and Diagnostic Testing shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Field Verification and Diagnostic Testing to be posted upon completion of that portion. A copy of the registered Certificate(s) of Field Verification and Diagnostic Testing shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

These certificates shall:

i. Identify the installed features, materials, components or manufactured devices that require HERS verification for compliance with the Appliance Efficiency Regulations and Part 6 as specified on the Certificate of Compliance for the building.

ii. State the number of the building permit under which the construction or installation was performed, display the unique registration number assigned by the HERS provider data registry, and provide any additional information required by Reference Appendices RA2, RA3, NA1 or NA2.

iii. Include a certification statement indicating that the installed feature(s), material(s), component(s) or manufactured device(s) requiring HERS verification complies with the applicable HERS verification requirements in Reference Appendices RA2, RA3, NA1or NA2, and also conforms to the requirements specified on the Certificate(s) of Compliance approved by the local enforcement agency, and confirms that the same feature(s), material(s), component(s) or manufactured device(s) is identified on the applicable sections of the registered Installation Certificate(s), signed and submitted by the person(s) responsible for the installation as described in Section 10-103(a)3A.

iv. Be signed and dated by the HERS rater who performed the field verification and diagnostic testing services. The signatures shall be electronic signatures on electronic documents.

Exception to Section 10-103(a): Enforcing agencies may exempt nonresidential buildings that have no more than 1,000 square feet of conditioned floor area in the entire building and an occupant load of 49 persons or less from the documentation requirements of Section 10-103(a), provided a statement of compliance with Part 6 is submitted and signed by a licensed engineer or the licensed architect with chief responsibility for the design.

(b) **Compliance, operating, maintenance and ventilation information to be provided by builder.**

1. **Compliance information.**

   A. For low-rise residential buildings, at final inspection, the enforcement agency shall require the builder to leave in the building the applicable completed, signed and dated compliance documents for the building owner at occupancy. For low-rise residential buildings, such information shall, at a minimum, include information indicated on forms Certificate of Compliance (CF-1R), Installation Certificate (CF-6R), and for buildings for which compliance requires HERS field verification, Certificate(s) of Field Verification and Diagnostic Testing (CF-4R). These forms shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).

   B. For nonresidential buildings, high-rise residential buildings and hotels/motels, at final inspection, the enforcement agency shall require the builder to leave in the building the applicable completed, signed and dated compliance documents for the building owner at occupancy. For nonresidential buildings, high-rise residential buildings and hotels/motels, such information shall include all ENV, MECH, LTG and OLTG compliance and acceptance forms. These forms shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).

2. **Operating information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, operating information for all applicable features, materials, components and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components and mechanical devices correctly and efficiently. The instructions shall be consistent with specifications set forth by the Executive Director. For low-rise residential buildings, such information shall be contained in a folder or manual which provides all information specified in Section 10-103(b). This operating information shall be in paper or electronic format.

   For dwelling units, buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating the feature, material, component or mechanical device installed in the building. This operating information shall be in paper or electronic format.

3. **Maintenance information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, maintenance information for all features, materials, components and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device.

   For dwelling units, buildings or tenant spaces that are not individually owned and operated or are centrally operated, such information shall be provided to the person(s) responsible for maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

4. **Ventilation information.**

   A. For low-rise residential buildings, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, a description of the quantities of outdoor air that the ventilation system(s) are designed to provide to the building's conditioned space, and instructions for proper operation and maintenance of the ventilation system. For buildings or tenant spaces that are not individually owned and operated or are centrally operated, such information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component or mechanical ventilation device installed in the building. This information shall be in paper or electronic format.

   B. For nonresidential buildings, high-rise residential buildings and hotels/motels, the enforcement agency shall require the builder to provide the building owner at occupancy a description of the quantities of outdoor and recirculated air that the ventilation systems are designed to provide to each area. For buildings or tenant spaces that are not individually owned and operated or are centrally operated, such information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

(c) **Equipment information to be provided by manufacturer or supplier.** The manufacturer or supplier of any manufactured device shall, upon request, provide to building designers and installers information about the device. The information shall include the efficiency (and other characteristics regulated by Part 6). This information shall be in paper or electronic format.

(d) **Enforcement agency requirements.**

1. **Permits.** An enforcement agency shall not issue a building permit for any construction unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 that are in effect on the date the building permit was applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

   If a building permit has been previously issued, there has been no construction under the permit, and the permit has expired, the enforcement agency shall not issue a new permit unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 in effect on the date the new permit is applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

   "Determines in writing" includes, but is not limited to, approval of a building permit with a stamp normally used by the enforcement agency.

2. **Inspection.** The enforcement agency shall inspect new construction to determine whether it is consistent with the agency's approved plans and specifications, and complies with Part 6. Final certificate of occupancy shall not be issued until such consistency and compliance is verified. For Occupancy Group R-3, final inspection shall not be complete until such consistency and compliance is verified.

   Such verification shall include determination that:

   A. All installed features, materials, components or manufactured devices, regulated by the Appliance Efficiency Regulations or Part 6, are indicated when applicable on the Installation Certificate(s), Certificate(s) of Acceptance and Certificate(s) of Field Verification and Diagnostic Testing, and are consistent with such features, materials, components or manufactured devices given in the plans and specifications and the Certificate(s) of Compliance approved by the local enforcement agency. This certificate shall include information specified in Section 10-103(a)3A.

   B. All required Installation Certificates are posted, or made available with the building permit(s) issued for the building, and are made available to the enforcement agency for all applicable inspections, and that all required Installation Certificates conform to the specifications of Section 10-103(a)3A.

   C. All required Certificates of Acceptance are posted, or made available with the building permit(s) issued for the building, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Acceptance conform to the specifications of Section 10-103(a)3B.

   D. All required Certificates of Field Verification and Diagnostic Testing are posted, or made available with the building permit(s) issued for the building, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Field Verification and Diagnostic Testing conform to the specifications of Section 10-103(a)5.

   Exception to Section 10-103(d): For newly constructed buildings that meet the requirements of the New Solar Homes Partnership (NSHP) as specified in the NSHP Guidebook, the enforcement agency may waive the plan check and inspection of all measures other than the mandatory measures in the building.

Authority: Section 25402, Public Resources Code.

Reference: Section 25402, Public Resources Code.

HISTORY:

1. Amendment of subsection (e) filed 1-19-84; effective thirtieth day thereafter (Register 84, No. 3).
2. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
3. Editorial correction of subsection (b) filed 2-5-85; effective upon filing pursuant to Government Code Section 11346.2 (d) (Register 85, No. 6).
4. Amendment of subsection (a) filed 12-4-86; effective thirtieth day thereafter (Register 87, No. 1).
5. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-103, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.
6. (CEC 2/94) Regular order by the California Energy Commission to amend Section 10-103 (a) 1, 2, 3 and 4; (b) 1, 2 and 3; (d) 2, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state May 24, 1995; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on May 23, 1995.

10-104. Exceptional designs.

Note: See Section 10-109 for approval of calculation methods and Alternative Component Packages.

(a) **Requirements.** If a building permit applicant proposes to use a performance compliance approach, and the building designs cannot be adequately modeled by an approved calculation method, an applicant shall be granted a building permit if the Commission finds:

1. That the design cannot be adequately modeled with an approved calculation method;
2. Using an alternative evaluation technique, that the design complies with Part 6; and
3. That the enforcement agency has determined that the design complies with all other legal requirements.

(b) **Applications.** The applicant shall submit four copies of a signed application with the following materials to the Executive Director:

1. A copy of the plans and specifications required by Section 10-103(a)2A;
2. A statement explaining why meeting the energy budget cannot be demonstrated using an approved calculation method;
3. Documentation from the enforcement agency stating that:

   A. Meeting the energy budget requirements cannot be demonstrated using an approved calculation method; and

B. The design complies with all other legal requirements; and

4. A detailed evaluation of the energy consumption of the proposed building and the building's materials, components, and manufactured devices proposed to be installed to meet the requirements of Part 6, using an alternative evaluation technique. The evaluation shall include a copy of the technique, instructions for its use, a list of all input data, and all other information required to replicate the results.

Authority: Sections 25402 and 25402.1, Public Resources Code.

Reference: Sections 25402 and 25402.1, Public Resources Code.

HISTORY:

1. New section filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
2. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-104, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-105. Enforcement by the Commission.

(a) **Where there is no local enforcement agency.** Before new construction may begin in an area where there is no local enforcement agency, the Executive Director shall determine in writing that the building design conforms to the requirements of Part 6. The person proposing to construct the building shall submit the information described in Sections 10-103(a)2 and 10-103(a)3 to the Executive Director when such a determination is sought.

(b) **Where building construction is under the jurisdiction of a state agency.** Pursuant to Public Resources Code Section 25402.1(g)(5), no construction of any state building shall commence until the Department of General Services or the state agency that otherwise has jurisdiction over the property determines that the construction is designed to comply with the requirements of Part 6 and confirms that the documentation requirements of Section 10-103(a)1 have been met, and that the plans indicate the features and performance specifications needed to comply with Part 6. The responsible state agency shall notify the Commission's Executive Director of its determination.

(c) **Where the enforcement agency fails to enforce.** If an enforcement agency fails to enforce the requirements of this article or of Part 6, the Commission, after furnishing 10 days written notice, may condition building permit issuance on submission of the information described in Sections 10-103(a)2 and 10-103(a)3 to the Executive Director and on his or her written determination that proposed construction conforms to the requirements of Part 6.

Authority: Code Section 25402.1, Public Resources.

Reference: Section 25402.1, Public Resources Code.

HISTORY:

1. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
2. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-105, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-106. Locally adopted energy standards.

(a) **Requirements.** Local governmental agencies may adopt and enforce energy standards for newly constructed buildings, additions, alterations, and repairs provided the Commission finds that the standards will require buildings to be designed to consume no more energy than permitted by Part 6. Such local standards include, but are not limited to, adopting the requirements of Part 6 before their effective date, requiring additional energy conservation measures, or setting more stringent energy budgets. Local adoption of the requirements of Part 6 before their effective date is a sufficient showing that the local standards meet the requirements of this section and Section 25402.1(f)(2) of the Public Resources Code; in such a case only the documentation listed in Section 10-106(b), and a statement that the standards are those in Part 6, need be submitted.

(b) **Documentation application.** Local governmental agencies wishing to enforce locally adopted energy conservation standards shall submit four copies of an application with the following materials to the Executive Director:

1. The proposed local energy standards.
2. A study with supporting analysis showing how the local agency determined energy savings.
3. A statement that the local standards will require buildings to be designed to consume no more energy than permitted by Part 6.
4. The basis of the agency's determination that the standards are cost effective.

Authority: Section 25402.1, Public Resources Code.

Reference: Section 23402.1, Public Resources Code.

HISTORY:

1. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
2. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-106, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-107. Interpretations.

(a) The Commission may make a written determination as to the applicability or interpretation of any provision of this article or of Part 6, upon written application, if a dispute concerning a provision arises between an applicant for a building permit and the enforcement agency, and the dispute has been heard by the local board of permit appeals or other highest local review body. Notice of any such appeal, including a summary of the dispute and the section of the regulations involved, shall if possible be sent to the Commission by the enforcing agency 15 days before the appeal is heard, and the result of the appeal shall be sent to the Commission within 15 days after the decision is made. Either party to the dispute may apply for a determination but shall concurrently deliver a copy of the application to the other party. The determinations are binding on the parties.

(b) The Executive Director may, upon request, give written advice concerning the meaning of any provision of this article or of Part 6. Such advice is not binding on any person.

Authority: Section 25402.1, Public Resources Code.

Reference: Section 23402.1, Public Resources Code.

HISTORY:

1. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
2. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-107, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-108. Exemption.

(a) **Requirements.** The Commission may exempt any building from any provision of Part 6 if it finds that:

1. Substantial funds had been expended in good faith on planning, designing, architecture or engineering of the building before the adoption date of the provision.
2. Compliance with the requirements of the provision would be impossible without both substantial delays and substantial increases in costs of construction above the reasonable costs of the measures required to comply with the provision.

(b) **Application.** The applicant shall submit four copies of a signed application with the following materials to the Executive Director:

1. A summary of the claimant's contracts for the project;
2. A summary of internal financial reports on the project;
3. Dated schedules of design activities; and
4. A progress report on project completion.

Authority: Section 25402.1, Public Resources Code.

Reference: Section 25402.1, Public Resources Code.

HISTORY:

1. Amendment filed 8-11-83; effective thirtieth day thereafter (Register 83, No. 33).
2. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
3. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-108, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-109. Calculation methods and alternative component packages.

Note: See Section 10-104 for approval of exceptional designs.

(a) **Public domain computer programs.** In addition to the present approved public domain computer programs, the Commission may, upon written application or its own motion, approve additional public domain computer programs that may be used to demonstrate that proposed building designs meet energy budgets.

1. The Commission shall ensure that users' manuals or guides for each approved program are available.
2. The Commission shall approve a program only if, when it models building designs or features, it predicts energy consumption substantially equivalent to that predicted by the public domain computer program.

(b) **Alternative calculation methods (all occupancies).** In addition to public domain computer programs, the Commission may approve alternative calculation methods (ACMs) that applicants for building permits may then use to demonstrate compliance with the performance standards (energy budgets) in Part 6.

1. **General requirements.** To obtain approval for a compliance software, the proponent shall submit an application that demonstrates that the compliance software:
   A. Makes no changes in any input parameter values specified by the Commission in Item 2 below.
   B. Provides input and output documentation that facilitates the enforcement agency's review and meets the formatting and content criteria found in the Residential or Nonresidential ACM Manual;
   C. Is supported by clear and concise instructions for using the method to demonstrate that the energy budget requirements of Part 6 are met; and
   D. Is reliable and accurate relative to the appropriate public domain computer program.
2. **Procedural requirements for alternative calculation methods.** In order to obtain approval of a compliance software, the applicant must comply with the requirements, specifications, and criteria set forth in the Residential or Nonresidential ACM Manual. The ACM Manuals specify application requirements, minimum modeling capabilities, required output forms and instructions, input assumptions, testing requirements, test approval criteria, vendor requirements and other related requirements. The requirements, specifications and criteria in the Residential or Nonresidential ACM Manuals are hereby incorporated by reference.

   Note: Copies of the ACM Manuals may be obtained from the Energy Commission's website at: www.energy.ca.gov/title24.
3. **Application.** The applicant shall submit four copies of a signed application form specified by the Executive Director. The application shall include the following materials:
   A. The method's analytical capabilities and limitations with respect to the occupancies, designs, materials and devices covered by Part 6;
   B. A demonstration that the criteria in Section 10-109(b) are met;
   C. Each of the items on the "Application Checklist" in the Residential or Nonresidential ACM Manual; and
   D. An initial fee of two thousand dollars ($2,000). The total fee shall cover the Commission's cost of reviewing and analyzing the proposed method. After the Commission determines the total costs, if the costs exceed the initial fee, the Commission shall assess additional fees to cover those costs; if the costs are less than the initial fee, the Commission shall refund the difference to the applicant.
4. **Exceptional methods.** If the alternative calculation method analyzes designs, materials or devices that cannot be adequately modeled using the public domain computer programs, the method may be approved as an exceptional method. Applications for approval of exceptional methods shall include theoretical and

empirical information that verify the method's accuracy, and shall also include the other documentation and fees required by Section 10-109(b).

5. **Approval.** The Commission may approve a method unconditionally, may restrict approval to specified occupancies, designs, materials or devices, or may reject the application.
6. **Resubmittal.** An applicant may resubmit a rejected method or may request modification of a restricted approval. Such application shall include the information specified in Section 10-109(b) and shall indicate how the method has been changed to enhance its accuracy or capabilities.
7. **Modification.** Whenever an approved calculation method is changed in any way, the method shall be resubmitted under this section for reapproval. The Executive Director may waive any of the requirements of this paragraph for nonsubstantive changes.

(c) The Commission may modify or withdraw certification of a program or method under Section 10-109(a) or 10-109(b) based on approval of other programs or methods that are more suitable.

(d) **Alternative component packages.** The Commission may approve any alternative component package, in addition to the packages in Sections 143(a) and 151(f) of Part 6, which it determines will meet the energy budgets and is likely to apply to a significant percentage of newly constructed buildings or to a significant segment of the building construction and design community. Applications for approval of packages shall use application forms specified by the Executive Director and shall be subject to the same fee requirements set forth in subsection (b).

(e) **Publication of Commission determinations.** The Executive Director shall annually publish a manual, newsletter or other administrative guide containing determinations made by the Commission pursuant to this section on or before December 31 of the calendar year.

Authority: Section 25402.1, Public Resources Code.
Reference: Section 25402.1, Public Resources Code.
HISTORY:

1. New section filed 12-9-81; designated effective 1-15-82 (Register 81, No. 50).
2. Amendment filed 8-11-83; effective thirtieth day thereafter (Register 83, No. 33).
3. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
4. Amendment of subsections (b), (d) and (e) filed 12-4-86; effective thirtieth day thereafter (Register 87, No. 1).
5. Change without regulatory effect of subsection (d) filed 4-5-88; operative 5-5-88 (Register 88, No. 17).
6. Amendment of subsections (b) and (d) filed 1-20-89; operative 2-19-89 (Register 89, No. 4).
7. (CEC 1/92) Regular order by the California Energy Commission to amend Section 10-109, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state June 12, 1992; publication date July 15, 1992; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on June 8, 1992.

10-110. Procedures for consideration of applications under Sections 10-104, 10-106, 10-108 and 10-109.

(a) If the application is complete, the Executive Director shall make the application available to interested parties. Comments from interested parties must be submitted within 60 days after acceptance of the application.

(b) Within 75 days of receipt of an application, the Executive Director may request any additional information needed to evaluate the application. If the additional information is incomplete, consideration of the application will be delayed until the applicant submits complete information.

(c) Within 75 days of receipt of the application, the Executive Director may convene a workshop to gather additional information from the applicant and other interested parties. Interested parties will have 15 days after the workshop to submit additional information regarding the application.

(d) Within 90 days after the Executive Director receives the application, or within 30 days after receipt of complete additional information requested under Section 10-110(b) or within 60 days after the receipt of additional information submitted by interested parties under Section 10-110(c), whichever is later, the Executive Director shall submit to the Commission a written recommendation on the application.

(e) The application and the Executive Director's recommendation shall be placed on the consent calendar and considered at the next business meeting after submission of the recommendation. The matter may be removed from the consent calendar at the request of any person.

(f) The Executive Director may charge a fee to recover the costs of processing and reviewing applications.

(g) All applicants have the burden of proof to establish that their applications should be granted.

Authority: Section 25402.1, Public Resources Code.
Reference: Section 25402.1, Public Resources Code.
HISTORY:

1. New section filed 12-9-81; designated effective 1-15-82 (Register 81, No. 50).
2. Amendment filed 12-27-84; designated effective 1-1-85 pursuant to Government Code Section 11346.2 (d) (Register 84, No. 52).
3. Amendment filed 12-4-86; effective thirtieth day thereafter (Register 87, No. 1).

10-111. Certification and labeling of fenestration product U-factors, solar heat gain coefficients and air leakage. This section establishes rules for implementing labeling and certification requirements relating to U-factors, solar heat gain coefficients (SHGCs) and air leakage for fenestration products under Section 116(a) of Title 24, California Code of Regulations, Part 6. This section also provides for designation of the National Fenestration Rating Council (NFRC) as the supervisory entity responsible for administering the state's certification program for fenestration products, provided NFRC meets specified criteria.

(a) **Labeling requirements.**

1. **Temporary labels.** Every manufactured and site-built fenestration product or fenestration system installed in construction subject to Title 24, Part 6 shall have attached to it a clearly visible temporary label or have an associated label certificate that lists the U-factor, the solar heat gain coefficient (SHGC) of that product and the method used to derive those values, and for manufactured fenestration products certifies compliance with air leakage requirements of Section 116(a)1.

A. Fenestration products rated and certified using NFRC 100, NFRC 200 or NFRC 400 Rating Procedures. The manufacturer shall stipulate that the ratings were determined in accordance with applicable NFRC procedures. For manufactured fenestration products, a temporary label certificate approved by the supervisory entity meets the requirements of this section. For site-built fenestration products, a label certificate approved by the supervisory entity meets the requirements of this section.

B. Fenestration products rated using a default value approved by the Commission. For manufactured fenestration products, a temporary label with the words "CEC Default U-factor," followed by the appropriate default U-factor specified in Section 116(a)2 and with the words "CEC Default SHGC," followed by the appropriate default SHGC specified in Section 116(a)3 meets the requirements of this section. For site-built fenestration products, a default label certificate approved by the Commission meets the requirements of this section.

C. The temporary label shall also certify that the product complies with the air leakage requirements of Section 116(a)1 of the Standards.

2. **Permanent labels.** If a product is rated using the NFRC Rating Procedure, it shall have a permanent label that is either a stand-alone label, an extension or tab of an existing permanent certification label being used by the manufacturer/responsible party, or series of marks on the product. The permanent label, coupled with observable product characteristics, can be used to trace the product to certification information on file with the supervisory entity or to a directory of certified products, published by the supervisory entity. For site-built fenestration products, a label certificate approved by the supervisory entity meets the requirements of this section.

Exception to Section 10-111(a): Field-fabricated fenestration products.

(b) **Certification requirements.**

1. **Certification to default ratings.** If a product's U-factor and SHGC are default values approved by the Commission as specified in Sections 116(a)2 and 116(a)3, the U-factor and SHGC shall be certified by the manufacturer.

A. A temporary label, affixed to the product, that meets the requirements of Section 10-111(a)1B meets this requirement.

B. If the product claims the default U-factor for a thermal break product, the manufacturer shall also certify on the label that the product meets the thermal-break product criteria, specified on the default table, on which the default value is based. Placing the terms "Meets Thermal Break Default Criteria" on the default temporary label or default label certificate meets this requirement.

2. **Certification to NFRC Rating Procedure.** If a product's U-factor or SHGC is based on the NFRC Rating Procedure, the U-factor or SHGC shall be certified by the manufacturer according to the procedures of an independent certifying organization approved by the Commission.

A. A temporary label, affixed to the product or label certificate for site-built fenestration, meeting the requirements of Section 10-111(a) certified by the independent certifying organization complies with this requirement.

B. An "independent certifying organization approved by the Commission" means any organization authorized by the supervisory entity to certify U-factor ratings and solar heat gain coefficient ratings in accordance with the NFRC Rating Procedure. If the Commission designates the NFRC as the supervisory entity, any independent certification and Inspection Agency (IA) licensed by NFRC shall be deemed to be an "independent certifying organization approved by the Commission."

C. The "supervisory entity" means the National Fenestration Rating Council (NFRC), except as provided in paragraph (c) 1.

Exception to Section 10-111(b): Field-fabricated fenestration products.

(c) **Designation of supervisory entity.** The National Fenestration Rating Council shall be the supervisory entity to administer the certification program relating to U-factors and solar heat gain coefficient ratings for fenestration products, provided the Commission determines that the NFRC meets the criteria in paragraph (d).

1. The Commission may consider designating a supervisory entity other than NFRC only if the Commission determines that the NFRC cannot meet the criteria in paragraph (d). Such other supervisory entity shall meet the criteria in paragraph (d) prior to being designated.
2. The Commission shall periodically review, at least annually, the structure and operations of the supervisory entity to ensure continuing compliance with the criteria in paragraph (d).

(d) **Criteria for supervisory entity.**

1. Membership in the entity shall be open on a nondiscriminatory basis to any person or organization that has an interest in uniform thermal performance ratings for fenestration products, including, but not limited to, members of the fenestration industry, glazing infill industry, building industry, design professionals, specifiers, utilities, government agencies and public interest organizations. The membership shall be composed of a broad cross section of those interested in uniform thermal performance ratings for fenestration products.
2. The governing body of the entity shall reflect a reasonable cross section of the interests represented by the membership.
3. The entity shall maintain a program of oversight of product manufacturers, laboratories, and independent

certifying organizations that ensures uniform application of the NFRC Rating Procedures, labeling and certification, and such other rating procedures for other factors affecting energy performance as the NFRC and the Commission may adopt.

4. The entity shall require manufacturers and independent certifying organizations within its program to use only laboratories accredited by the supervisory entity to perform simulations and tests under the NFRC Rating Procedure.
5. The entity shall maintain appropriate guidelines for testing and simulation laboratories, manufacturers and certifying agencies, including requirements for adequate:

   A. Possession and calibration of equipment;

   B. Education, competence and training of personnel;

   C. Quality control;

   D. Record keeping and reporting;

   E. Periodic review (including, but not limited to, blind testing by laboratories; inspections of products; and inspections of laboratories, manufacturing facilities and certifying agencies);

   F. Challenges to certified ratings; and

   G. Guidelines to maintain the integrity of the program, including, but not limited to, provisions to avoid conflicts of interest within the rating and certification process.
6. The entity shall be a nonprofit organization and shall maintain reasonable, nondiscriminatory fee schedules for the services it provides and shall make its fee schedules, the financial information on which fees are based, and financial statements available to its members for inspection.
7. The entity shall provide hearing processes that give laboratories, manufacturers and certifying agencies a fair review of decisions that adversely affect them.
8. The entity shall maintain a certification policy committee whose procedures are designed to avoid conflicts of interest in deciding appeals, resolving disputes and setting policy for the certifying organizations within its program.
9. The entity shall publish at least annually a directory of products certified and decertified within its program.
10. The entity itself shall be free from conflict-of-interest ties or to undue influence from any particular fenestration manufacturing interest(s), testing or simulation lab(s), or independent certifying organization(s).
11. The entity shall provide or authorize the use of labels and label certificates for site-built fenestration products that can be used to meet the requirements of Section 116(a)1 and 2, and this section.
12. The entity's certification program shall allow for multiple participants in each aspect of the program to provide for competition between manufacturers, testing labs, simulation labs, and independent certifying organizations.

(e) **Certification for other factors.** Nothing in this section shall preclude any entity, whether associated with a U-factor and SHGC certification program or not, from providing certification services relating to factors other than U-factors and SHGC for fenestration products.

Authority: Section 25402.1, Public Resources Code.

Reference: Section 25402.1, Public Resources Code.

HISTORY:

1. (CEC/2/92) Regular order by the California Energy Commission to adopt Section 10-111, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state August 10, 1993; effective 30 days thereafter (September 9, 1993). Approved as a regular order by the California Building Standards Commission on August 2, 1993.
2. (CEC 2/94) Regular order by the California Energy Commission to amend Section 10-111 (a) 1 B, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state August 24, 1993; effective 30 days thereafter. Approved as a regular order by the California Building Standards Commission on August 2, 1995.

10-112. Criteria for default tables.

(a) The Commission shall maintain tables of default U-factors and SHGCs for use as an alternative to U-factors and SHGCs derived based on the NFRC Rating Procedure. The default values shall meet the following criteria:

1. The values shall be derived from simulations of products using the same computer simulation program(s) used in the NFRC Rating Procedure.
2. The default values shall be set so that they do not provide to any significant number of products a lower U-factor or SHGC than those products would obtain if they were rated using the full NFRC Rating Procedure.

(b) The Commission shall periodically review and revise the default tables as necessary to ensure that the criteria are met.

Authority: Section 25402.1, Public Resources Code.

HISTORY:

1. (CEC/2/92) Regular order by the California Energy Commission to adopt Section 10-112, Part 1, Title 24, California Code of Regulations. Filed with the secretary of state August 10, 1993; effective 30 days thereafter (September 9, 1993). Approved as a regular order by the California Building Standards Commission on August 2, 1993.

10-113. Certification and labeling of roofing product reflectance and emittance. This section establishes rules for implementing labeling and certification requirements relating to reflectance and emittance for roofing products for showing compliance with Sections 141, 142, 143(a)1, 149(b)1B, 151(f)12, 152(b)1H, and 152(b)2 of Title 24, California Code of Regulations, Part 6. This section also provides for designation of the Cool Roof Rating Council (CRRC) as the supervisory entity responsible for administering the state's certification program for roofing products, provided CRRC meets specified criteria.

(a) **Labeling requirements.** Every roofing product installed in construction to take compliance credit or meet the Prescriptive requirements for reflectance and emittance under Sections 141, 142, 143(a), 149(b)1B, 151(f)12, 152(b)1H or 152(b)2, shall have a clearly visible packaging label that lists the emittance and the initial and 3-year aged reflectances tested in accordance with CRRC-1.

Packaging for liquid-applied roof coatings shall state the product meets the requirements specified in Section 118(i)4.

(b) **Certification requirements.** Every roofing product installed in construction to take compliance credit or meet the Prescriptive requirements for reflectance and emittance under Sections 141, 142, 143 (a)1, 149 (b)1B, 151 (f)12, 152 (b)1H or 152(b)2 shall be certified by CRRC or another supervisory entity approved by the Commission pursuant to Section 10-113(c).

(c) **Designation of supervisory entity.** The Cool Roof Rating Council shall be the supervisory entity to administer the certification program relating to reflectance and emittance ratings for roofing products, provided the Commission determines that the CRRC meets the criteria in paragraph (d).

1. The Commission may consider designating a supervisory entity other than CRRC only if the Commission determines that the CRRC cannot meet the criteria in paragraph (d). Such other supervisory entity shall meet the criteria in paragraph (d) prior to being designated.
2. The Commission shall periodically review, at least annually, the structure and operations of the supervisory entity to ensure continuing compliance with the criteria in paragraph (d).

(d) **Criteria for supervisory entity.**

1. Membership in the entity shall be open on a nondiscriminatory basis to any person or organization that has an interest in uniform performance ratings for roofing products, including, but not limited to, members of the roofing industry, building industry, design professionals, specifiers, utilities, government agencies and public interest organizations. The membership shall be composed of a broad cross section of those interested in uniform thermal performance ratings for roofing products.
2. The governing body of the entity shall reflect a reasonable cross section of the interests represented by the membership.
3. The entity shall maintain a program of oversight of product manufacturers, laboratories and independent certifying organizations that ensures uniform application of the CRRC testing and rating procedures, labeling and certification, and such other rating procedures for other factors affecting energy performance as the CRRC and the Commission may adopt.
4. The entity shall require manufacturers and independent certifying organizations within its program to use only laboratories accredited by the supervisory entity to perform tests under the CRRC rating procedure.
5. The entity shall maintain appropriate guidelines for testing laboratories and manufacturers, including requirements for adequate:

   A. Possession and calibration of equipment;

   B. Education, competence, and training of personnel;

   C. Quality control;

   D. Record keeping and reporting;

   E. Periodic review including, but not limited to, blind testing by laboratories; inspections of products; and inspections of laboratories, and manufacturing facilities;

   F. Challenges to certified ratings; and

   G. Guidelines to maintain the integrity of the program, including, but not limited to, provisions to avoid conflicts of interest within the rating and certification process.
6. The entity shall be a nonprofit organization and shall maintain reasonable, nondiscriminatory fee schedules for the services it provides, and shall make its fee schedules, the financial information on which fees are based, and financial statements available to its members for inspection.
7. The entity shall provide hearing processes that give laboratories, manufacturers and certifying agencies a fair review of decisions that adversely affect them.
8. The entity shall maintain a certification policy committee whose procedures are designed to avoid conflicts of interest in deciding appeals, resolving disputes and setting policy for the certifying organizations in its program.
9. The entity shall publish at least annually a directory of products certified and decertified within its program.
10. The entity itself shall be free from conflict-of-interest ties or to undue influence from any particular roofing product manufacturing interest(s), testing or independent certifying organization(s).
11. The entity shall provide or authorize the use of labels that can be used to meet the requirements for showing compliance with the requirements of Sections 141, 142, 143(a)1, 149(b)1B, 151(f)12, 152(b)1H and 152(b)2, and this section.
12. The entity's certification program shall allow for multiple participants in each aspect of the program to provide for competition between manufacturers and between testing labs.

Authority: Section 25402.1, Public Resources Code.

Reference: Section 25402.1, Public Resources Code.

10-114. Determination of outdoor lighting zones, local outdoor lighting ordinances and administrative rules for use. This section establishes rules for implementing outdoor lighting zones and rules for adopting specific outdoor light levels to show compliance with Section 147 of Title 24, California Code of Regulations, Part 6.

(a) **Lighting zones.** Exterior lighting allowances in California vary by Lighting Zones (LZ).

(b) **Lighting zone characteristics.** Table 10-114-A specifies the relative ambient illumination level and the statewide default location for each lighting zone.

(c) **Amending the lighting zone designation.** A local jurisdiction may officially adopt changes to the lighting zone designation of an area by following a public process that allows for formal public notification, review and comment about the proposed change. The local jurisdiction may determine areas where Lighting Zone 4 is applicable and may increase or decrease the lighting zones for areas that are in State Default Lighting Zones 1, 2 and 3, as specified in Table 10-114-A.

(d) **Commission notification, amended outdoor lighting zone designation.** Local jurisdictions who adopt changes to the State Default Lighting Zones shall notify the Commission by providing the following materials to the Executive Director:

1. A detailed specification of the boundaries of the adopted Lighting Zones, consisting of the county name, the city name if any, the zip code(s) of the redesignated areas, and a description of the physical boundaries within each zip code.
2. A description of the public process that was conducted in adopting the Lighting Zone changes.
3. An explanation of how the adopted Lighting Zone changes are consistent with the specifications of Section 10-114.

The commission shall have the authority to not allow Lighting Zone changes which the Commission finds to be inconsistent with the specifications of Section 10-114.

(e) **Amending local outdoor ordinances**. A local jurisdiction may officially adopt specific outdoor light levels, which shall be expressed as average or minimum footcandle levels, by following a public process that allows for formal public notification, review and comment about the proposed change.

(f) **Commission notification, local outdoor lighting ordinances.** Local jurisdictions who adopt specific outdoor light levels shall notify the Commission by providing the following materials to the Executive Director:

1. A detailed description of the adopted specific light levels, consisting of the minimum or average light levels adopted, the applications where these light levels apply, and the county name, city name if any, and zip code(s) of all areas covered by the local ordinance.
2. A description of the public process that was conducted in adopting the specific light levels.

TABLE 10-114-A
LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

ZONE	AMBIENT ILLUMINATION	STATEWIDE DEFAULT LOCATION	MOVING UP TO HIGHER ZONES	MOVING DOWN TO LOWER ZONES
LZ1	Dark	Government designated parks, recreation areas and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	A government designated park, recreation area, wildlife preserve or portions thereof, can be designated as LZ2 or LZ3 if they are contained within such a zone.	Not applicable.
LZ2	Low	Rural areas, as defined by the 2000 U.S. Census.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a rural area.	Special districts and government designated parks within a default LZ2 zone may be designated as LZ1 by the local jurisdiction for lower illumination standards, without any size limits.
LZ3	Medium	Urban areas, as defined by the 2000 U.S. Census.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts and government designated parks within a default LZ3 zone may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

HISTORY NOTE APPENDIX FOR CHAPTER 10

Administrative Regulations for the California Energy Commission
(Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (CEC 1/97) Regular order by the California Energy Commission to amend Article 1, 1998 Energy Efficiency Standards. Filed with the secretary of state on December 3, 1997; effective January 22, 1998. Approved by the California Building Standards Commission on November 18, 1997.

2. (CEC-EF 1/01) Emergency adoption of AB 970 energy efficiency standards for residential and nonresidential buildings; CCR, Title 24, Parts 1 and 6. Approved by the California Building Standards Commission on January 31, 2001, and filed with the secretary of state on February 2, 2001, effective June 1, 2001.

Exception: Building energy efficiency standards compliance documentation submitted prior to June 1, 2001, using the Multiple Orientation Alternative to Section 151 (c) shall be used to determine compliance through December 31, 2001.

3. (CEC 03/02) Approval of energy efficiency standards, which adopt by reference the National Fenestration Rating Council's (NFRC) 2002 window rating and labeling procedures; CCR, Title 24, Parts 1 and 6. Approved by the California Building Standards Commission on May 14, 2003, and filed with the Secretary of State on May 16, 2003. Effective June 14, 2003.

4. (CEC 01/03) 2005 building energy efficiency standards approved by the California Building Standards Commission on July 21, 2004, for publication in California Code of Regulations, Title 24, Parts 1 and 6; filed with the Secretary of State September 24, 2004; published April 1, 2005; effective October 1, 2005.

5. (CEC 01/07) Update of 2007 building energy efficiency standards in response to AB 32 (Nuñez, Chap. 488, Stats. of 2006) and SB 1 (Murray, Chap. 132, Stats. of 2006), approved by the California Building Standards Commission on September 11, 2008; filed with the Secretary of State September 12, 2008; effective 30 days after filing with the Secretary of State [Health and Safety Code §18938(c)].

6. Erratum to change the effective date of the supplement published on January 1, 2009 from August 1, 2009 to January 1, 2010.

CHAPTER 11

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF FOOD AND AGRICULTURE (AGR)

(RESERVED)

CHAPTER 12

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF YOUTH AUTHORITY (YA)

(RESERVED)

CHAPTER 13

ADMINISTRATIVE REGULATIONS FOR THE CORRECTIONS STANDARDS AUTHORITY (CSA)

ARTICLE 1
MINIMUM STANDARDS FOR LOCAL DETENTION FACILITIES

13-101. County correctional facility capital expenditure fund.

(a) **Definitions.** The following words where used in this subchapter shall have the meaning hereafter ascribed to them, unless the context of their use clearly requires a different meaning.

BOARD means State Corrections Standards Authority.

COUNTY CORRECTIONAL FACILITY CAPITAL EXPENDITURE FUND means moneys received from the sale of State of California General Obligation Bonds as authorized by the County Correctional Facility Capital Expenditure Bond Act of 1986.

CONTRACT means the written agreement and any amendments thereto between the State Board and a county in which the terms, provisions and conditions governing the funds are stated.

(b) **Fund award conditions.**

1. Prior to entering into a contract with a county, the Board shall ensure that the county is ready to proceed with construction. A county shall be deemed ready to proceed with construction when it has done all of the following:
   A. Received approval by the State Fire Marshal for compliance with fire safety regulations in the plans, specifications and working drawings for the facility to be constructed.
   B. Received approval for compliance with minimum jail standards by the Board as described in Title 15, Chapter 1, Subchapter 2, Sections 546 and 548.
   C. Met all other requirements contained in Title 15, Chapter 1, Subchapter 2, Section 544.

(c) **Preparation of architectural drawings and specifications.**

1. Architectural drawings and specifications shall be submitted to the Board by dates and in a manner prescribed by the Board.
2. After review of the drawings and specifications, the Board shall notify the county, in writing, of any major deficiencies. Deficiencies may be identified as either failures to comply with minimum jail standards, or as design features which will pose serious operational or management problems if uncorrected even though no minimum jail standards are violated.
3. Deficiencies in compliance with minimum jail standards shall be corrected by the county prior to advertising for bids.
4. At least 30 days prior to entering into a contract with the county, the Board shall inform the sheriff and the board of supervisors in writing of other design deficiencies posing serious operational or management problems.
5. At the time the county submits its final architectural plans and specifications for review and approval, it shall also submit a preliminary staffing plan for the proposed facility, along with an analysis of other anticipated operating costs for the facility, which have been reviewed and approved by the board of supervisors in a public hearing. The sheriff shall review the staffing plan and operating cost analysis, and his written comments shall accompany this submittal. At a minimum, this plan shall include the following:
   A. Transition team program statement and costs.
   B. Staffing requirements under the proposed design capacity.
   C. Shift and post identification of staff for the proposed facility, delineated by custody and support staff.
   D. Analysis of 30-year life cycle operating costs and maintenance and energy costs for the proposed facility.
   E. Identification of, and revenue sources for, additional funds needed to support the staffing levels and operating costs for the proposed facility.

(d) **Variance.**

1. The Board may grant a variance from any Board requirement contained herein for good and sufficient reason. Such a variance may be granted by the Board only upon the written application therefore and documentation thereof. The request for a variance shall contain the following:
   A. Name and address of requestor.
   B. The specific requirement for which variance is being requested.
   C. The supporting reasons for a variance request.
   D. A copy of the variance request shall be sent to the Board by requestor. The staff shall summarize the issues involved and cause the matter to be placed on a Board meeting agenda in an expeditious manner. The requestor will be given an opportunity to be heard by the Board for the purpose of presenting oral argument in support of its request for a variance.

(e) **Project modifications.**

1. Project modifications which are proposed after a contract is signed which (1) substantially alter the design or scope of the project, (2) substantially alter the design,

location, size, capacity or quality of major items or equipment, or (3) increase the amount of state funds needed to complete the project, require prior written approval of the Board.

2. Construction change orders which propose a substantial increase in jail capacity or a substantial change in project concept or cost require prior written approval of the Board. Other change orders will not require prior approval. Summaries of all change orders shall be submitted to the Board monthly in a format approved by the Board.

Note: See also Title 15, Chapter 1, Subchapter 2, Section 568.

(f) **Purpose.** The appeal hearing procedures are intended to provide a review concerning the application and enforcement of standards and regulations governing the administration of the County Correctional Facility Capital Expenditure Fund. A county may appeal on the basis of alleged misapplication, capricious enforcement of regulations, or substantial differences of opinion as may occur concerning the proper application of regulations or procedures.

(g) **Definitions applying to appeal procedures.** For purpose of this article, the following definitions shall apply:

APPEAL HEARING means an administrative procedure providing an appellant with an opportunity to present the facts of the appeal for a formal decision concerning matters raised pursuant to the purposes set forth in subsection (f), above.

APPELLANT means a county which files a request for an appeal hearing.

EXECUTIVE OFFICER means the Executive Officer of the Board.

REQUEST FOR APPEAL HEARING means a clear written expression of dissatisfaction about a procedure or action taken and a request for a hearing on the matter and filed with the Executive Officer of the Board.

FILING DATE means the date a request for an appeal hearing is received by the Executive Officer of the Board.

AUTHORIZED REPRESENTATIVE means an individual authorized by the appellant to act as his/her representative in any or all aspects of the hearing.

HEARING PANEL means a panel comprised of three members of the Board who shall be selected by the chairperson at the time the appeal is filed. A fourth member may be designated as an alternate. Members designated to the hearing panel shall not be employed by or be residents of the county submitting the appeal nor shall they be employed by any other county that has a funded project or is seeking funds.

PROPOSED DECISION means a written recommendation from the hearing panel/hearing officer to the full Board containing a summary of facts and a recommended decision on the appeal.

NOTICE OF DECISION means a written recommendation from the hearing panel/hearing officer to the full Board containing a summary of facts and a recommended decision on the appeal.

(h) **Request for appeal hearing by Board.**

1. If a county is dissatisfied with an action of the Board staff, it may file a request for an appeal hearing with the Board. Such appeal shall be filed within 30 calendar days of the notification of the action with which the county is dissatisfied.
2. The request shall be in writing and:
   A. Shall state the basis for the dissatisfaction.
   B. Shall state the action being requested of the Board.
   C. Shall include as attachments any correspondence related to the appeal with and from the Executive Officer.

(i) **Board hearing procedures.**

1. The hearing shall be conducted by a hearing panel designated by the Chairperson of the Board at a reasonable time, date and place, but not later than 21 days after the filing of the request for hearing with the Board, unless delayed for good cause. The Board shall mail or deliver to the appellant or authorized representative a written notice of the time and place of hearing not less than 7 days prior to the hearing.
2. The procedural time requirements may be waived with mutual written consent of the parties involved.
3. Appeal hearing matters shall be set for hearing, heard, and disposed of by a notice of decision within 60 days from the date of the request for appeal hearing, except in those cases where the appellant withdraws or abandons the request for hearing or the matter is continued for what is determined by the hearing panel to be good cause.
4. An appellant may waive a personal hearing before the hearing panel and under such circumstances, the hearing panel shall consider the written information submitted by the appellant and other relevant information as may be deemed appropriate.
5. The hearing is not formal in nature. Pertinent and relevant information, whether written or oral, will be accepted. Hearings will be tape recorded.
6. After the hearing has been completed, the hearing panel shall submit a proposed decision in writing to the Board at its next regular public meeting.

(j) **State Board decision.**

1. The Board, after receiving the proposed decision, may:
   A. Adopt the proposed decision.
   B. Decide the matter on the record with or without taking additional evidence, or,
   C. Order a further hearing to be conducted if additional information is needed to decide the issue.
2. After the hearing panel's proposed decision is adopted, or an alternate decision is rendered by the Board, or notice of new hearing ordered, notice of decision or other such actions shall be mailed or otherwise delivered by the Board to the appellant.
3. The record of the testimony, exhibits, all papers and requests filed in the proceedings and the hearing panel's

proposed decision, shall constitute the exclusive record for decision and shall be available to the appellant at any reasonable time for one year after the date of the Board's notice of decision in the case.

4. The decision of the Board shall be final.

Note: Amendments to Section 13-102 effective November 25, 1993.

13-102. Minimum standards for local detention facilities.

(a) **Definitions.** The following definitions shall apply:

ADMINISTERING MEDICATION, as it relates to managing legally obtained drugs, means the act by which a single dose of medication is given to a patient. The single dose of medication may be taken either from stock (undispensed) or dispensed supplies.

ADMINISTRATIVE SEGREGATION means the physical separation of different types of inmates from each other as specified in Penal Code Sections 4001 and 4002, and Section 1053 of Title 15, C.C.R. Administrative segregation is accomplished to provide that level of control and security necessary for good management and the protection of staff and inmates.

ALTERNATE MEANS OF COMPLIANCE means a process for meeting or exceeding standards in an innovative way, after a pilot project evaluation, approved by the Board pursuant to an application.

AVERAGE DAILY POPULATION means the average number of inmates housed daily during the last fiscal year.

BOARD means the State Corrections Standards Authority, which acts by and through its executive director, deputy directors, and field representatives.

CONTACT means communications, whether verbal or visual, or immediate physical presence.

COURT HOLDING FACILITY means a local detention facility constructed within a court building after January 1, 1978, used for the confinement of persons solely for the purpose of a court appearance for a period not to exceed 12 hours.

CUSTODIAL PERSONNEL means those officers with the rank of deputy, correctional officer, patrol persons or other equivalent sworn or civilian rank whose primary duties are the supervision of inmates.

DELIVERING MEDICATION, as it relates to managing legally obtained drugs, means the act of providing one or more doses of a prescribed and dispensed medication to a patient.

DEVELOPMENTALLY DISABLED means those persons who have a disability which originates before an individual attains age 18, continues, or can be expected to continue indefinitely, and constitutes a substantial disability for that individual. This term includes mental retardation, cerebral palsy, epilepsy and autism, as well as disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for mentally retarded individuals.

DIRECT VISUAL OBSERVATION means direct personal view of the inmate in the context of his/her surroundings without the aid of audio/video equipment. Audio/video monitoring may supplement but not substitute for direct visual observation.

DISCIPLINARY ISOLATION means that punishment status assigned an inmate as the result of violating facility rules and which consists of confinement in a cell or housing unit separate from regular jail inmates.

DISPENSING, as it relates to managing legally obtained drugs, means the interpretation of the prescription order, the preparation, repackaging and labeling of the drug based upon a prescription from a physician, dentist or other prescriber authorized by law.

DISPOSAL, as it relates to managing legally obtained drugs, means the destruction of medication or its return to the manufacturer or supplier.

EMERGENCY means any significant disruption of normal facility procedure, policies, or activities caused by a riot, fire, earthquake, attack, strike or other emergent condition.

EMERGENCY MEDICAL SITUATIONS means those situations where immediate services are required for the alleviation of severe pain, or immediate diagnosis and treatment of unforeseeable medical conditions are required, if such conditions would lead to serious disability or death if not immediately diagnosed and treated.

EXERCISE means activity that requires physical exertion of the large muscle group.

FACILITY/SYSTEM ADMINISTRATOR means the sheriff, chief of police, chief probation officer or other official charged by law with the administration of a local detention facility/system.

FACILITY MANAGER means the jail commander, camp superintendent or other comparable employee who has been delegated the responsibility for operating a local detention facility by a facility administrator.

HEALTH AUTHORITY means that individual or agency that is designated with responsibility for health care policy pursuant to a written agreement, contract or job description. The health authority may be a physician, an individual or a health agency. In those instances where medical and mental health services are provided by separate entities, decisions regarding mental health services shall be made in cooperation with the mental health director. When this authority is other than a physician, final clinical decisions rest with a single designated responsible physician.

HEALTH CARE means medical, mental health and dental services.

INMATE WORKER, as used in Articles 8 and 9, means an adult in a jail or lockup assigned to perform designated tasks outside of his/her cell or dormitory, for any length of time.

JAIL, as used in Article 8, means a Type II or III facility as defined in the "Minimum Standards for Local Detention Facilities."

LABELING, as it relates to managing legally obtained drugs, means the act of preparing and affixing an appropriate label to a medication container.

LAW ENFORCEMENT FACILITY means a building that contains a Type I Jail or Temporary Holding Facility. It does not include a Type II or III jail, which has the purpose of detaining

adults, charged with criminal law violations while awaiting trial or sentenced adult criminal offenders.

LEGEND DRUGS are any drugs defined as "dangerous drugs" under Chapter 9, Division 2, Section 4211 of the *California Business and Professions Code*. These drugs bear the legend, "Caution Federal Law Prohibits Dispensing without a Prescription." The Food and Drug Administration (FDA) has determined, because of toxicity or other potentially harmful effects, that these drugs are not safe for use except under the supervision of a health care practitioner licensed by law to prescribe legend drugs.

LICENSED HEALTH PERSONNEL includes, but is not limited to, the following classifications of personnel: physician/psychiatrist, dentist, pharmacist, physician's assistant, registered nurse/nurse practitioner/public health nurse, licensed vocational nurse and psychiatric technician.

LIVING AREAS means those areas of a facility utilized for the day-to-day housing and activities of inmates. These areas do not include special use cells such as sobering, safety, and holding or staging cells normally located in receiving areas.

LOCAL DETENTION FACILITY means any city, county, city and county, or regional jail, camp, court holding facility or other correctional facility, whether publicly or privately operated, used for confinement of adults or of both adults and minors, but does not include that portion of a facility for confinement of both adults and minors which is devoted only to the confinement of minors.

LOCAL DETENTION SYSTEM means all of the local detention facilities that are under the jurisdiction of a city, county or combination thereof, whether publicly or privately operated. Nothing in the standards are to be construed as creating enabling language to broaden or restrict privatization of local detention facilities beyond that which is contained in other statute.

LOCAL HEALTH OFFICER means that licensed physician who is appointed pursuant to Health and Safety Code Section 101000 to carry out duly authorized orders and statutes related to public health within their jurisdiction.

LOCKUP means a locked room or secure enclosure under the control of a peace officer or custodial officer that is primarily used for the temporary confinement of adults who have recently been arrested; sentenced prisoners who are inmate workers may reside in the facility to carry out appropriate work.

MANAGERIAL CUSTODIAL PERSONNEL Means the jail commander, camp superintendent or other comparable employee who has been delegated the responsibility for operating a local detention facility by a facility administrator.

MENTAL HEALTH DIRECTOR means that individual who is designated by contract, written agreement or job description, to have administrative responsibility for the facility or system mental health program.

NONSECURE CUSTODY means that a minor's freedom of movement in a law enforcement facility is controlled by the staff of the facility; and

(1) the minor is under constant direct visual observation by the staff;
(2) the minor is not locked in a room or enclosure; and,
(3) the minor is not physically secured to a cuffing rail or other stationary object.

NONSENTENCED INMATE means an inmate with any pending local charges or one who is being held solely for charges pending in another jurisdiction.

OVER-THE-COUNTER (OTC) DRUGS, as it relates to managing legally obtained drugs, are medications which do not require a prescription (nonlegend).

PEOPLE WITH DISABILITIES includes, but is not limited to, persons with a physical or mental impairment that substantially limits one or more of their major life activities or those persons with a record of such impairment or perceived impairment that does not include substance use disorders resulting from current illegal use of a controlled substance.

PILOT PROJECT means an initial short-term method to test or apply an innovation or concept related to the operation, management or design of a local detention facility pursuant to application to, and approval by, the Board.

PROCUREMENT, as it relates to managing legally obtained drugs, means the system for ordering and obtaining medications for facility stock.

PSYCHOTROPIC MEDICATION means any medication prescribed for the treatment of symptoms of psychoses and other mental and emotional disorders.

RATED CAPACITY means the number of inmate occupants for which a facility's single- and double-occupancy cells, or dormitories, except those dedicated for health care or disciplinary isolation housing, were planned and designed in conformity to the standards and requirements contained herein and in Title 15, C.C.R.

REGIONAL CENTER FOR DEVELOPMENTALLY DISABLED means those private agencies throughout the state, funded through the Department of Developmental Services which assure provision of services to persons with developmental disabilities. Such centers will be referred to as regional centers in these regulations.

REMODEL means to alter the facility structure by adding, deleting, or moving any of the building's components, thereby affecting any of the spaces specified in Title 24, Section 470A.

REPACKAGING, as it relates to managing legally obtained drugs, means the transferring of medications from the original manufacturer's container to another properly labeled container.

REPAIR means to restore to original condition or replace with like-in-kind.

SAFETY CHECKS means regular, intermittent and prescribed direct, visual observation to provide for the health and welfare of inmates.

SECURE DETENTION means that a minor being held in temporary custody in a law enforcement facility is locked in a room or enclosure and/or physically secured to a cuffing rail or other stationary object.

SECURITY GLAZING means a glass/polycarbonate composite glazing material designed for use in detention facility doors and windows and intended to withstand measurable, complex loads from deliberate and sustained attacks in a detention environment.

SENTENCED INMATE means an inmate that is sentenced on all local charges.

SHALL is mandatory; "may" is permissive.

SOBERING CELL as referenced in Section 1056, refers to an initial "sobering up" place for arrestees who are sufficiently intoxicated from any substance to require a protected environment to prevent injury by falling or victimization by other inmates.

STORAGE, as it relates to legally obtained drugs, means the controlled physical environment used for the safekeeping and accounting of medications.

SUPERVISION IN A LAW ENFORCEMENT FACILITY means that a minor is being directly observed by the responsible individual in the facility to the extent that immediate intervention or other required action is possible.

SUPERVISORY CUSTODIAL PERSONNEL means those staff members whose duties include direct supervision of custodial personnel.

TEMPORARY CUSTODY means that the minor is not at liberty to leave the law enforcement facility.

TEMPORARY HOLDING FACILITY means a local detention facility constructed after January 1, 1978, used for the confinement of persons for 24 hours or less pending release, transfer to another facility or appearance in court.

TYPE I FACILITY means a local detention facility used for the detention of persons, for not more than 96 hours, excluding holidays, after booking. Such a Type I facility may also detain persons on court order either for their own safekeeping or sentenced to a city jail as an inmate worker, and may house inmate workers sentenced to the county jail provided such placement in the facility is made on a voluntary basis on the part of the inmate. As used in this section, an inmate worker is defined as a person assigned to perform designated tasks outside of his/her cell or dormitory, pursuant to the written policy of the facility, for a minimum of four hours each day on a five-day scheduled work week.

TYPE II FACILITY means a local detention facility used for the detention of persons pending arraignment, during trial and upon a sentence of commitment.

TYPE III FACILITY means a local detention facility used only for the detention of convicted and sentenced persons.

TYPE IV FACILITY means a local detention facility or portion thereof designated for the housing of inmates eligible under Penal Code Section 1208 for work/education furlough and/or other programs involving inmate access into the community.

(b) **Exclusions.** Title 24 of the California Code of Regulations, Sections 13-102 and 2-1013 which pertain to planning and design of detention facilities shall be applicable to facilities for which architectural drawings have been submitted to the State Board for review. These requirements shall not be applicable to facilities which were constructed in conformance with the standards of the Board in effect at the time of initial architectural planning. When any facility, designed and constructed under earlier standards, can comply with a more recently adopted requirement, the least-restrictive regulation shall apply.

If, in the course of inspection of local detention facilities, the Board determines that a facility planned or built prior to these regulations does not meet the appropriate, applicable standards in effect at the time of initial architectural planning, the local governing body shall submit to the Board for their approval within one year of such inspection a plan for causing that facility to meet current standards. Such a plan shall include the specific building areas which need to be remodeled and/or constructed, a definite time period over which the proposed modifications are planned, and a cost estimate including a description of the method of financing.

(c) **Initial planning for a local detention facility.**

1. **Letter of intent.** A city, county, city and county, or any combination thereof which has an intent to build or remodel any local detention facility shall immediately file a letter of intent with the Board.
2. **Needs assessment study.** Any city, county, city and county, or region intending to construct a new Type I, II, III or IV facility or add 25 or more beds to an existing facility shall complete a needs assessment study. One copy of the needs assessment study shall be submitted to the Board prior to contracting for plans and specifications.

   The needs assessment shall include, but not be limited to, a description of:

   A. The elements of the system;

   B. The department's operational and design philosophy;

   C. The current inmate population;

   D. The classification system;

   E. Program needs, including planned academic programs including special education programs and an analysis of performance in using programs that can reduce secure facility requirements;

   F. An analysis of the local trends and characteristics which influence planning assumptions about future corrections' systems change, including population projections, current and projected inmate populations, and program costs based on continuation of current policies and projections of alternative policies or programs on inmate population growth and program costs;

   G. The adequacy of staffing levels;

   H. The ability to provide visual supervision;

   I. The adequacy of record keeping;

   J. A history of the systems compliance with standards; and

   K. Any unresolved issues.

3. **Operational program statement.** Unless the construction or remodeling is of a minor nature, not affecting the capacity or flow of the facility, an operational program statement shall be developed by the facility administrator and submitted to the Board for the purpose of providing the basis upon which architectural plans are drawn. The operational program statement must be submitted with the schematic architectural plans required by Section 13-102 (c) 5 of these regulations and must include a description of the following:
   A. Intended capacity of facility.
   B. Security and classification of inmates to be housed.
   C. Inmate movement within the facility and entry and exit from security areas.
   D. Food preparation and serving.
   E. Staffing.
   F. Booking.
   G. Visiting and attorney reviews.
   H. Exercise.
   I. Programs.
   J. Medical services, including the management of communicable diseases.
   K. Cleaning and/or laundering.
   L. Inmate segregation as specified in Penal Code Sections 4001 and 4002 and Article 5 of Title 15, C.C.R.
   M. Court holding and inmate movement.
   N. Mental health services.
   O. Facilities for jail administration and operations staff.
   P. Staff to staff communications system.
   Q. Management of disruptive inmates.
   R. Management and placement of persons with disabilities, with provisions for wheelchairs, gurney access and for evacuation during emergencies.
   S. Architectural treatment of space relative to preventing suicides by inmates.
   T. Method of implementing Penal Code Section 4030 relating to the holding of misdemeanor arrestees.
   U. Intended type of facility.
   V. Sobering cell(s) as referenced by Title 15, Section 1056, with the ability to segregate.
   W. Safety cell(s) as referenced by Title 15, Section 1055.
4. **Type III and Type IV facilities in existing buildings.** Wherever a city, county or combination thereof, intends to establish a Type III or Type IV facility in an existing building or buildings, notice shall be given to the Board of Corrections whose staff shall complete a survey to determine capacity of such buildings and shall make recommendations for necessary modifications. The proposing local government shall secure the appropriate clearance from the health authority, building official, and State Fire Marshal.
5. **Submittal of plans and specifications.** All plans and specifications submitted to the Board of Corrections in compliance with Penal Code Section 6029 shall be in duplicate at the schematic design phase, at the design development phase and when the construction document drawings and specifications are developed. A copy of the plans will be forwarded by the Board to the State Fire Marshal for review. Board of Corrections staff shall respond in writing indicating compliance or noncompliance with these regulations.
6. **Design requirements.**
   A. The design of a local detention facility shall comply with provisions of California Code of Regulations, Title 24, Part 2, Section 2-1013.
   B. The design of a Type I, Type II, Type III or Type IV facility, shall provide the following:
      (1) **Fire safety.** The provisions of Title 19 as they relate to detention facilities shall be incorporated into the facility design.
      (2) **Suicide hazards.** Architectural plans shall be reviewed by the Board for the purpose of reducing hazards posed by fixtures and equipment which could be used for an act of suicide by an inmate. The facility design shall avoid any surfaces, edges, fixtures or fittings that can provide an attachment for self-inflicted injury. The following features shall be incorporated in the design of temporary holding cells, temporary staging cells sobering cells, safety cells, single occupancy cells and any other area where an inmate may be left alone:
         a. plumbing shall not be exposed. Operation of control valves shall use flush buttons or similar. The drinking fountain bubbler shall be without curved projections;
         b. towel holders shall be ball-in-socket or indented clasp, not pull-down hooks or bars;
         c. supply and return grilles shall have openings no greater than $^{3}/_{16}$ inch or have 16-mesh per square inch;
         d. beds, desk surfaces and shelves shall have no sharp edges and be configured to prevent attachment;
         e. light fixtures shall be tamper resistant;
         f. fixtures such as mirrors shall be mounted using tamper-resistant fasteners; and
         g. fire sprinkler heads inside rooms shall be designed to prevent attachment.
      (3) **Health and sanitation.** Provisions of Subchapter 4, Title 15, California Code of Regulations, and of the California Uniform Retail Food Facilities Law as they relate to detention facilities shall be incorporated into the facility design.

(4) **Single- and/or double-occupancy cells.** In any local detention system, the number of single- and/ or double-occupancy cells shall be that number, determined by the facility/system administrator in conjunction with the Board of Corrections, necessary to safely manage the population of the facility/system based on a comprehensive needs assessment which accounts for those inmates projected to be:

a. administrative segregation cases,

b. persons with disabilities,

c. custodial problems, and/or

d. likely to need individual housing for other specific reasons as determined by the facility/system administration.

The total number of single- and/or double-occupancy cells shall not be less than 10 percent of the system's Board of Corrections rated capacity. The local detention facility/ system shall comply with all other design requirements contained in these regulations.

(5) **Staff and inmate safety.** Facilities shall be designed and/or equipped in such a manner that staff and inmates have the ability to summon immediate assistance in the event of an incident or an emergency.

(6) **Heating and cooling.** Provision shall be made to maintain a comfortable living environment in accordance with the heating, ventilating, and air conditioning requirements of Parts 2 and 4, and the energy conservation requirements of Part 6, Title 24, California Code of Regulations.

(7) **Acoustics.** Housing areas shall be designed and constructed so that the average noise level does not exceed 70 decibels during periods of activity and 45 decibels during sleeping hours.

(8) **Living areas.** Living areas shall be separated from the area for reception and booking.

(9) **Spaces for persons with disabilities.**

a. Housing cell or room. A cell or room for an inmate with a disability using a wheelchair must have an appropriate entry and toilet, washbasin and drinking fountain which the inmate can use without personal assistance.

b. Other spaces within the security perimeter such as day rooms and activity areas shall be located such that persons with disabilities will not be excluded from participating in any program for which he or she would otherwise be eligible. Accessible showers for inmates with disabilities shall be available.

c. Spaces outside the security perimeter. Public areas of a local detention facility shall comply with the applicable chapters of Title 24, Part 2 of the California Code of Regulations.

(10) **Security.** The design should facilitate security and supervision appropriate to the level of inmate custody.

(11) **Glazing.** Internal and external facility glazing shall be appropriate to the security level of the detention area or room.

(12) **Hair care space.** Space and suitable equipment must be provided in all Type II or Type III facilities for men's haircutting and/or female hair-dressing.

(13) Floor drains shall be provided where operationally and mechanically appropriate.

(14) Medical/mental health care housing shall be designed in consultation with the health authority. Medical/mental health areas may contain other than single occupancy rooms.

C. The design of a Court Holding or Temporary Holding facility must include and comply with the following subsections of Section 13-102(c)6B: (1), (2), (3), (5), (6), (7), (9), (10) and (13). Court holding facilities shall have separate paths of travel for inmates from those used by the public.

7. **Pilot projects.** The pilot project is the short-term method used by a local detention facility/system, approved by the Board of Corrections, to evaluate innovative programs, operations or concepts which meet or exceed the intent of these regulations.

The Board of Corrections may, upon application of a city, county, or city and county, grant pilot project status to a program, operational innovation or new concept related to the operation and management of a local detention facility. An application for a pilot project shall include, at a minimum, the following information:

A. The regulations which the pilot project will affect.

B. Review of case law, including any lawsuits brought against the applicant's local detention facility, pertinent to the proposal.

C. The applicant's history of compliance of noncompliance with standards.

D. A summary of the "totality of conditions" in the facility or facilities, including but limited to:

(1) Program activities, exercise and recreation;

(2) Adequacy of supervision;

(3) Types of inmates affected; and,

(4) Inmate classification procedures.

E. A statement of the goals the pilot project is intended to achieve, the reasons a pilot project is necessary and why the particular approach was selected.

F. The projected costs of the pilot project and projected cost savings to the city, county, city and county, if any.

G. A plan for developing and implementing the pilot project, including a time line where appropriate.

H. A statement of how the overall goal of providing safety to staff and inmates will be achieved.

The Board of Corrections shall consider applications for pilot projects based on the relevance and appropriateness of the proposed project, the completeness of the information provided in the application and staff recommendations.

Within 10 working days of receipt of the application, Board staff will notify the applicant, in writing, that the application is complete and accepted for filing, or that the application is being returned as deficient and identifying what specific additional information is needed. This does not preclude the Board of Corrections members from requesting additional information necessary to make a determination that the pilot project proposed actually meets or exceeds the intent of the regulations at the time of the hearing. When complete, the application will be placed on the agenda for the Board's consideration at a regularly scheduled meeting. The written notification from the Board to the applicant shall also include the date, time and location of the meeting at which the application will be considered. (The Board meeting schedule for the current calendar year is available through its office in Sacramento.)

When an application for a pilot project is approved by the Board of Corrections, the Board shall notify the applicant, in writing within 10 working days of the meeting, of any conditions included in the approval and the time period for the pilot project. Regular progress reports and evaluative data on the success of the pilot project in meeting its goals shall be provided to the Board. If disapproved, the applicant shall be notified in writing, within 10 working days of the meeting, the reasons for said disapproval. This application approval process may take up to 90 days from the date of receipt of a complete application.

Pilot project status granted by the Board of Corrections shall not exceed twelve months after its approval date. When deemed to be in the best interest of the application, the Board of Corrections may extend the expiration date for up to an additional twelve months. Once a city, county, or city and county successfully completes the pilot project evaluation period and desires to continue with the program, it may apply for an alternate means of compliance as described in Section 13-102(c)8 of these regulations.

8. **Alternate means of compliance.** The alternate means of compliance is the long-term method used by a local detention facility/system, approved by the Board, to encourage responsible innovation and creativity in the operation of California's local detention facilities. The Board may, upon application of a city, county, or city and county, consider alternate means of compliance with these regulations after the pilot project process has been successfully evaluated [as defined in Section 13-102(c)7]. The city, county, or city and county must present the completed application to the Board no later than 30 days prior to the expiration of its pilot project.

   Applications for alternate means of compliance must meet the spirit and intent of improving jail management, shall be equal to or exceed the existing standard(s) and shall include reporting and evaluation components. An application for alternate means of compliance shall include, at a minimum, the following information:

A. Review of case law, including any lawsuits brought against the applicant local detention facility, pertinent to the proposal.

B. The applicant's history of compliance or noncompliance with standards.

C. A summary of the "totality of conditions" in the facility or facilities, including but not limited to:

   (1) Program activities, exercise and recreation;

   (2) Adequacy of supervision;

   (3) Types of inmates affected; and

   (4) Inmate classification procedures.

D. A statement of the problem the alternate means of compliance is intended to solve, how the alternative will contribute to a solution of the problem and why it is considered an effective solution.

E. The projected costs of the alternative and projected cost savings to the city, county, city and county if any.

F. A plan for developing and implementing the alternative, including a time line where appropriate.

G. A statement of how the overall goal of providing safety to staff and inmates was achieved during the pilot project evaluation phase [Section 13-102(c)7].

ARTICLE 2
MINIMUM STANDARDS FOR JUVENILE FACILITIES

13-201. Minimum standards for juvenile facilities.

(a) **Definitions.** The following definitions shall apply:

ADMINISTERING MEDICATION, as it relates to pharmaceutical management, means the act by which a single dose of medication is given to a patient by licensed health care staff. The single dose of medication may be taken either from stock (undispensed) or dispensed supplies.

ALTERNATE MEANS OF COMPLIANCE means a process for meeting or exceeding the intent of the standards in an innovative way as approved by the Corrections Standards Authority pursuant to an application.

APPEAL HEARING means an administrative procedure providing an appellant with an opportunity to present the facts of the appeal for the formal decision concerning matters raised pursuant to the purposes set forth in these regulations. Such hearing may be conducted using oral and/or written testimony as specified by the Executive Director of the Corrections Standards Authority.

APPELLANT means a county or city which files a request for an appeal hearing.

AUTHORIZED AND REPRESENTATIVE means an individual authorized by the appellant to act as its representative in any or all aspects of the hearing.

CAMP means a juvenile camp, ranch, forestry camp or boot camp established in accordance with Section 881 of the Welfare and Institutions Code, to which minors made wards of the court on the grounds of fitting the description in Section 602 of the Welfare and Institutions Code may be committed.

CELL EXTRACTION means the forceful removal of a minor from a room.

CHILD SUPERVISION STAFF means juvenile facility employee, whose duty is primarily the supervision of minors. Administrative, supervisory, food services, janitorial or other auxiliary staff is not considered child supervision staff.

COMMITTED means placed in a jail or juvenile facility pursuant to a court order for a specific period of time, independent of, or in connection with, other sentencing alternatives.

CONTRABAND is any object, writing or substance, the possession of which would constitute a crime under the laws of the State of California, pose a danger within a juvenile facility or would interfere with the orderly day-to-day operation of a juvenile facility.

CONTROL ROOM is a continuously staffed secure area within the facility that contains staff responsible for safety, security, emergency response, communication, electronics and movement.

COURT HOLDING FACILITY FOR MINORS means a local detention facility constructed within a court building used for the confinement of minors or minors and adults for the purpose of a court appearance, for a period not to exceed 12 hours.

CSA means the State Corrections Standards Authority, which acts by and through its executive director, deputy directors and field representatives.

DELIVERING MEDICATION, as it relates to pharmaceutical management, means the act of providing one or more doses of a prescribed and dispensed medication to a patient.

DEVELOPMENTALLY DISABLED means those persons who have a disability which originates before an individual attains age 18, continues, or can be expected to continue indefinitely, and constitutes a substantial disability for that individual. This term includes mental retardation, cerebral palsy, epilepsy and autism, as well as disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for mentally retarded individuals.

DIRECT VISUAL OBSERVATION means staff must personally see minor's movement and/or skin. Audio/video monitoring may supplement but not substitute for direct visual observation.

DIRECT VISUAL SUPERVISION means staff constantly in the presence of the minor. Audio/video monitoring may supplement but not substitute for direct visual supervision.

DISPENSING, as it relates to pharmaceutical management, means the interpretation of the prescription order, the preparation, repackaging, and labeling of the drug based upon a prescription from a physician, dentist or other prescriber authorized by law.

DISPOSAL, as it relates to pharmaceutical management, means the destruction of medication or its return to the manufacturer or supplier.

DNA or Deoxvribonucleic acid means a chromosomal double stranded molecule that exists in each living cell. DNA determines an individual's hereditary characteristics and can be used to distinguish and identify an individual from another person. This becomes critical when blood, hair, skin or any other part of the body is used to prove one's involvement or lack of involvement in a crime scene.

EMERGENCY means a significant disruption of normal facility procedure, policy or operation caused by civil disorder, single incident of mass arrest of juveniles and natural disasters such as flood, fire or earthquake; and which requires immediate action to avert death or injury and to maintain security.

EXECUTIVE DIRECTOR means the Executive Director of the Corrections Standards Authority.

EXERCISE means an activity that requires physical exertion of the large muscle group.

FACILITY ADMINISTRATOR means Chief Probation Officer, Sheriff, Marshal, Chief of Police or other official charged by law with administration of the facility.

FACILITY MANAGER means director, superintendent, police or sheriff commander or other person in charge of the day-to-day operation of a facility holding minors.

FILING DATE means the date a request for an appeal hearing is received by the Executive Director or the Corrections Standards Authority.

504 PLAN means a written educational plan developed by a group of educators, administrators, parents and other relevant participants pursuant to Section 504 of the Federal Rehabilitation Act of 1973; Title 29 of the United States Code, Section 794; and Title 34 of the Code of Federal Regulations, Part 104, that addresses the needs of a disabled student, as defined under section 504.

FURLOUGH means the conditional or temporary release of a minor from the facility.

GROUP PUNISHMENT means a group of uninvolved minors is denied programming due to the actions of one or more minors.

HEALTH ADMINISTRATOR means that individual or agency that is designated with responsibility for health care policy pursuant to a written agreement, contract or job description. The health administrator may be a physician, an individual or a health agency. In those instances where medical and mental health services are provided by separate entities, decisions regarding mental health services shall be made in cooperation with the mental health director. When the administrator is other than a physician, final clinical judgment rests with a designated responsible physician.

HEALTH CARE means medical, mental health and dental services.

HEALTH CARE CLEARANCE means a nonconfidential statement which indicates to child supervision staff that there are no health contraindications to a minor being admitted to a facility and specifies any limitations to full program participation.

HEARING PANEL means a panel comprised of three members of the Corrections Standards Authority who shall be selected by the Chairman at the time an appeal is filed. A fourth member may be designated as alternate. Members designated to the hearing panel shall not be employed by or citizens of the county or city submitting an appeal.

INDIVIDUAL EDUCATION PROGRAM (IEP) means a written statement determined in a meeting of the individualized education program team pursuant to Education Code Section 56345.

INTENSIVE SUPERVISION UNIT within a camp means a secure unit that shall comply with all requirements for a Special Purpose Juvenile Hall.

JUVENILE FACILITY means a juvenile hall, juvenile home, ranch or camp, forestry camp, regional youth education facility, boot camp or special-purpose juvenile hall.

JUVENILE HALL means a county facility designed for the reception and temporary care of minors detained in accordance with the provisions of this subchapter and the juvenile court law.

LABELING, as it relates to pharmaceutical management, means the act of preparing and affixing an appropriate label to a medication container.

LEGEND DRUGS are any drugs defined as "dangerous drugs" under Chapter 9, Division 2, Section 4211 of the California Business and Professions Code. These drugs bear the legend, "Caution Federal Law Prohibits Dispensing Without a Prescription." The Food and Drug Administration (FDA) has determined, because of toxicity or other potentially harmful effects, that these drugs are not safe for use except under the supervision of a health care practitioner licensed by law to prescribe legend drugs.

LICENSED HEALTH CARE PERSONNEL means those individuals who are licensed by the state to perform specified functions within a defined scope of practice. This includes, but is not limited to, the following classifications of personnel: physician/psychiatrist, dentist, pharmacist, physician's assistant, registered nurse/nurse practitioner/public health nurse, licensed vocational nurse and psychiatric technician.

LIVING UNIT shall be a self-contained unit containing locked sleeping rooms, single and double occupancy sleeping rooms or dormitories, dayroom space, water closets, wash basins, drinking fountains and showers commensurate to the number of minors housed. A living unit shall not be divided by any permanent or temporary barrier that hinders direct access, supervision or immediate intervention or other action if needed.

LOCAL HEALTH OFFICER means that licensed physician who is appointed by the Board of Supervisors pursuant to Health and Safety Code Section 101000 to carry out duly authorized orders and statutes related to public health within his/her jurisdiction.

MAXIMUM CAPACITY means the number of minors that can be housed at any one time in a juvenile hall, camp, ranch, home, forestry camp, regional youth education facility or boot camp in accordance with provisions in this subchapter.

MENTAL HEALTH DIRECTOR means that individual who is designated by contract, written agreement or job description to have administrative responsibility for the mental health program. The health administrator shall work in cooperation with the mental health director to develop and implement mental health policies and procedures.

MINIMUM STANDARDS FOR LOCAL DETENTION FACILITIES means those regulations within Title 15, Division 1, Subchapter 4, Section 1000 et. seq. of the California Code of Regulations and Title 24, Part 1, Section 13-102, and Part 2, Section 1230 of the California Code of Regulations, as adopted by the Corrections Standards Authority.

MINOR means a person under 18 years of age and includes those persons whose cases are under the jurisdiction of the adult criminal court.

NEW GENERATION DESIGN means a design concept for detention facilities in which housing cells, dormitories or sleeping rooms are positioned around the perimeter of a common day-room, forming a housing/living unit. Generally, the majority of services for each housing/living unit (such as dining, medical exam/sick call, programming, school, etc.) occur in specified locations within the unit.

NOTICE OF DECISION means a written statement by the Executive Director or the Corrections Standards Authority which contains the formal decision of the Executive Director or the CSA and the reason for that decision.

ON-SITE HEALTH CARE STAFF means licensed, certified or registered health care personnel who provide regularly scheduled health care services at the facility pursuant to a contract, written agreement or job description. It does not extend to emergency medical personnel or other health care personnel who may be on site to respond to an emergency or an unusual situation.

OVER-THE-COUNTER (OTC) DRUGS, as it relates to pharmaceutical management, are medications which do not require a prescription (nonlegend).

PILOT PROJECT means an initial short-term method to test or apply an innovation or concept related to the operation, management or design of a juvenile facility, jail or lockup pursuant to an application to, and approval by, the Correction Standards Authority.

PRIMARY RESPONSIBILITY is the ability of a child supervision staff member to independently supervise one or more minors.

PROCUREMENT, as it relates to pharmaceutical management, means the system for ordering and obtaining medications for facility stock.

PROPOSED DECISION means a written recommendation from the hearing panel/hearing officer to the full Corrections

Standards Authority containing a summary of facts and a recommended decision on an appeal.

PROSTHESES means artificial devices to replace missing body parts or to compensate for defective bodily function. Prostheses are distinguished from slings, crutches or other similar assistive devices.

PSYCHOTROPIC MEDICATION means those drugs whose purpose is to have an effect on the central nervous system to impact behavior or psychiatric symptoms. Psychotropic medications include, but are not limited to, antipsychotic, antidepressant, lithium carbonate and anxiolytic drugs, as well as anticonvulsants or any other medication when used to treat psychiatric conditions. Drugs used to reduce the toxic side effects of psychotropic medications are not included.

RECREATION means activities that occupy the attention and offer the opportunity for relaxation. Such activities may include ping-pong, TV, reading, board games and letter writing.

REGIONAL FACILITY means a facility serving two or more counties bound together by a memorandum of understanding or a joint powers agreement identifying the terms, conditions, rights, responsibilities and financial obligation of all parties.

REMODELING means to alter the facility structure by adding, deleting or moving any of the buildings components, thereby affecting any of the spaces specified in Title 24, Section 1230.

REPACKAGING, as it relates to pharmaceutical management, means transferring medications from the original manufacturer's container to another properly labeled container.

REQUEST FOR APPEAL HEARING means a clear written expression of dissatisfaction about a procedure or action taken, requesting a hearing on the matter, and filed with the Executive Director of the Corrections Standards Authority.

RESPONSIBLE PHYSICIAN means that physician who is appropriately licensed by the state and is designated by contract, written agreement or job description to have responsibility for policy development in medical, dental and mental health matters involving clinical judgments. The responsible physician may also be the health administrator.

SECURITY GLAZING means a glass/polycarbonate composite glazing material designed for use in detention facility doors and windows and intended to withstand measurable, complex loads from deliberate and sustained attacks in a detention environment.

SHALL is mandatory; “may” is permissive.

SPECIAL-PURPOSE JUVENILE HALL means a county facility used for the temporary confinement of a minor, not to exceed 96 hours, prior to transfer to a full service juvenile facility or release.

STATUS OFFENDER means a minor alleged or adjudged to be a person described in Section 601 of the Welfare and Institutions Code.

STORAGE, as it relates to pharmaceutical management, means the controlled physical environment used for the safekeeping and accounting of medications.

SUPERVISORY STAFF means a staff person whose primary duties may include, but are not limited to, scheduling and evaluating subordinate staff, providing on-the-job training, making recommendations for promotion, hiring and discharge of subordinate staff, recommending disciplinary actions and overseeing subordinate staff work. Supervisory staff shall not be included in the minor to supervision staff ratio, although some of their duties could include the periodic supervision of minors.

USE OF FORCE means an immediate means of overcoming resistance and to control the threat of imminent harm to self or others.

(b) **Exclusions.** Title 24 of the California Code of Regulations, Sections 13-201 and 1230, which pertain to planning and design of juvenile facilities, shall be applicable to facilities for which architectural drawings have been submitted to the State Corrections Standards Authority for review. These requirements shall not be applicable to facilities that were constructed in conformance with the standards of the Department of the Youth Authority or the Corrections Standards Authority in effect at the time of initial architectural planning. However, an existing juvenile facility built in accordance with construction standards in effect at the time of construction shall be considered as being in compliance with the provisions of this article unless the condition of the structure is determined by the facility administrator or other appropriate authority to be dangerous to life, health or welfare of minors. When any facility, designed and constructed under earlier standards, can comply with a more recently adopted requirement, the least restrictive regulation shall apply.

If, in the course of inspection of local juvenile facilities, the Corrections Standards Authority determines that a facility planned or built prior to these regulations does not meet the appropriate, applicable standards in effect at the time of initial architectural planning, the local governing body shall submit to the Corrections Standards Authority for their approval within one year of such inspection a plan for causing that facility to meet current standards. Such a plan shall include the specific building areas that need to be remodeled and/ or constructed, a definite time period over which the proposed modifications are planned, and a cost estimate including a description of the method of financing.

(c) **Initial planning for a local juvenile facility.**

1. **Letter of intent.** A county, city, city and county or regional juvenile facility that intends to build or remodel any local juvenile facility shall file a letter of intent with the Corrections Standards Authority.
2. **Needs assessment.** Any county, city, city and county, or regional juvenile facility intending to construct a new juvenile facility, or expand the rated capacity of the current facility, shall complete a needs assessment. One copy of the needs assessment shall be submitted to the Corrections Standards Authority prior to submitting plans and specifications. There are two types of needs assessments:

   A. Comprehensive Needs Assessment. The Comprehensive Needs Assessment shall include:

      (1) A description of the elements of the system;

(2) A description of the department's management philosophy/process;

(3) A description of the current minor population;

(4) A description of the classification system;

(5) A description of the program needs, including planned academic programs and special education programs, and an analysis of performance in using programs which can reduce secure facility requirements;

(6) An analysis of the corrections' system trends and characteristics which influence planning assumptions about future change, including: population projections, projections of minor population and program costs based on continuation of current policies, and projections of the impact of alternative policies or programs on minor population growth and program costs;

(7) A history of the system's compliance with standards, including the adequacy of staffing levels and the ability to provide visual supervision;

(8) A history of the adequacy of record keeping;

(9) The ability to provide confidential interviews and medical exams; and;

(10) A discussion of unresolved issues.

B. Targeted Needs Assessment.

(1) For expansion of an existing facility, a targeted needs assessment may be submitted if a comprehensive needs assessment has been submitted and accepted by the Corrections Standards Authority within 5 years.

(2) The Targeted Needs Assessment shall include any update and/or changes to the previous Comprehensive Needs Assessment and provide information affirming its validity and accuracy.

3. **Operational program statement.** Unless the construction or remodeling is of a minor nature, not affecting the capacity or flow of the facility, an operational program statement shall be developed by the facility administrator and submitted to the Corrections Standards Authority for the purpose of providing the basis upon which architectural plans are drawn. The operational program statement must be submitted with the schematic architectural plans required by Section 13-201 (c) 5 of these regulations and must include a description of the following:

A. Intended capacity of facility;

B. Security and classification of minors to be housed;

C. Movement within the facility and entry and exit from secure areas;

D. Food preparation and serving;

E. Staffing;

F. Booking;

G. Visiting and attorney interviews;

H. Exercise;

I. Programs;

J. Medical services, including the management of communicable diseases;

K. Cleaning and/or laundering;

L. Segregation of minors;

M. Court holding and movement;

N. Mental health services;

O. Facilities for administration and operations staff;

P. Staff to staff communications system;

Q. Management of disruptive minors;

R. Management of minors with disabilities, with provisions for wheelchairs, gurney access and for evacuation during emergencies;

S. Architectural treatment of space relative to preventing suicides by minors;

T. Method of implementing *California Penal Code* Section 4030 relating to the holding of offenders requiring incarceration without the necessity of unjustified strip searches; and

U. School programs.

4. **Facilities in existing buildings.** Wherever county, city, city and county, or regional juvenile facility intends to establish a juvenile facility in an existing building or buildings, notice shall be given to the Corrections Standards Authority whose staff shall complete a survey to determine capacity of such buildings and shall make recommendations for necessary modifications. The proposing local government shall secure the appropriate clearance from the health authority, building official, and State Fire Marshal.

5. **Submittal of plans and specifications.** All plans and specifications submitted to the Corrections Standards Authority in compliance with Penal Code Section 6029 shall be in duplicate at the schematic design stage, at the design development stage and when final working plans and specifications are developed. Corrections Standards Authority staff shall respond in writing indicating compliance or noncompliance with these regulations.

6. **Design requirements.**

A. The design of a local juvenile facility shall comply with provisions of California Code of Regulations, Title 24, Part 2, Section 1230.

B. The design of a juvenile facility shall address the following:

(1) **Fire safety.** The provisions of Title 19 as they relate to juvenile facilities shall be incorporated into the facility design.

(2) **Suicide hazards.** Architectural plans shall be reviewed by the CSA for the purpose of reducing hazards posed by fixtures and equipment which could be used for an act of suicide by a

minor. The facility design shall avoid any surfaces, edges, fixtures, or fittings that can provide an attachment for hanging or other opportunity for self-inflicted injury. The following features shall be incorporated in the design of sleeping rooms, bathrooms, and any other area where a juvenile may be left alone:

a. Plumbing shall not be exposed. Operation of control valves shall use flush buttons or similar. Drinking water spout, if any, shall be without curved projections;

b. Towel holders shall be ball-in-socket or indented clasp, not pull-down hooks or bars;

c. Supply and return grilles shall have openings no greater than $^{3}/_{16}$ inch or have 16-mesh per square inch;

d. Beds, desk surfaces and shelves shall have no sharp edges and shall be configured to prevent attachment;

e. Light fixtures shall be tamper resistant;

f. Fixtures such as mirrors shall be mounted using tamper-resistant fasteners;

g. Fire sprinkler heads inside rooms shall be designed to prevent attachment; and

h. Telephone cords shall be of minimum length to facilitate use.

(3) **Health and sanitation.** Provisions of Subchapter 5, Title 15, California Code of Regulations, and of the California Uniform Retail Food Facilities Law as they relate to juvenile facilities shall be incorporated into the facility design.

(4) When adding new sleeping rooms to a juvenile hall, not less than 10 percent of them shall be single occupancy, unless the juvenile hall can demonstrate that its current number of single occupancy rooms will equal at least 10 percent of the new rated capacity. In addition, single or double occupancy rooms shall be that number, determined by the facility administrator, necessary to safely manage the population of the facility based on a comprehensive needs assessment which accounts for minors projected to be:

a. Mentally disordered,

b. Custodial problems, and/or

c. Likely to need individual housing for other specific reasons as determined by the facility administration.

The total number of single or double occupancy rooms shall be identified.

(5) **Staff and safety.** Facilities shall be designed and/ or equipped in such a manner that staff and minors have the ability to summon immediate assistance in the event of an incident or an emergency.

(6) **Heating and cooling.** Provision shall be made to maintain comfortable living environment and meet the energy requirements of Part 2 (*California Building Code*), Part 4 (*California Mechanical Code*), and Part 6 (*California Energy Code*) of Title 24, California Code of Regulations.

(7) **Acoustics.** Dayroom areas shall be designed and constructed so that the noise level does not exceed 70 decibels and a reverberation time less than 1.5 seconds. Sleeping areas shall have a noise level no higher than 45 decibels and a reverberation time less than 1.5 seconds. The heating, ventilating and air conditioning noise level shall be no higher than 45 decibels in sleeping areas and classrooms.

(8) **Spaces for the disabled.**

a. **Housing room.** A room for a minor with a disability requiring a wheelchair must have an appropriate entry and a toilet, washbasin, and drinking fountain which the minor can utilize without personal assistance.

b. Other space within the security perimeter such as dayroom and activity areas shall be located such that a disabled minor will not be excluded from participating in any program for which they would otherwise be eligible. An accessible shower for disabled minors shall be available.

c. **Spaces outside the security perimeter.** Public areas of a local juvenile facility shall comply with the applicable chapters of Title 24, Part 2 of the California Code of Regulations.

(9) **Security.** Facility design shall provide security and supervision appropriate to the classification level of minors in custody.

a. The facility perimeter shall be controlled by appropriate means to ensure that minors remain within the perimeter and shall be designed to prevent access by the general public without proper authorization.

b. Security glazing shall be used where it defines the secure perimeter of buildings. It shall also be used at appropriate interior locations to ensure a secure and safe environment for minors and staff.

(10) **Medical/mental health care housing and treatment space.** There shall be some means to provide health care and housing and treatment of ill and/or infirm minors. When the operational program statement for a facility indicates that medical care housing is needed, such housing must provide lockable storage space for medical instruments and must be located within the security area of the facility accessible to both female and male minors, but not in the living area of either. Treatment spaces and the medical

care housing unit shall be designed in consultation with the health authority. If negative pressure isolation rooms are being planned, they shall be designed to the community standard. Medical/mental health areas may contain other than single occupancy rooms.

7. **Pilot project.** A pilot project is the short-term method used by a local juvenile facility/system approved by the Corrections Standards Authority to evaluate innovative programs, operations or concepts which may not comply with the regulations but meet or exceed the intent of these regulations.

The Corrections Standards Authority may, upon application of a city, county, or city and county, grant pilot project status to a program, operational innovation or new concept related to the operation and management of a local juvenile facility. An application for a pilot project shall include, at a minimum, the following information:

(a) The regulations that the pilot project shall affect;

(b) Any lawsuits brought against the applicant local juvenile facility, pertinent to the proposal;

(c) A summary of the "totality of conditions" in the facility or facilities, including but not limited to

1. Program activities, exercise and recreation,
2. Adequacy of supervision,
3. Types of minors affected, and
4. Classification procedures.

(d) A statement of the goals the pilot project is intended to achieve, the reasons a pilot project is necessary and why the particular approach was selected;

(e) The projected costs of the pilot project and projected cost savings to the city, county, or city and county, if any;

(f) A plan for developing and implementing the pilot project including a time line where appropriate; and

(g) A statement of how the overall goal of providing safety to staff and minors shall be achieved.

The Corrections Standards Authority may consider applications for pilot projects based on the relevance and appropriateness of the proposed project, the applicant's history of compliance/noncompliance with regulations, the completeness of the information provided in the application and staff recommendations.

Within 10 working days of receipt of the application, CSA staff shall notify the applicant, in writing, that the application is complete and accepted for filing, or that the application is being returned as deficient and identifying what specific additional information is needed. This does not preclude the Corrections Standards Authority members from requesting additional information necessary to make a determination that the pilot project proposed actually meets or exceeds the intent of these regulations at the time of the hearing. When complete, the application shall be placed on the agenda for the CSA's consideration at a regularly scheduled meeting. The written notification from the CSA to the applicant shall also include the date, time and location of the meeting at which the application shall be considered.

When an application for a pilot project is approved by the Corrections Standards Authority, the CSA shall notify the applicant, in writing within 10 working days of the meeting, of any conditions included in the approval and the time period for the pilot project. Regular progress reports and evaluative data on the success of the pilot project in meeting its goals shall be provided to the CSA. The Corrections Standards Authority may extend time limits for pilot projects for good and proper purpose.

If disapproved, the applicant shall be notified in writing, within 10 working days of the meeting, the reasons for said disapproval. This application approval process may take up to 90 days from the date of receipt of a complete application.

Pilot project status granted by the Corrections Standards Authority shall not exceed 12 months after its approval date. When deemed to be in the best interest of the applicant, the Corrections Standards Authority may extend the expiration date. Once a city, county, or city and county successfully completes the pilot project evaluation period and desires to continue with the program, it may apply for an alternate means of compliance. The pilot project shall be granted an automatic extension of time to operate the project pending the Corrections Standards Authority consideration of an alternate means of compliance.

8. **Alternate means of compliance.** An alternate means of compliance is the long-term method used by a local juvenile facility/system, approved by the Corrections Standards Authority, to encourage responsible innovation and creativity in the operation of California's local juvenile facilities. The Corrections Standards Authority may, upon application of a city, county, or city and county, consider alternate means of compliance with these regulations either after the pilot project process has been successfully evaluated or upon direct application to the Corrections Standards Authority. The city, county, or city and county shall present the completed application to the Corrections Standards Authority no later than 30 days prior to the expiration of its pilot project, if needed.

Applications for alternate means of compliance shall meet the spirit and intent of improving facility management, shall enhance, be equal to, or exceed the intent of, existing standard(s), and shall include reporting and evaluation components. An application for alternate means of compliance shall include, at a minimum, the following information:

(a) Any lawsuits brought against the applicant local facility, pertinent to the proposal;

(b) A summary of the "totality of conditions" in the facility or facilities, including but not limited to:

1. Program activities, exercise and recreation;
2. Adequacy of supervision;
3. Types of minors affected; and
4. Classification procedures.

(c) A statement of the problem the alternate means of compliance is intended to solve, how the alternative shall contribute to a solution of the problem and why it is considered an effective solution;

(d) The projected costs of the alternative and projected cost savings to the city, county, or city and county, if any;

(e) A plan for developing and implementing the alternative, including a time line where appropriate; and

(f) A statement of how the overall goal of providing safety to staff and minors was or would be achieved during the pilot project evaluation phase.

(g) When remodeling, a statement which indicates that the alternate means of compliance will provide an enhanced compliance with current regulations, if full compliance cannot be achieved.

The Corrections Standards Authority may consider applications for alternate means of compliance based on the relevance and appropriateness of the proposed alternative, the applicant's history of compliance/noncompliance with regulations, the completeness of the information provided in the application, the experiences of the jurisdiction during the pilot project, if applicable, and staff recommendations.

Within 10 working days of receipt of the application, CSA staff shall notify the applicant, in writing, that the application is complete and accepted for filing, or that the application is being returned as deficient and identifying what specific additional information is needed. This does not preclude the Corrections Standards Authority members from requesting additional information necessary to make a determination that the alternate means of compliance proposed meets or exceeds the intent of these regulations at the time of the hearing. When complete, the application shall be placed on the agenda for the CSA's consideration at a regularly scheduled meeting. The written notification from the CSA to the applicant shall also include the date, time and location of the meeting at which the application shall be considered.

When an application for an alternate means of compliance is approved by the Corrections Standards Authority, the CSA shall notify the applicant, in writing, within 10 working days of the meeting, of any conditions included in the approval and the time period for which the alternate means of compliance shall be permitted. Regular progress reports and evaluative data as to the success of the alternate means of compliance shall be submitted by the applicant. If disapproved, the applicant shall be notified in writing, within 10 working days of the meeting, the reasons for said disapproval. This application approval process may take up to 90 days from the date of receipt of a complete application.

The Corrections Standards Authority may revise the minimum standards during the next biennial review based on data and information obtained during the alternate means of compliance process. If, however, the alternate means of compliance does not have universal application, a city, county, or city and county may continue to operate under this status as long as they meet the terms of this regulation.

HISTORY:

1. (BOC 1/96) Regular order by the Board of Corrections to add Article 2, to Part 1, Title 24, C.C.R. Filed with the secretary of state on February 19, 1997; effective March 21, 1997. Approved as a regular order by the California Building Standards Commission on February 6, 1997.

HISTORY NOTE APPENDIX FOR CHAPTER 13

Administrative Regulations for the Board of Corrections
(Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (BOC 1/97) Regular order by the Board of Corrections to amend their administrative regulations pertaining to Local Detention Facilities. Filed with the secretary of state on March 25, 1998; effective April 24, 1998. Approved by the California Building Standards Commission on March 18, 1998.

2. January 2, 2003 Supplement approved by the California Building Standards Commission on January 31, 2001, Filed with the Secretary of State on February 2, 2001, published January 1, 2003 and effective July 1, 2003:

Section 13-102(a)5 — Revise ". . . Executive Officer . . ." to read ". . . Executive Director. . .".

Section 13-102(a)9 — Revise "Detoxification cell" to read "Sobering cell".

Section 13-102(a)24 — Revise ". . . as detoxification, safety, . . ." to read ". . . as sobering, safety, . . .".

Following Section 13-102(a)18, insert a new Section 13-102(a)19. Renumber Sections 13-102(a)29 and 13-102(a)30 as Section 13-102(a)30 and 13-102(a)31 respectively.

Following renumbered Section 13-102(a)31, insert a new Section 13-102(a)32. Renumber Sections 13-102(a)31 through 13-102(a)35 two numbers higher.

Following renumbered Section 13-102(a)37, insert a new Section 13-102(a)38. Renumber Section 13-102(a)36 as 13-102(a)39.

Following renumbered Section 13-102(a)39, insert a new Section 13-102(a)40. Renumber Sections 13-102(a)37 through 13-102(a)46 four numbers higher.

(All of the following references for Section 13-102 et seq. use the revised Section numbers.)

Section 13-102(c)2 — At the end of the first paragraph delete the words "The needs assessment study shall include:" and items A. through F. Insert new lead provision and items (a) through (k).

Section 13-102(c)3.R — Revise "disabled inmates" to "persons with disabilities."

Section 13-102(c)3.T — Revise "Section 4465.5" to "Section 4030."

Section 13-102(c)3.V — Revise "Detoxification Cell(s)" to "Sobering cell(s)."

Section 13-102(c)6.B.(2) — In the tenth line, revise "detoxification cells" to "sobering cells."

Section 13-102(c)6.B.(4)a — Revise "mentally disordered" to "persons with disabilities."

Section 13-102(c)6.B.(4)d — Delete the words "The needs assessment study shall include, but not be limited to, a description of:" and delete the items a. through j. immediately below.

Section 13-102(c)6.B.(9) — Revise the title to "Spaces for persons with disabilities."

Section 13-102(c)6.B.(9)a — Revise the definition to read "A cell or room for an inmate with a disability using a wheelchair must have an appropriate entry and a toilet, washbasin and drinking fountain which the inmate can use without personal assistance."

Section 13-102(c)6.B.(9)b — Revise ". . . disabled inmate . . ." to ". . . persons with disabilities . . ."; and revise the last sentence to read "Accessible showers for inmates with disabilities shall be available."

Following Section 13-102(c)6.B.(10) insert a new Section 13-102(c)6.B.(ll) and renumber the existing Section 13-102(c)6.B.(ll) to Section 13-102(c)6.B.(12).

Following the newly renumbered Section 13-102(c)6.B.(12), insert new Sections 13-102(c)6.B.(13) and 13-102(c)6.B.(14).

Section 13-102(c)6.C — Revise the fourth line to read ". . . (6), (7), (9), (10), and (12). Court holding. . ."

Section 13-201(a)2 — Revise the second line to read ". . . in an innovative way as approved by . . .".

Section 13-201(a)3 — Revise ". . . Executive Officer . . ." to ". . . Executive Director . . .".

Section 13-201(a)5 — Replace ". . . his or her . . ." with ". . . its . . .".

Section 13-201(a)6 — Replace ". . . officer . . ." with ". . . director. . .".

Section 13-201(a)7 — Revise ". . . Section 880 of the California Welfare and Institutions Code . . ." to read ". . . Section 881 of the Welfare and Institutions Code, . . ."; and revise ". . . Section 602 of the California Welfare and Institutions Code. . ." to read ". . . Section 602 of the Welfare and Institutions Code . . .".

Section 13-201(a)8 — In the last line, replace ". . . are . . ." with ". . . is . . .".

Section 13-201(a)9 — Revise ". . . means sentenced to a jail . . . " to read ". . . means placed in a jail . . .".

Section 13-201(a)15 — Revise ". . . an I.Q. of 70 or lower . . ." to read ". . . an I.Q. of 69 or lower . . .".

Insert a new Section 13-201(a)16 and renumber the existing Sections 13-201(a)16 thru 13- thru 13-13-201(a)51 one number higher.

(The following references use the revised Section numbers.)

Section 13-201(a)17-In the last line, replace ". . . observation . . ." with ". . . supervision . . .".

Section 13-201(a)21 — Revise ". . . Executive Officer . . ." to ". . . Executive Director . . .".

Section 13-201(a)24 — Revise ". . . Executive Officer or . . ." to ". . . Executive Director of . . .".

Section 13-201(a)27 — Revise ". . . contraindications to minors being . . ." to read ". . . contraindications to a minor being . . .".

Section 13-201(a)28 — In the third and last lines, revise ". . . the appeal . . ." to read ". . . an appeal . . .".

Section 13-201(a)31 — Revise the second line to read ". . . forestry camp, regional youth educational facility, boot camp or . . .".

Section 13-201(a)32 — In the last line, revise ". . . article . . ." to read ". . . subchapter . . .".

Section 13-201(a)34 — Revise the first and second lines to read ". . . means a building that contains a Type I or Temporary Holding Facility. It does not include . . .".

Section 13-201(a)35 — In the fifth line, add a "," after the word "determined" and in the sixth line add a "," after the word "effects."

Section 13-201(a)37 — In the third line revise ". . . sleeping rooms and/or dormitories . . ." to read ". . . sleeping rooms or dormitories . . .".

Section 13-201(a)38 — In the last line, revise ". . . their jurisdiction." to read ". . . his/her jurisdiction."

Section 13-201(a)39 — In the second line change ". . . which . . ." to ". . . that . . ."; and at the end of the Section add "Lockups are Type I or Temporary Holding Facilities as defined in the 'Minimum Standards for Local Detention Facilities'."

Section 13-201(a)40 — Revise ". . . minors authorized to be housed . . ." to ". . . minors that can be housed . . ."; and revise ". . . forestry camp or boot camp . . ." to read ". . . forestry camp, regional youth education facility, or boot camp . . ."; and in the last line, replace "article" with "subchapter."

Section 13-201(a)41 — Revise last line to read ". . . administrative responsibility for the mental health program."

Section 13-201(a)42 — Capitalize Minimum Standards for Local Detention Facilities and after ". . . Subchapter 4, . . ." add "Section 1000 et seq."

Section 13-201(a)43 – In the last line omit the word "California."

Section 13-201(a)44B — Add a "," after "and."

Section 13-201(a)45 — Revise ". . . Executive Officer . . . " to ". . . Executive Director. . ."

Section 13-201(a)46 — Revise the third line to read ". . . pursuant to a contract, . . .".

Section 13-201(a)48 — Revise the third line to read ". . . pursuant to an application . . .".

Section 13-201(a)50 — Revise the last line to read ". . . on an appeal."

Insert a new Section 13-201(a)53 and renumber existing Sections 13-201(a)52 thru 13-201(a)64 two numbers higher.

(The following references use the revised Section numbers.)

Section 13-201(a)54 — Revise the last line to read ". . . specified in Title 24 Section 460A."

Section 13-201(a)56 — Revise ". . . Executive Officer or . . ." to ". . . Executive Director of . . .".

Section 13-201(a)57 — In the last line change ". . . authority." to ". . . administrator."

Section 13-201(a)60 — Revise the second line to read ". . . of a minor, not to exceed 96 hours, . . .".

Section 13-201(a)61 — Omit the word ". . . California . . ." from the second line.

Section 13-201(a)63 — Revise the first line to read "Supervision in a law enforcement facility means . . ."; and revise the second line to read ". . . is being directly observed by the . . .".

Section 13-201(b) — Revise the seventh line to read ". . . Youth Authority of the Board of Corrections in effect . . .".

Section 13-201(c)l — Revise the first line to read ". . . or regional juvenile facility . . .".

Section 13-201(c)2 — Revise the second line to read ". . . or regional juvenile facility . . ."; and revise the third line to read ". . . facility, or expand the rated capacity of the current facility shall complete . . ."; and replace existing items A through E with new items A through J.

Section 13-201(c)3 — In item R revise the first line to read "Management of minors with disabilities with provisions . . ."; and in item S omit "and," from the last line; and in item T revise "Section 4465.5" to "Section 4030" and add "; and," to the last line; and insert a new item U.

Section 13-201(c)4 — Revise the second line to read ". . . county, or regional juvenile facility. . .".

Section 13-201(c)6B — Revise the first line to read ". . . facility shall address the . . .".

Section 13-201(c)6B(3) — Revise ". . . Subchapter 4 . . ." to read ". . . Subchapter 5. . .".

Section 13-201(c)6B(4) — Insert new language before "single or double occupancy . . ."; and omit the heading "The needs assessment shall include but not be limited to a description of:" along with the items a. through k. below it.

Section 13-201(c)6B(8)a. — Revise the definitions to read "A room for a minor with a disability requiring a wheelchair, must have an appropriate entry and a toilet, washbasin and drinking fountain which the minor can utilize without personal assistance."

Section 13-201(c)6B(10) — Revise the title to read ". . . health care housing and treatment space."; and revise the second line to read ". . . housing and treatment of ill . . ."; and revise the tenth line to read "... Treatment spaces and the medical care housing. . .".

Section 13-201(c)8 — Revise the second line of the second paragraph to read ". . . compliance shall enhance, be equal to, or . . ."; and insert a new item (g).

3. (BOC 01/02) Approval of minimum standards for local facilities, CCR, Title 24, Part 1. Approved by the California Building Standards Commission on July 16, 2003, and filed

with the Secretary of State on July 18, 2003. Effective August 17, 2003.

4. (BOC 01/04) Part 1, Chapter 13, Sections 13-102(a); 13-102(c)l; 13-102(c)3; 13-102(c)6; 13-102(c)7; 13-102(c)8.

13-102(a) — Definitions. Add a definition for "Contact," "Inmate worker," "Jail," "Law enforcement facility," "Lockup," "Nonsecure custody," "Secure detention," "Supervision in law enforcement facility," "Temporary custody" and "Exercise."

Revise "health authority" for clarity. Revise "local detention facility" to add the term "and minors" for clarity.

The term "herein" and "CCR" were deleted from the definition of "rated capacity."

Revise "managerial custodial personnel" for clarity.

Add new definition for "security glazing" to help define the adult regulation requirements.

The term "his or her" is being replaced with the term "his/her" in the definition of "Type I Facility."

13-102(c)1 — Letter of Intent + Revise regulation to provide consistent terminology when referring to a "city," "county" or "city and county."

13-102(c)3 — Program Statement — Retitled regulation to include "Operational" in the title heading to read as follows: "Operational Program Statement."

13-102(c)6 — Design Requirements — This modification will require floor drains to be added to hair care spaces.

13-102(c)7 — Pilot Projects — Replaces existing text in Title 24 with language from Title 15.

13-102(c)8 — Alternate Means of Compliance — Describes the process for applying, monitoring and approving alternate means of compliance.

5. (CSA 01/06) Part 1, Chapter 13, 13-201. Approved by the California Building Standards Commission on July 17, 2008, filed with the Secretary of State on October 21, 2008 and effective 30 days after filing with the Secretary of State.

CHAPTER 14

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF EDUCATION (DOE)

(RESERVED)

CHAPTER 15.1

ADMINISTRATIVE REGULATIONS FOR THE DEPARTMENT OF CONSUMER AFFAIRS (CA) BOARD OF ACCOUNTANCY

(RESERVED)

CHAPTER 15.2

ACUPUNCTURE EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.3

DIVISION OF ALLIED HEALTH PROFESSIONS

(RESERVED)

CHAPTER 15.4

BOARD OF ARCHITECTURAL EXAMINERS

(RESERVED)

CHAPTER 15.5

ATHLETIC COMMISSION

(RESERVED)

CHAPTER 15.6

AUCTIONEER COMMISSION

(RESERVED)

CHAPTER 15.7

BUREAU OF AUTOMOTIVE REPAIR

(RESERVED)

CHAPTER 15.8

BOARD OF BARBER EXAMINERS

(RESERVED)

CHAPTER 15.9

BOARD OF BEHAVIORAL SCIENCE EXAMINERS

(RESERVED)

CHAPTER 15.10

CEMETERY BOARD

(RESERVED)

CHAPTER 15.11

BUREAU OF COLLECTION AND INVESTIGATIVE SERVICES

(RESERVED)

CHAPTER 15.12

CONTRACTORS' STATE LICENSE BOARD

(RESERVED)

CHAPTER 15.13

BOARD OF COSMETOLOGY

(RESERVED)

CHAPTER 15.14

BOARD OF DENTAL EXAMINERS

(RESERVED)

CHAPTER 15.15

BUREAU OF ELECTRONIC AND APPLIANCE REPAIR

(RESERVED)

CHAPTER 15.16

BOARD OF FUNERAL DIRECTORS AND EMBALMERS

(RESERVED)

CHAPTER 15.17

BOARD OF REGISTRATION FOR GEOLOGISTS AND GEOPHYSICISTS

(RESERVED)

CHAPTER 15.18

BOARD OF GUIDE DOGS FOR THE BLIND

(RESERVED)

CHAPTER 15.19

HEARING AID DISPENSERS EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.20

BUREAU OF HOME FURNISHINGS

(RESERVED)

CHAPTER 15.21

BOARD OF LANDSCAPE ARCHITECTS

(RESERVED)

CHAPTER 15.22

BOARD OF MEDICAL QUALITY ASSURANCE

(RESERVED)

CHAPTER 15.23

BOARD OF NURSING HOME ADMINISTRATORS

(RESERVED)

CHAPTER 15.24

BOARD OF OPTOMETRY

(RESERVED)

CHAPTER 15.25

BUREAU OF PERSONNEL SERVICES

(RESERVED)

CHAPTER 15.26

BOARD OF PHARMACY

(RESERVED)

CHAPTER 15.27

PHYSICAL THERAPY EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.28

PHYSICIAN'S ASSISTANT EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.29

BOARD OF PODIATRIC MEDICINE

(RESERVED)

CHAPTER 15.30

BOARD OF POLYGRAPH EXAMINERS

(RESERVED)

CHAPTER 15.31

BOARD OF PROFESSIONAL ENGINEERS

(RESERVED)

CHAPTER 15.32

PSYCHOLOGY EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.33

BOARD OF REGISTERED NURSES

(RESERVED)

CHAPTER 15.34

RESPIRATORY CARE EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.35

BOARD OF CERTIFIED SHORTHAND REPORTERS

(RESERVED)

CHAPTER 15.36

SPEECH PATHOLOGY AND AUDIOLOGY EXAMINING COMMITTEE

(RESERVED)

CHAPTER 15.37

STRUCTURAL PEST CONTROL BOARD

(RESERVED)

CHAPTER 15.38

TAX PREPARERS PROGRAM

(RESERVED)

CHAPTER 15.39

BOARD OF EXAMINERS IN VETERINARY MEDICINE

(RESERVED)

CHAPTER 15.40

BOARD OF VOCATIONAL NURSE AND PSYCHIATRIC TECHNICIAN EXAMINERS

(RESERVED)

CHAPTER 16

CALIFORNIA STATE LIBRARY

ARTICLE 1
SCOPE

16-101. Application. These regulations apply to public library projects for which funds have been granted under the Library Construction and Renovation Bond Act of 1988, Proposition 85 (1988), Education Code Sections 19950-19981.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957 and 19961.

ARTICLE 2
DEFINITIONS

16-201. Definitions. In this chapter, the following definitions apply:

PROJECT means the construction or renovation project for which an application has been approved by the Board.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957 and 19961 (c).

BOND ACT means the California Library Construction and Renovation Bond Act of 1988, Proposition 85 (1988), Education Code Sections 19950-19981.

Authority: Education Code Section 19960.
Reference: Education Code Section 19950.

BOARD means the California Library Construction and Renovation Board.

Authority: Education Code Section 19960.
Reference: Education Code Section 19952 (c).

FACILITY means a building used for public library service and operated or intended to be operated by a jurisdiction under authority of an Education Code provision to provide public library service. The owner of a facility may be a jurisdiction other than the operator of the facility.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

INITIATOR means a description of a proposed change order together with a request for a cost estimate for the change order, prepared for transmission to the contractor by the project architect or similar official representing the owner. An "initiator" is sometimes referred to as a "bulletin."

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957, 19962 and 19965.

STATE LIBRARIAN means the State Librarian or a duly authorized representative of the State Librarian.

Authority: Education Code Section 19960.
Reference: Education Code Section 19960.

ARTICLE 3
ADMINISTRATION AND ENFORCEMENT

16-301. Local responsibility for plan checking and inspection. The local building official of the jurisdiction responsible for the site upon which the facility is located is responsible for routine plan checking and on-site inspections for compliance with local building codes, regulations and requirements.

Authority: Education Code Section 19960.
Reference: Education Code Section 19958 (b).

16-302. Required submissions to the state librarian before putting a project to bid.

(a) No project shall receive Bond Act funds if it has been put to bid before the State Librarian has reviewed and approved, in sequence, the following submissions of design and fiscal documents:

1. The building program, schematic designs and outline specifications, and a current project budget.
2. Preliminary plans and specifications (also known as 100 percent design development documents), and a current project budget.
3. Working drawings and specifications and contract language (also known as construction documents or contract documents), and a current project budget. This submission shall be prior to the local plan check.
4. Any revisions to the approved set of schematic designs, preliminary plans, or any revisions to the approved set of working drawings, specifications and contract clauses, including any resulting from the local plan check if they affect library operations or project scope.

(b) Projects which, at the time of approval of their application by the Board, have completed any of the design documents in the preceding subsection, shall after approval of the application submit the building program and the most current set of design documents to the State Librarian for the required review, in the number of copies specified by the State Librarian. Earlier versions need not be submitted.

Authority: Education Code Section 19960.
Reference: Education Code Section 19960.

Exception: Submission requirements shall differ from those in the preceding section for the designs of the following projects:

1. Projects solely for energy conservation shall submit an energy audit by a qualified engineer or architect, instead of a building program.
2. Projects whose total cost is less than $200,000, including any contiguous work not included in the approved project, shall omit the submission of the preliminary plans and specifications.
3. Projects governed by this section shall provide all other required submissions.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-303. Notification of submission dates. Grantees shall periodically provide the State Librarian an amended schedule of dates when the required initial submissions of building pro-

grams and schematic, preliminary and working drawings will be made. Submissions received within twenty-two (22) working days of the date specified on the most recent amended schedule received from the grantee at least thirty (30) working days prior to the submission shall be reviewed within the time periods specified in this Article.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957 and 19960.

16-304. Time period for review of submissions prior to bid.

(a) The State Librarian shall review:

1. The initial submission of building programs, schematic drawings and outline specifications, and current project budget within fifteen (15) working days after receipt.
2. The initial submission of preliminary plans and specifications, and current project budget within fifteen (15) working days after receipt.
3. The initial submission of working drawings, specifications and contract clauses within thirty (30) working days after receipt.

(b) The State Librarian shall approve any required resubmissions or any changes to approved designs and documents prior to bid, within five (5) working days after receipt.

(c) If the submission is received more than twenty-two (22) working days earlier or later than the date specified on the most recent amended schedule received from the grantee at least thirty (30) working days prior to the submission, the State Librarian may extend the review period for that submission by ten (10) working days.

(d) Following the time period for review, the State Librarian shall either approve the submission or notify the submitter of the deficiencies that are to be corrected. If the State Librarian does neither, the submission is approved as submitted.

Authority: Education Code Section 19960.
Reference: Education Code Section 19960.

16-305. Change orders.

(a) Following local award of the construction contract for the project, the grantee shall submit to the State Librarian a copy of each initiator, regardless of its nature, no later than the same time it is forwarded to the contractor.

(b) The State Librarian shall, within three working days of receipt of the initiator, review all initiators that if issued as change orders would:

1. Affect library operations, including but not limited to work that affects the location or number of any bookstacks, storage shelving, doorways or direction of swing of doors, paths of travel and circulation, access to any library equipment, materials and services, or use of spaces. Any such initiators shall be accompanied by a statement by the local library director describing how the change will be accommodated in the operational program following completion of the construction; or,
2. Change the scope of the project, including the project budget if the change would reduce the local contribution to the project.

(c) Upon receipt of any initiator requiring review in accordance with the preceding subsection, the State Librarian shall:

1. Approve the change order; or,
2. Return the initiator for resubmission, for a specified reason, in which case the resubmission will be reviewed within three days of its receipt; or,
3. Notify the submitter than an additional period not to exceed five days will be required to gather specified additional information. No further additional time shall be taken for this reason.

(d) If the State Librarian does not act in accordance with the preceding subsection, the change order may be issued as submitted.

(e) All other change orders may be issued without the State Librarian's approval.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957, 19962 and 19965.

16-306. Review of building programs, schematic designs, specifications and budget. The State Librarian shall review and approve building programs, schematic designs, outline specifications and the current project budget to ensure that:

(a) The building program conforms to general principles of library planning as included in Nolan Lushington, Libraries designed for users (1979); Raymond Holt, Wisconsin Library Building Handbook (1978); Aaron Cohen, Designing and space planning for libraries (1979), or similar standard public library planning works, and as supplemented by subsequent standard journal literature on changing concepts of library service.

(b) The schematic designs and outline specifications appropriately interpret the building program, provide functional arrangements and a practical design.

(c) The current project budget is appropriate to the approved program and to the schematic designs and outline specifications.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-307. Review of preliminary plans, specifications and budget. The State Librarian shall review and approve preliminary plans and specifications and the current project budget to ensure that:

(a) The preliminary plans carry out the approved schematic design concepts without significant change.

(b) The support systems are appropriate to meet program requirements, accessible and reasonably laid out.

(c) There are no obvious code compliance problems.

(d) The current project budget is appropriate to the approved program and to the preliminary designs.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-308. Review of working drawings, specifications, budget and contract language. The State Librarian shall review and approve working drawings and specifications, the current project budget, and contract language to ensure that:

(a) The systems and design are compatible with the programmatic needs of the library and the requirements of the State Building Code.

(b) The design reflects prudent principles of public works buildings design and good construction practice.

(c) The systems in the design documents are well coordinated.

(d) The current project budget is appropriate to the approved program and to the working drawing designs.

(e) The construction contract provides for all relevant requirements of the Bond Act, of the regulations adopted under authority of Education Code Section 19960, and of the project documents.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-309. Arbitration if fail to agree on comments.

(a) If the grantee and the State Librarian cannot agree on disposition of comments by the State Librarian at any of the reviews by the State Librarian, the State Librarian shall provide to the grantee a list of three experts qualified in the appropriate discipline. The experts shall not have previously been involved with the project. The grantee shall choose one of them to decide the issue, and shall pay the expert's costs and customary fees. The expert's decision shall be binding on both parties.

(b) If the issue relates to code interpretation, its disposition shall use the jurisdiction's local code appeals process.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-310. Bookstacks.

(a) No bookstacks may be installed, remodeled or moved until the State Librarian has reviewed and approved in sequence the following:

1. Specifications for the bookstacks, which implement the standards in Part 2 of the State Building Code, and
2. The local review of the contractor's calculations showing that the installation meets the specification.

This requirement applies to bookstacks to be installed, remodeled or moved in any project receiving Bond Act funds. It also applies both to bookstacks included in the local construction contract and to bookstacks contracted for separately from the local construction contract, but installed within one year of the completion of the local construction contract.

(b) The grantee or its successor in interest shall ensure that any bookstacks installed, moved or remodeled in any project during the twenty (20) years following acceptance of the project by the local jurisdiction having title to the facility conform to the specifications for library bookstacks in the State Building Code applicable to the project at the time of project completion.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957 (f) and 19967 (a).

16-311. Floor loads. If any floor areas in a project are adjacent to bookstacks and are potentially available for future installation of bookstacks, even if not originally so intended, those areas shall conform to the same floor load standards as required for the book-stacks.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-312. Remodeling.

(a) Remodeling and renovation of public library facilities constructed prior to 1973 shall conform to the *Uniform Building Code* requirements for remodeling, except that:

1. Remodeling and renovation of facilities classified as qualified historical buildings or structures under Health and Safety Code Section 18955 shall meet the requirements of the *State Historical Building Code* instead of the requirements of the *Uniform Building Code*.
2. Remodeling or renovation projects that include unreinforced masonry shall conform to Chapter 1 of the Appendix to the *Uniform Code for Building Conservation*, 1987. If a jurisdiction with a remodeling or renovation project that includes unreinforced masonry has adopted a local earthquake hazard mitigation program that requires strengthening such structures, the jurisdiction may instead follow its local program.

(b) Remodeling and renovation of public library facilities constructed in 1973 or later, or parts of public library facilities, shall for the facility, or each respective part of a facility, conform to the codes in effect at the time of original construction for the facility or for the respective part. If the remodeling and renovation is for a facility that had previously been remodeled, or for one or more parts that had previously been remodeled, and such previous remodeling required that the facility or respective parts of the facility were brought up to the code in effect at the time of previous remodeling, then the remodeling funded by Bond Act moneys shall conform to the code in effect at the time of previous remodeling rather than the code in effect at the time of original construction of the respective parts of the facility.

Authority: Education Code Section 19960.
Reference: Education Code Section 19957.

16-313. Access to construction and records. The grantee shall provide the State Librarian reasonable access to the construction site and to project records.

Authority: Education Code Section 19960.
Reference: Education Code Section 19960.

ARTICLE 4
FEES

16-401. Project administration fee.

(a) For purposes of this section, "project cost" means the entire cost of a project, paid by state and local funds combined, including the cost of bookstacks whether or not in the construction contract, and of furnishings if credited under Education Code Section 19962 (d), but excluding the cost of land acquired under Education Code Section 19957 (b) or the value of land donated or otherwise acquired and credited to the project under Education Code Section 19962 (c).

(b) The State Librarian may charge a project administration fee for each project of one-half of one percent (.5%) of project cost.

Authority: Education Code Section 19960.
Reference: Education Code Sections 19957, 19960 and 19962.

16-402. Allowable fees and costs as allowable bond act costs. Any fees or costs authorized in this Division, including work required to meet Title 24 requirements, may be included in Bond Act project costs. Costs of resolving a code interpretation dispute with the local building official may not be included in Bond Act costs.

Authority: Education Code Section 19960.

Reference: Education Code Sections 19957 (g) and 19958 (b) (4).

HISTORY:

1. (DOE-A 1/89) Adopt CCR, Title 24, Part 1, Chapter 16, effective 12-1-89. Approved by the Building Standards Commission 10-30-89.

ARTICLE 5
CALIFORNIA READING AND LITERACY IMPROVEMENT AND PUBLIC LIBRARY CONSTRUCTION AND RENOVATION BOND ACT OF 2000

Article 5.1. Scope.

16-510. Applicability. These regulations apply to public library projects for which funds have been granted under the California Reading and Literacy Improvement and Library Construction and Renovation Bond Act of 2000. Education Code Sections 19985-20011.

Authority: Education Code Section 19992.

Reference: Education Code Sections 19989 and 19993.

Article 5.2. Definitions.

16-520. Definitions. In this chapter, the following definitions apply:

ADDENDUM—a description of a proposed change to the approved plans or specifications prior to bid for construction.

ADDITION—a project that increases the floor area of enclosed space of an existing building. Addition also means expansion.

ARCHITECT—an architect holding a valid license under Chapter 3, Division 3, of the *California Business and Professions Code*.

ASSIGNABLE SQUARE FOOTAGE—the usable space within the defining walls of the building assigned to furniture and equipment but does not include any nonassignable space.

BOARD—the California Public Library Construction and Renovation Board.

BOND ACT—the California Reading and Literacy Improvement and Public Library Construction and Renovation Bond Act of 2000, Education Code, Sections 19985-20011.

BUILDING CODE—the *California Building Standards Code,* Title 24, California Code of Regulations.

CHANGE ORDER—a description of a proposed change, together with a cost estimate for the change order, prepared for transmission from the contractor to the project architect or similar official representing the owner.

CONSTRUCTION COST ESTIMATOR—an individual who has had responsibility for five or more construction project cost estimates in excess of $1,000,000 each within the previous 10 years prior to the Board's application deadline.

CONSTRUCTION SPECIFICATIONS INSTITUTE, or **CSI**—a technical association providing product and specification information to its members.

DESIGN DOCUMENTS—plans, specifications and all other documents appropriate for the design phase of a project.

DIVISION OF THE STATE ARCHITECT, or **DSA**—the Division of the State Architect, Department of General Services, State of California.

FACILITY—a building used for public library service and operated or intended to be operated by a local jurisdiction to provide public library service. The owner of a facility may be a jurisdiction other than the operator of the facility.

FENESTRATION—the arrangement, proportioning and design of exterior and interior windows, clerestories, skylights, window walls and doors in a building.

GROSS SQUARE FOOTAGE—the entire area of the building interior including the exterior wall thickness. The total of the assignable square footage and the nonassignable square footage equals the gross square footage.

LIBRARY BUILDING PROGRAM—the planning document that describes the space requirements and all other general building considerations required for the design of a public library building.

NONASSIGNABLE SPACE—utility areas of a building required for the function of the building, including stairways; elevators; corridors and interior walkways; public lobbies; restrooms; duct shafts; mechanical rooms; electrical closets; telecommunications closets for voice, data, electrical, security and fire systems; janitor's closets; fireplaces; interior and exterior wall thickness; and exterior amenities that are part of the building but not enclosed, such as loading docks and covered patios, porches, and walkways.

PLANS—the architectural and engineering drawings associated with a project such as, but not limited to, vicinity maps, site plans, foundation plans, floor plans, reflected ceiling plans, roof plans, cross sections, interior elevations, exterior elevations and details.

PROFESSIONAL ENGINEER—an engineer holding a valid certificate under Chapter 7, Division 3, of the *California Business and Professions Code*, in that branch of engineering that is applicable.

PROJECT—the construction, renovation and/or addition project for which an application has been awarded a grant by the Board.

READERS' SEATS—all seating in the library available for the public of all ages to use while reading print materials (i.e., lounge seating, benches, floor cushions, seating at tables, carrels, and study counters). Readers' seats do not include technology workstations.

REMODELING, REHABILITATION AND RENOVATION—a construction change within, or to, an existing building.

STATE LIBRARIAN—the California State Librarian or a duly authorized representative of the State Librarian.

STATE LIBRARY—the California State Library.

STATE LIBRARY PLANS REVIEW FORM—the form used by California State Library staff to comment on each design phase plan submittal. (See Appendix.)

TECHNOLOGY WORKSTATIONS—workstations in the library of any form (e.g., tables, carrels, counters, office systems) available for the public of all ages to use while operating any kind of library provided electronic or audiovisual technology [i.e., personal computers, computer terminals, online public access computers (OPAC's), audio and video units, ADA adaptive technology, and microform readers].

Authority: Education Code Section 19992.

Reference: Education Code Sections 19985, 19986(c), 19989, 19992, 19995 and 19997.

Article 5.3 Administration and enforcement. All library bond act projects.

16-530. Local responsibility for permitting, plan checking and construction inspections.

Local building official responsibilities. The local building official of the jurisdiction responsible for the site upon which the facility is located is responsible for routine plan checking and on-site inspections for compliance with state and local building codes, regulations and requirements.

Authority: Education Code Section 19992.

Reference: Education Code Section 19992.

Article 5.4. Administration and enforcement. All library bond act projects, including all joint use projects.

16-540. Required submission to the State Librarian before putting a project to bid.

(a) **State Librarian review and accept before bid.** No project awarded Library Bond Act funds shall be put to bid before the State Librarian has reviewed and accepted, in sequence, the submissions of design documents and final cost estimate as set forth in Section 16-542.

(b) **Projects that have completed any of the design documents at grant award not required to submit earlier versions.** Projects that, at the time of approval of their application by the Board, have completed any of the design documents in Section 16-542 shall, after grant award, submit a copy of the final library building program and the most current set of design documents to the State Librarian for the required review. Earlier versions need not be submitted.

Authority: Education Code Section 19992.

Reference: Education Code Section 19993.

16-541. Timetable for architectural and engineering plans and specifications review and acceptance.

(a) **Conceptual plans and outline specifications review.** Conceptual plans shall be returned to the grant recipient within 15 working days after the grant award by the Board.

(b) **State Librarian plans review.** The State Librarian shall review and accept:

1. **Schematic design plans and specifications review.** The review period for schematic documents [See Section 16-542(h)] is 15 working days after receipt.
2. **Design development plans and specifications review.** The review period for design development documents [See Section 16-542(i)] is 21 working days after receipt.
3. **Construction documents and specifications review.** The review period for construction documents [see Section 16-542(j)] is 30 working days after receipt.
4. **Final review of construction documents.** The review period for final construction documents [see Section 16-542(k)], before going to bid, is five working days after receipt. Final review shall occur after all local jurisdictional approvals have been obtained.

(c) **Revision to previously accepted set of design documents.** The State Librarian shall review and accept, within 10 working days after receipt, any revisions to a previously accepted set of design documents, including any revisions resulting from the local plan check, that affect the following:

1. **Alter use of space.** Alter the proposed use of all or part of the library building;
2. **Change square footage of space.** Change the square footage by 10 percent or more of a building space identified in the grant recipient's building program, and in the most recently accepted set of design documents;
3. **Decrease library components.** Decrease the number of collections, readers seats, technology workstations, staff workstations and offices, meeting room seating by more than 10 percent;
4. **Change in building systems with negative impacts.** Change the lighting, power or data distribution systems in a manner that negatively impacts the use of the building, furniture, and equipment by the public or staff;
5. **Modify access compliance.** Modify access compliance from most recently accepted set of design documents;
6. **Functional layout.** Change the layout of the library furniture and equipment in a way that negatively affects the functional operation of the facility as a library.

(d) **State Librarian acceptance.** Following the time period for review, the State Librarian shall either accept or notify the grant recipient of the deficiencies that are to be corrected. If the State Librarian does neither, the submission is accepted as submitted.

(e) **Plans and specifications submittal review period extension.** The State Librarian may extend the plans review period up to 15 additional working days if potential design or construction defects are identified in the plans and specifications. A letter of notification of the additional 15 working day review period will be sent to the grant recipient.

Authority: Education Code Section 19992.

Reference: Education Code Sections 19989 and 19993.

16-542. Submittal requirements for architectural and engineering plans and specifications review and acceptance.

(a) **Address for plans submittal.** The address for plans submittal shall be:

Library Bond Act Manager
Office of Library Construction
California State Library
1029 J Street, Suite 400
Sacramento, CA 95814-2825

(b) **State Librarian review and acceptance of architectural and engineering plans.** The State Librarian shall review and accept, in sequence, the final library building program, the architectural and engineering plans, and the construction cost estimates. For each submittal of schematic plans, design development plans and construction documents, the grant recipient shall submit to the California State Library, the following:

1. **Number of sets of plans required.** Four sets of plans and specifications; and
2. **One copy of all supporting documents required.** One copy of all other documentation as designated in this section for each design phase.

(c) **Sheet numbering.** All plan sheets shall be identified by a sheet number and shall be cross-referenced. Sheet numbers shall also correspond to a sheet index on the title sheet.

(d) **Preliminary, detailed and final construction cost estimates.** An independent, professional construction cost estimator who is not an employee of the grant recipient or library service provider shall provide the preliminary construction cost estimate for the schematic design plans and specifications review, the detailed construction cost estimate for the design development plans and specifications review, and the final construction cost estimate for the construction documents and specifications review. All estimates shall be priced out at the current market conditions prevailing at the time the plans and specifications are submitted to the State Library.

(e) **Incomplete submittals.** If the State Library determines that any design plan submittal is incomplete or incorrect, the grant recipient will be notified of the missing or incorrect documents within five days of receipt of the submittal. The time period for State Librarian review will not begin until the missing or corrected documents are submitted to the State Library.

(f) **State Library plans review form.** In response to any design phase review, State Library comments shall be documented on a State Library Plans Review Form (see Appendix) and returned to the grant recipient. The grant recipient shall address each State Library comment on the plans or specifications, making appropriate changes and noting on the State Library Plans Review Form each change made and where it can be found on the drawings or in the specifications. The grant recipient shall return one copy of this revised form to the State Library at the next required design phase submittal.

(g) **Conceptual plans and outline specifications review.** Conceptual plans and outline specifications previously submitted with an application shall be sent with State Library comments to the grant recipient. The grant recipient shall incorporate these comments into the schematic design plans and specifications.

(h) **Schematic design plans and specifications review.** The grant recipient shall provide the following:

1. **Final library building program.** A final library building program.
2. **Preliminary code information.** Preliminary code information documented on the title sheet of drawings including occupancy, construction type, site and building access, any applicable seismic and energy provisions, planning and environmental compliance information, and any other code applications to specific project conditions.
3. **Site plan.** A site plan showing the library building, parking (including number of spaces and location of accessible parking), and trees or other features that must remain in their original locations, and access drives as well as any anticipated future expansion of the building and parking. The site plan shall have a north arrow. Property lines shall be shown clearly as determined by the boundary survey completed as part of the grant application.
4. **Floor plans.** Floor plans of the spaces listed in the library building program and identified by the area/space name assigned in the library building program. Show all columns and identify all functional areas, including all nonassignable spaces.
5. **Furniture and equipment plan.** A furniture and equipment plan that identifies all furniture and equipment based on the library building program. The furniture and equipment plan shall be a computer-generated drawing, drawn to scale. Show all columns and coordinate with the floor plan. Show critical dimensions for the following: overall dimensions, dimensions between columns, dimensions for exiting and access compliance, and other dimensions that demonstrate the required quantity of furniture and equipment will fit into the proposed building, and allow for full code compliance and functioning of the facility.
6. **Assignable square footage tabulation.** A tabulation of the assignable square footage for each area called for in the final library building program compared to the assignable square footage shown on the floor plan.
7. **Collection tabulation.** A tabulation of the number of books, magazines and audiovisual materials called for in the library building program compared to the number of books, magazines and audiovisual materials that can be housed given the proposed furniture and equipment plan. The tabulation shall also provide the conversion factors utilized (books per double-faced unit, or books per linear foot).
8. **Technology workstations tabulation.** A tabulation of the number of technology workstations by area called for in the library building program compared to the number of technology workstations shown on the furniture and equipment plan.
9. **Readers' seats tabulation.** A tabulation of the number of readers' seats by area called for in the library building program compared to the number of readers' seats shown on the furniture and equipment plan.
10. **Exterior elevations.** Elevations of all four sides of the building showing general locations of openings, roof lines and grade lines.
11. **Roof plan.** A roof plan showing roofing material, roof slope and direction of slope; roof overhangs and major elements and their relationship to the exterior wall of the building.
12. **Building sections.** Two sections through the building, one longitudinal and one latitudinal.

13. **Engineering plans and specifications.**
    A. **Civil.** On-site and off-site utilities, fire protection, drainage, paving and grading.
    B. **Structural.** Basic structural materials and systems, analyses and development of design solutions.
    C. **Mechanical.** Energy source, heating, ventilating and air conditioning (HVAC), conservation, plumbing, fire protection and security systems.
    D. **Electrical.** Power, data, communication, lighting, fire and security systems, and general space requirements.
    E. **Landscape.** Conceptual design solutions for land forms, lawns and plantings based on program requirements, physical site characteristics, design and environmental objectives.
14. **Outline specifications.** Outline specifications describing the type and quality of building systems, basic components, and components unique to the project. Outline specifications for the engineering disciplines listed in Item 13, "Engineering plans and specifications" shall be included.
15. **Preliminary construction cost estimate.** A preliminary construction cost estimate consisting of a projected cost for the construction project based on the most recent schematic design studies, current and historic area, volume or other unit costs. The estimate shall include an assemblies (or CSI format) estimate summary.

(i) **Design development plans and specifications review.** The grant recipient shall provide the following:

1. **Site plan.** A site plan showing all buildings dimensioned from adjacent structures or other critical site features, datum elevations at all entries, street lines and grades, property lines, required setbacks, easements, parking, sidewalks, preliminary site and exterior building lighting scheme with identification of fixture types, and routing of sewer, water, gas and other utilities, and site detailing showing typical external elements.
2. **Floor plans.** Floor plans showing complete functional layout, room designations, all major dimensions, all critical dimensions and all columns.
3. **Exterior elevations.** Elevations showing full-height facades, type and extent of exterior finishes, all openings including fenestration and overall vertical building heights related to established building datum. Indicate treatment of visible mechanical equipment and abutting topography and grade relationship.
4. **Roof plan.** A roof plan delineating roofing materials, direction and slope of roof; relationship of exterior wall to roof, overhangs and covered areas; mechanical equipment areas and screening; and location and major dimensions for major roof elements.
5. **Building sections.** Two building sections (one longitudinal and one latitudinal) showing the overall building solution with typical wall construction, foundation, parapet design, insulation methods, window, mechanical penetrations impact, relationship of various levels, floor to ceiling heights, and ceiling height and bookstack height coordination anticipating code-compliant fire sprinkler installation.
6. **Details.** Detail sheets showing key conditions, such as window and frame types, frame and door types, typical wall types and nontypical design-related detailing.
7. **Interior elevations.** Interior elevations showing typical and special spaces, and any built-in cabinetry or counter items. These drawings shall be of pre-final quality adequate to convey design intent. Basic dimensions shall be delineated, along with casework, counters, and other built-ins, with heights and depths shown.
8. **Reflected ceiling plan.** Reflected ceiling plan integrated to show structural, mechanical and electrical impacts, including low voltage systems; e.g., security, audiovisual and public address system speakers.
9. **Schedules.** Schedules are to be nonrepetitive and comprehensive with keying to floor plans and elevations; pre-final interior finishes, frame and door, window and glazing, and preliminary hardware.
10. **Furniture, furnishings and equipment plan.** Furniture, furnishings and equipment plan with any special interior design features. Preliminary documentation of materials, finishes and colors.
11. **Signage schedule and plan.** Signage schedule and plan indicating the size, type and nomenclature of all interior signs.
12. **Assignable square footage comparison.** A tabulation of the assignable square footage for each area called for in the final library building program compared to the assignable square footage shown on the floor plan. Any changes from the accepted schematic plans shall be highlighted.
13. **Engineering plans and specifications.**
    A. **Civil.** Grading, drainage and preliminary details for on-site and off-site work.
    B. **Structural.** Basic structural system and dimensions, structural and foundation design criteria, and preliminary sizing of major structural components.
    C. **Mechanical.** Preliminary equipment and duct layout, approximate equipment sizes and capacities, required space for equipment, chases and clearance coordination with structural, acoustical and energy conservation measures and visual impacts.
    D. **Plumbing.** Preliminary plumbing lines routing within the building, point of entry of water, gas, storm drains, and sewer to building and preliminary details.
    E. **Electrical.** Electrical site plan. Preliminary lighting plan and fixture schedule, single line diagram, preliminary power, data, and communication plans, security and fire alarm plans, and low-voltage plans.
        (1) **Lighting system plan.** Lighting system plan overlaid on the furnishings, equipment and signage plan. Show all sources of artificial illu-

mination with a legend that indicates the type of light fixture.

(2) **Catalog "cut" sheets.** Catalog "cut" sheets for each lighting fixture showing the fixture configuration, type and lens. The cut sheets must be keyed to the legend on the plans for quick identification.

(3) **Electrical and data distribution systems plan.** Electrical and data distribution systems plan overlaid on the furnishings, equipment and signage plan. Show all service panel boards, power outlets, telephone, data communication outlets, and audiovisual outlets with a legend that indicates the type of outlets. Also include locations of book detection gates and security system components (surveillance cameras, motion and glass break detectors, magnetic door contacts, and card access system readers), and public address system speaker locations.

F. **Landscape.** Preliminary planting and irrigation plans with preliminary details.

14. **Draft specifications.** Draft specifications including comprehensive, abbreviated descriptions of size, character, and quality of methods, materials, and systems. Coordinate specifications with the drawings. Use Construction Specifications Institute (CSI) format with applicable section numbers. Include all engineering specifications, and special or supplementary conditions specific to the project.
15. **Detailed construction cost estimate.** A detailed construction cost estimate and summary shall be prepared updating and refining the preliminary construction cost estimate of the project. The following shall be shown: (1) a breakdown for each major area of construction work in CSI format; (2) all estimates shall include individual item unit costs (materials, labor and equipment); quantities and total quantity costs; (3) sales tax; general contractor's construction indirects (general conditions, overhead and profit); subcontractor's mark-ups shall be listed separately; (4) the estimate shall separate the project's building costs from site and utilities costs.

(j) **Construction documents and specifications review.** The grant recipient shall provide the following:

1. **Complete set of construction documents.** A complete set of construction documents including all drawings, and specifications, structural calculations, and energy load calculations in accordance with the Building Code; and contract language, along with all other documentation required as part of the bid package. All building systems must be delineated fully to illustrate their proposed scope and functions.
2. **Final construction cost estimate.** A detailed final construction cost estimate and summary shall be prepared in CSI format, updating and refining the detailed construction cost estimate, including: (1) individual line items, unit costs (materials, labor and equipment); quantities and total quantity costs; (2) sales tax; general contractor's construction indirects (general conditions, overhead and profit); subcontractor's mark-ups shall be listed separately; and (3) the estimate shall separate the project's building costs from site and utilities costs.

(k) **Final review of construction documents.** Once the State Librarian has accepted the construction documents and all the local code compliance reviews have been completed, the grant recipient shall send to the State Library one final copy of stamped and signed plans and specifications, which will be used by contractors when providing their bids. All sheets of the plans shall be signed, as well as the specifications cover by the architect or appropriate engineer.

(l) **Access compliance.** Grant recipient, upon receipt of DSA approval, shall provide documentation of DSA Access Compliance approval for the project to the State Librarian. (See Access Compliance by the Division of the State Architect authority as cited in Government Code, Section 4450 et. seq., and the compliance procedures found in *California Building Standards Code*, Title 24, Code of Regulations, Part 1, Sections 5-101 et. seq.)

Authority: Education Code Section 19992.
Reference: Education Code Sections 19989 and 19993.

16-543. Bookstacks.

(a) **Bookstack installation acceptance.** No bookstacks may be installed, remodeled or moved until the State Librarian has reviewed and accepted in sequence the following:

1. **Specifications for the bookstacks.** Specifications for the bookstacks, which implement the standards in Volume 2 of the *California Building Code;* and
2. **Local review and approval of bookstack installation.** The local review and approval of the bookstack contractor's calculations showing that the installation meets the specification.

(b) **Requirement for bookstacks installed at a later date.** The requirement in Section 16-543(a) applies to bookstacks to be installed, remodeled or moved in any project receiving Library Bond Act funds. It also applies both to bookstacks included in the local construction contract and to bookstacks contracted for separately from the local construction contract, but installed within one year of the completion of the local construction contract.

(c) **Bookstack installation must meet specifications for 40 years.** The grant recipient or its successor in interest shall ensure that any bookstacks installed, moved or remodeled in any project during the 40 years following acceptance of the project by the local jurisdiction having title to the facility conform to the specifications for library bookstacks in the *California Building Code.*

Authority: Education Code Section 19992.
Reference: Education Code Sections 19989 and 19999(a).

16-544. Floor loads.

(a) **Standards for floor loads.** Implement the standards in Volume 2 of the *California Building Code.*

(b) **Floor load for adjacent areas to bookstacks.** If any floor areas in a project are adjacent to bookstacks and the bookstacks may expand to these adjacent areas, even if not originally so intended, those areas shall conform to the same

floor load standards as required for the bookstacks. (Refer to *California Building Code,* Volume 2.)

Authority: Education Code Section 19992.
Reference: Education Code Section 19989.

16-545. Renovations.

(a) **Public library renovation requirements.** Renovation of public library facilities shall conform to the *California Building Standards Code*, Title 24, California Code of Regulations requirements for renovation, except that:

1. **Renovation projects**—***California Historical Building Code***. Renovation of facilities classified as qualified historical buildings or structures under Health and Safety Code Section 18955 shall meet the requirements of the *California Historical Building Code* (Part 8) instead of the requirements of the *California Building Standards Code*, Title 24, California Code of Regulations.
2. **Renovation projects**—***California Code for Building Conservation***. Renovation projects that include unreinforced masonry shall conform to Part 10 of the *California Building Standards Code*, the *California Code for Building Conservation.*

Authority: Education Code Section 19992.
Reference: Education Code Section 19989.

16-546. State Librarian acceptance of addenda and change orders.

(a) **Changes in accepted plans.** Changes of the accepted plans or specifications shall be made by means of an addendum or change order sent to the address specified in Section 16-542(a).

(b) **Addendum and change order types requiring State Librarian review.** A grant recipient shall submit to the State Librarian for review and acceptance addenda or change orders that would:

1. **Alter use of space.** Alter the proposed use of all or part of the library building;
2. **Change square footage of space.** Change the square footage by 10 percent or more of a building space identified in the grant recipient's building program, and in the final construction documents accepted by the State Librarian;
3. **Decrease library components.** Decrease the number of collections, readers' seats, technology workstations, staff workstations and offices, meeting room seating by more than 10 percent;
4. **Change in building systems with negative impacts.** Change the lighting, power, or data distribution systems in a manner that negatively impacts the use of the building, furniture, and equipment by the public or staff.
5. **Modify access compliance.** Modify access compliance from what was approved by Division of State Architect's Access Compliance unit.

(c) **Addendum and change order requirements.** Addenda and change orders shall state the reason for the change and the scope of work to be provided, and where necessary, supplementary drawings shall be furnished to clearly describe the change.

(d) **Acceptance of addenda or change orders.** Upon receipt of any addenda or change orders requiring review in accordance with the preceding subsections, the State Librarian shall, within three working days of receipt, review and:

1. **Accept.** Accept the addendum or change order; or
2. **Return for resubmission.** Return the addendum or change order, stating the reasons why it was not accepted, for revision or additional justification and resubmission.

(e) **Addenda or change orders issued as submitted.** If the State Librarian has not accepted or returned the addendum or change order within three working days, the addendum or change order may be issued as submitted.

(f) **All other project addenda and change orders.** All addenda or change orders not covered by Section 16-546(b) shall be issued without the State Librarian's review and acceptance.

Authority: Education Code Section 19992.
Reference: Education Code Sections 19989, 19995 and 19997.

16-547. State Access to construction and records.

Access to construction site and project records. The grant recipient shall provide the State Librarian reasonable access to the construction site and to project records.

Authority: Education Code Section 19992.
Reference: Education Code Sections 19992 and 19993.

Article 5.5. Fees.

16-550. Allowable fees and costs as allowable bond act costs.

Allowable project fees and costs. Any fees or costs authorized in these regulations pursuant to the Library Bond Act, including work required to meet *California Building Standards Code* requirements, may be included as eligible Library Bond Act project costs.

Authority: Education Code Section 19992.
Reference: Education Code Sections 19989 and 19990.

APPENDIX
STATE LIBRARY PLANS REVIEW FORM

CALIFORNIA STATE LIBRARY
Office of Library Construction
1029 J Street, Suite 400
Sacramento, CA 95814

Facsimile: (916) 445-9200
E-mail: _____
Contact: _____

PAGE _____OF _____

[ ] CONCEPTUAL [ ] SCHEMATICS [ ] DESIGN DEVELOPMENT
[ ] CONSTRUCTION DOCUMENTS [ ]

PROJECT NAME: _____

PROJECT LOCATION: _____

STATE LIBRARY PROJECT NO: _____

#	REVIEW COMMENT	ACTION TAKEN	DATE

APPENDIX
STATE LIBRARY PLANS REVIEW FORM (Continued)

CALIFORNIA STATE LIBRARY
Office of Library Construction
1029 J Street, Suite 400
Sacramento, CA 95814

Facsimile: (916) 445-9200
E-mail: _____
Contact: _____

PAGE _____OF _____

#	REVIEW COMMENT	ACTION TAKEN	DATE

HISTORY NOTE APPENDIX FOR CHAPTER 16

Administrative Regulations for the State Librarian
(Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (SL 1/01) Part 1, Chapter 16, Article 5. Approved by the Building Standards Commission on November 28, 2001. Filed with the Secretary of State on December 4, 2001, effective January 3, 2002. Add Article 5 to Chapter 16 pertaining to the libraries funded pursuant to the Public Library Construction and Renovation Bond Act of 2000.

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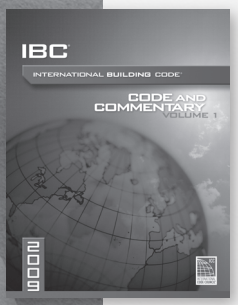

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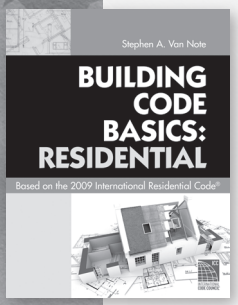

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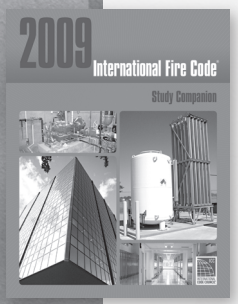

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