45-DAY EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION

REGARDING PROPOSED CHANGES TO
CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A Notation: shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE)

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is underlined.
2. New California amendments: All such language appears *underlined and in italics*.
3. Repealed text: All such language appears in ~~strikeout~~.
4. Information for the reader is shown as *[bracketed and in italics].*

INITIAL EXPRESS TERMS

ITEM 1. CBSC proposes to bring forward existing California amendments in Chapter 1, Division I, Section 1.1 General, from the 2013 California Building Code for adoption into the 2016 California Building Code with additional amendments as follows:

CHAPTER 1
SCOPE AND ADMINISTRATION
DIVISION I
CALIFORNIA ADMINISTRATION

SECTION 1.1
GENERAL

1.1.1 Title. *These regulations shall be known as the California Building Code, may be cited as such and will be referred to herein as "this code." The California Building Code is Part 2 of ~~twelve~~ thirteen parts of the official compilation and publication of the adoption, amendment and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the ~~2012~~ 2015 International Building Code of the International Code Council with necessary California amendments.*

1.1.2 Purpose. *The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.*

1.1.3 Scope. *The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout the State of California.*

1.1.3.1 Nonstate-regulated buildings, structures and applications. *Except as modified by local ordinance pursuant to Section 1.1.8, the following standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9, 10 and 11 shall apply to all occupancies and applications not regulated by a state agency.*

1.1.3.2 State-regulated buildings, structures and applications. *The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions shall apply to the following buildings, structures, and applications regulated by state agencies as specified in Sections 1.2 through 1.14, except where modified by local ordinance pursuant to Section 1.1.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature.*

Note: See ~~Preface~~ "How to Distinguish Between Model Code Language and California Amendments" in the front of the code.

1. *State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 1.2 for additional scope provisions.*

2. *Local detention facilities regulated by the Board of State and Community Corrections ~~Corrections Standards Authority~~. See Section 1.3 for additional scope provisions.*

3. *Barbering, cosmetology or electrolysis establishments, acupuncture offices, pharmacies, veterinary facilities and structural pest control locations regulated by the Department of Consumer Affairs. See Section 1.4 for additional scope provisions.*

4. *~~Energy efficiency standards regulated by the~~ Section 1.5 reserved for the California Energy Commission. ~~See Section 1.5 for additional scope provisions.~~*

5. *Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See Section 1.6 for additional scope provisions.*

6. *Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles and wild animal quarantine facilities regulated by the Department of Public Health. See Section 1.7 for additional scope provisions.*

7. *Hotels, motels, lodging houses, ~~apartment houses~~ apartments, 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. See Section 1.8.2.1.1 for additional scope provisions.*

8. *Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLING," and new common-use ~~spaces~~ areas serving new covered*

multifamily dwellings, which are regulated by the Department of Housing and Community Development. See Section 1.8.2.1.2 for additional scope provisions.

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16. Section 1.13 reserved for ~~Graywater systems regulated by~~ the Department of Water Resources. ~~See Section 1.13 for additional scope provisions.~~

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1.1.7 Order of precedence and use.

1.1.7.1 Differences. *In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.*

1.1.7.2 Specific provisions. *Where a specific provision varies from a general provision, the specific provision shall apply.*

1.1.7.3 Conflicts. *When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title the most restrictive requirements shall prevail.*

1.1.7.3.1 Detached one-and two-family dwellings. *Detached one-and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures, may be designed and constructed in accordance with this code or the California Residential Code, but not both, unless the proposed structure(s) or element(s) exceed the design limitations established in the California Residential Code, and the code user is specifically directed by the California Residential Code to use this code.*

1.1.8 City, county, or city and county amendments, additions or deletions. *The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 1.1.8.1. The effective date of amendments, additions or deletions to this code by a city, county, or city and county filed pursuant to Section 1.1.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code. Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.*

1.1.8.1 Findings and filings.

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.

3. Findings prepared by fire protection districts shall be ratified by the local city, county or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P. 0. Box 1407, Sacramento, CA 95812-1407 or ~~1800 3rd Street, Room~~

~~260, Sacramento, CA 95811~~ 2020 West El Camino Avenue, Suite 250, Sacramento, CA 95833-1829.

1.1.8.2 Locally adopted energy standards – California Energy Code, Part 6

In addition to the provisions of Section 1.1.8.1 of this Part, the provisions of this section shall apply to a city, county, and city and county adopting local energy standards applicable to buildings and structures subject to the California Energy Code, Part 6.

Applicable provisions of Public Resources Code Section 25402.1(h)(2) and applicable provisions of Section 10-106, Chapter 10 of the California Administrative Code, Part 1 apply to locally adopted energy standards amending the California Energy Code, Part 6.

***1.1.9 Effective date of this code**. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.*

***1.1.10 Availability of codes.** At least one complete copy each of Titles 8, 19, 20, 24 and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county, or city and county shall have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (~~d~~ e) (1) and (2).*

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Notation:
Authority: Government Code §14617; Health and Safety Code § 16600, 18928, 18930.5, 18934.5, 18934.6, 18938 & 18940.5
References: Government Code §14617; Health and Safety Code §§16600 & 18901-18949

ITEM 2. CBSC proposes to bring forward existing California amendments in Chapter 1, Division I, Section 1.2 Building Standards Commission, from the 2013 California Building Code for adoption into the 2016 California Building Code with additional amendments as follows:

SECTION 1.2
BUILDING STANDARDS COMMISSION

***1.2.1 BSC.** Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

1. State buildings for all occupancies.

***Application-**State buildings (all occupancies), including buildings constructed by the Trustees of the California State University (CSU) and the Regents of the University of California (UC) where no state agency has the authority to adopt building standards applicable to such buildings.*

***Enforcing agency-**State or local agency specified by the applicable provisions of law.*

Authority cited-*Health and Safety Code Section 18934.5.*

Reference-*Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.*

2. University of California, California State Universities and California Community Colleges.

Application-*Standards for lighting for parking lots and primary campus walkways at the University of California, California State Universities and California Community Colleges.*

Enforcing agency-*State or local agency specified by the applicable provisions of law.*

Authority cited-*Government Code Section 14617.*

Reference-*Government Code Section 14617.*

3. Existing state-owned buildings, including those owned by the University of California and by the California State University.

Application-*Building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures. See also Division of the State Architect.*

Enforcing agency*-State or local agency specified by the applicable provisions of law. Authority cited-Health and Safety Code Section 16600.*

Authority cited- *Health and Safety Code Sections 16600.*

Reference-*Health and Safety Code Sections 16600 through 16604.*

4. Unreinforced masonry-bearing wall buildings*.*

Application-*Minimum seismic strengthening standards for buildings specified in Appendix Chapter A1 of the California Existing Building Code, except for buildings subject to building standards pursuant to Health and Safety Code (commencing) with Section 17910.*

Enforcing agency-*State or local agency specified the applicable provisions of law.*

Authority cited-*Health and Safety Code Section 18934.~~6.~~7*

Reference-~~Health and Safety Code Sections 18901 through 18949.~~ *Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.*

1.2.1.1 State building. *For purposes of this code, a "state building" is a structure for which a state agency or state entity has authority to construct, alter, enlarge, replace, repair or demolish.*

1.2.1.2 Enforcement. *[CSU, UC, Judicial Council and California Department of Corrections and Rehabilitation ~~CDCR~~] State agencies or state entities authorized to construct state buildings may appoint a building official who is responsible to the agency for enforcement of the provisions of the California Building Standards Code.*

Exception: *State buildings regulated by other sections of this code remain the enforcement responsibility of the designated entities.*

1.2.1.3 Enforcement. Reserved for DGS.

~~1.2.3~~ 1.2.1.4 Adopting agency identification. *The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym* ***BSC****.*

1.2.2 BSC-CG. *Specific scope of application of the agency responsible for enforcement, the enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

Application*-All occupancies where no state agency has the authority to adopt green building standards applicable to those occupancies.*

Enforcing agency*-State or local agency specified by the applicable provisions of law.*

Authority cited*-Health and Safety Code Sections 18930.5(a), 18938, and 18940.5.*

Reference*-Health and Safety Code, Division 13, Part 2.5, commencing with Section 18901.*

1.2.2.1 Adopting agency identification. *The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym* ***BSC-CG****.*

~~1.2.2~~ 1.2.3 Alternative materials, design and methods of construction and equipment. *The provisions this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.*

~~1.2.2.1~~ 1.2.3.1 Research reports. *Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.*

~~1.2.2.2~~ 1.2.3.2 Tests. *Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.*

Notation:
Authority: Government Code §14617; Health and Safety Code § 16600, 18928, 18930.5, 18934.5, 18934.6, 18938 & 18940.5
References: Government Code §14617; Health and Safety Code §§16600 & 18901-18949

ITEM 3. CBSC does not adopt Chapter 1 SCOPE AND ADMINISTRATION, but proposes to carry forward existing editorial amendments and make additional editorial amendments for code consistency.

DIVISION II
SCOPE AND ADMINISTRATION

Note: *Sections adopted or amended by state agencies are specifically indicated by and agency banner. ~~or indicated in the Matrix Adoption Table.~~*

Notation:
Authority: Government Code §14617; Health and Safety Code § 16600, 18928, 18930.5, 18934.5, 18934.6, 18938 & 18940.5
References: Government Code §14617; Health and Safety Code §§16600 & 18901-18949

ITEM 4. CBSC proposes to adopt 2015 IBC, Chapter 2 Definitions.

CHAPTER 2

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Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 5. CBSC proposes to adopt Chapters 3, 4, 5, 6, 7 of the 2015 IBC without amendment.

CHAPTER 3
USE AND OCCUPANCY CLASSIFICATION
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CHAPTER 4
SPECIAL DETAILED REQUIREMENTS ON USE AND OCCUPANCY
. . .

CHAPTER 5
GENERAL BUILDING HEIGHTS AND AREAS
. . .

CHAPTER 6
TYPES OF CONSTRUCTION
. . .

CHAPTER 7
FIRE AND SMOKE PROTECTION FEATURES
. . .

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 6. CBSC proposes to adopt Chapter 8 Interior Finishes of the 2015 IBC with new amendments.

CHAPTER 8
INTERIOR FINISHES

SECTION 801
GENERAL

801.1 Scope. The provisions of this chapter shall govern the use of materials used as interior finishes, trim, and decorative materials. ***[BSC-CG]*** *See California Green Building Standards Code, Chapter 5, Division 5.5 for additional finish material pollutant control requirements.*

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Notation:
Authority: Health and Safety Code §18928 & 18934.5 18940.5
Reference: Health and Safety Code §§18928, 18928.1, 18934.5, 18938(b) & 18940.5

ITEM 7. CBSC proposes to adopt Chapters 9 and 10 of the 2015 IBC without amendment.

CHAPTER 9
FIRE PROTECTION SYSTEMS
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CHAPTER10
MEANS OF EGRESS
. . .

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 8. CBSC does not adopt Chapter 11 Accessibility of the 2015 IBC.

CHAPTER 11
ACCESSIBILITY

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 9. CBSC proposes to adopt Chapter 12 Interior Environment of the 2015 IBC with new amendments and carry forward the existing amendment to Section 1205.7 (formerly 1205.6) Campus lighting for parking facilities and primary walkways at California state universities, colleges and community colleges and its sub-sections.

CHAPTER 12
INTERIOR ENVIRONMENT

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SECTION 1205

LIGHTING

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1205.6 Light pollution reduction. [BSC-CG] *See California Green Building Standards Code, Chapter 5, Division 5.1 for additional light pollution reduction requirements.*

~~1205.6~~ 1205.7 Campus lighting for parking facilities and primary walkways at California state universities, colleges and community colleges. [BSC] *Artificial light shall be provided for parking facilities and primary walkways at California State Universities, colleges, and community colleges in accordance with provisions of this subsection. This subsection shall not apply to the University of California unless the Regents of the University of California, by resolution, make it applicable.*

~~1205.6.1~~ 1205.7.1 Lighting Requirements. *Based on the recommendations of the most current edition of the Illumination Engineering Society lighting handbook, for the following lighting standards shall be used for all new construction of open parking facilities, covered parking facilities and primary walkways:*

1. *Open and covered parking facilities.*
   - *1.1 Medium-level activity usage when medium usage is present.*
   - *1.2 High-level activity usage when high usage is present.*

2. *Primary campus walkways.*
   - *2.1 Medium-level activity usage when medium usage is present.*
   - *2.2 High-level activity usage when high usage is present*

SECTION 1207
SOUND TRANSMISSION

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1207.5 Acoustical control. [BSC-CG] *See California Green Building Standards Code, Chapter 5, Division 5.5 for additional sound transmission requirements.*

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Notation:
Authority: Government Code §14617, Health and Safety Code §18928, 18934.5 & 18940.5
Reference: Government Code §14617, Health and Safety Code §§18928, 18928.1, 18934.5, 18938(b) & 18940.5

ITEM 10. CBSC does not adopt Chapter 13 Energy Efficiency of the 2015 IBC.

CHAPTER 13
ENERGY EFFICIENCY

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 11. CBSC proposes to adopt Chapter 14 Exterior Walls of the 2015 IBC with amendments.

CHAPTER 14

EXTERIOR WALLS

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1403.2.1 [BSC-CG] *See California Green Building Standards Code, Chapter 5, Division 5.4 for additional weather protection requirements.*

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Notation:
Authority: Health and Safety Code §18928, 18934.5 & 18940.5
References: Health and Safety Code §§18928, 18928.1, 18934.5 & 18940.5

ITEM 12. CBSC proposes to adopt Chapter 15 Roof Assemblies and Roof Top Structures of the 2015 IBC with amendments. Carry forward the existing amendment to Section 1510.7.1 (Formerly 1509.7.1) Wind resistance.

CHAPTER 15
ROOF ASSEMBLIES AND ROOF TOP STRUCTURES

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SECTION 1510 (FORMERLY 1509)
ROOFTOP STRUCTURES

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~~**1509.7.1**~~ **1510.7.1 Wind resistance**. Rooftop mounted photovoltaic panels and modules shall be designed for component and cladding wind loads in accordance with Chapter 16 using an effective wind area based on the dimensions of a single unit frame.

Exception: [BSC] *The effective wind area shall be in accordance with Chapter 16 and ASCE 7 Section 26.2.*

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Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 13. CBSC adopts Chapter 16 Structural Design of the 2015 IBC with new amendments. Carry forward existing California amendments with minimal changes to Section 1613.1.2 and 1613.1.3 for state-owned buildings. Repeal Section 1613.5 and its sub-section which amended ASCE 7.

CHAPTER 16
STRUCTURAL DESIGN

SECTION 1613
EARTHQUAKE LOADS

1613.1 Scope. Every structure, and portion thereof,…

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1613.1.2. State-owned buildings. [BSC] *State-owned buildings, including those of the University of California, CSU and Judicial Council, shall not be constructed where any portion of the foundation would be*

within a mapped area of earthquake-induced liquefaction of landsliding or within 50 feet of a mapped fault rupture hazard as established by Section 1803.7

1613.1.3 Existing state buildings. [BSC] *Additions, alterations, repairs, or change of occupancy category of existing buildings shall be in accordance with the California Existing Building Code, Part 10. ~~Chapter 34.~~*

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~~1613.5 [BSC] Modifications to ASCE 7.~~ *~~The text of ASCE 7 shall be modified as indicated in Sections 1613.5.1 through 1613.5.2.~~*

~~1613.5.1 [BSC] Modify ASCE 7 DEFINITIONS~~ *~~as follows:~~*

~~1.2 DEFINITIONS.~~

~~BALLASTED PHOTOVOLTAIC SYSTEM:~~ *~~A roof mounted system composed of solar photovoltaic panels and supporting members that are unattached or partially attached to the roof and must rely on its weight, aerodynamics and friction to counter the effect of wind and seismic forces.~~*

~~1613.5.2 [BSC] Modify ASCE 7 Section 13.4~~ *~~as follows:~~*

~~Section 13.4 NONSTRUCTURAL COMPONENT ANCHORAGE.~~

~~Components and their supports shall be attached (or anchored) to the structure in accordance with the requirements of this section and the attachment shall satisfy the requirements for the parent material as set forth elsewhere in this standard. Component attachments shall be bolted, welded, or otherwise positively fastened without consideration of frictional resistance produced by the effects of gravity. A continuous load path of sufficient strength and stiffness between the component and the supporting structure shall be provided. Local elements of the structure including connections shall be designed and constructed for the component forces where they control the design of the elements or their connections. The component forces shall be those determined in Section 13.3.1, except that modifications to Fp and R, due to anchorage conditions need not be considered. The design documents shall include sufficient information relating to the attachments to verify compliance with the requirements of this section~~

~~Exception:~~ *~~Ballasted photovoltaic systems when designed is based on Section 13.4.7 and approved by the enforcing agency.~~*

~~13.4.7. Solar PV panels or modules installed on a roof as a balasted system need not be rigidly attached to the roof or supporting structure. Ballasted systems shall be designed and installed only on roofs with slopes 1 inch per foot or less. The ballasted system shall be designed to resist sliding and uplift resulting from lateral and vertical forces, using a coefficient of friction determined by acceptable engineering practices. In sites where the Seismic Design category is C or above, the system shall be designed to accommodate seismic displacement determined by approved analysis or shake-table testing, using input motions consistent with ASCE 7 lateral and vertical seismic forces for non-structural components on roofs.~~

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 14. CBSC proposes to adopt Chapter 17 Special Inspections and Tests of the 2015 IBC without new amendments. Carry forward existing California amendments to Sections 1704.2.3 and 1707.1. See Item 26.

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 15. CBSC proposes to adopt Chapter 18 Soils and Foundation of the 2015 IBC without new amendments. Carry forward existing California amendments to Section 1810.3.10.4 Seismic Reinforcement.

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 16. CBSC proposes to adopt Chapter 19 Concrete of the 2015 IBC with amendments. CBSC proposes to repeal the amendment to the 2013 CBC, Section 1905.1.8 (Formerly 1905.1.9) American Concrete Institute (ACI), Section D.3.3 and adopt the 2015 IBC Section 1905.1.8, ACI 318, Section 17.2.3 with minor amendments.

CHAPTER 19
CONCRETE

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1905.1.3 ACI 318, Section 18.5 (formerly 21.4).
Modify ACI 318, (formerly Section 21.4), by adding new Section 18.5.2.2 and renumbering existing Section 18.5.2.2 and 18.5.2.3 to become 18.5.2.3 and 18.5.2.4, respectively.

18.5.2.2 - Connections that are designed to yield shall be capable of maintaining 80 percent of their design strength at the deformation induced by the design displacement or shall use Type 2 mechanical splices.

18.5.2.3 - Elements of the connection that are not designed to yield shall develop at least 1.5 S_y.

~~*18.5.2.4 - Wall piers in Seismic Design Category D, E or F shall comply with Section 1905.1.4 of the California Building Code.*~~

18.5.2.4 – In structures assigned to SDC D, E or F, wall piers sha;; be designed in accordance with 18.10.8 or 18.14 in ACI 318.

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1905.1.8 (formerly) ~~1905.1.9 ACI 318, Section D.3.3.~~ *Modify ACI 318, Sections D.3.3.4.2, D.3.3.4.3 ~~(d) and D.3.3.5.2 to read as follows:~~*

~~*D.3.3.4.2 - Where the tensile component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor tensile force associated with the same load combination, anchors and their attachments shall be designed in accordance with Section D.3.3.4.3. The anchor design tensile strength shall be determined in accordance with Section D.3.3.4.4.*~~

~~***Exception:** Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 and Section 1604A.8.2 of this code shall be deemed to satisfy Section D.3.3.4.3 (d).*~~

~~*D.3.3.4.3 (d) - The anchor or group of anchors shall be designed for the maximum tension obtained from design load combinations that include E, with E increased by Ω_0. The anchor design tensile strength shall be calculated from Section D.3.3.4.4.*~~

~~*D.3.3.5.2 – Where the shear component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor shear force associated with the same load combination, anchors and their attachments shall be designed in accordance with Section D.3.3.5.3. The anchor design shear strength for resisting earthquake forces shall be determined in accordance with Section D.6.*~~

~~***Exceptions:***~~

~~*1. For the calculation of the in-plane shear strength of anchor bolts attaching wood sill plates of bearing or non-bearing walls of light-frame wood structures to foundations or foundation stem walls, the in-plane design shear strength in accordance with Sections D.6.2 and D.6.3 need not be computed and Section D.3.3.5.3 shall be deemed to be satisfied provided all of the following are met:*~~

~~*1.1. The allowable in-plane shear strength of the anchor is determined in accordance with AF&PA NDS Table 11E for lateral design values parallel to grain.*~~

~~*1.2. The maximum anchor nominal diameter is 5/8 inches (16 mm).*~~

~~*1.3. Anchor bolts are embedded into concrete a minimum of 7 inches (178 mm).*~~

~~*1.4. Anchor bolts are located a minimum of 1 3/4 inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate.*~~

~~*1.5. Anchor bolts are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.*~~

~~*1.6. The sill plate is 2-inch or 3-inch nominal thickness.*~~

~~*2. For the calculation of the in-plane shear strength of anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of light-frame construction to foundations or foundation stem walls the in-plane design shear strength in accordance with Sections D.6.2 and D.6.3 need not be computed and Section D.3.3.5.3 shall be deemed to be satisfied provided all of the following are met:*~~

~~*2.1. The maximum anchor nominal diameter is 5/8 inches (16 mm).*~~

~~*2.2. Anchors are embedded into concrete a minimum of 7 inches (178 mm).*~~

~~*2.3. Anchors are located a minimum of 1 3/4 inches (45 mm) from the edge of the concrete parallel to the length of the track.*~~

~~*2.4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the track.*~~
~~*2.5. The track is 33 to 68 mil designation thickness.*~~

~~*Allowable in-plane shear strength of exempt anchors, parallel to the edge of concrete shall be permitted to be determined in accordance with AISI S100 Section E3.3.1.*~~

~~*3. In light-frame construction, bearing or nonbearing walls, shear strength of concrete anchors less than or equal to 5/8 inch [16mm] in diameter of sill plate or track to foundation or foundation stem wall need not satisfy*~~
~~*Section D.3.3.5.3 (a) through (c) when the design strength of the anchors is determined in accordance with Section D.6.2.1(c).*~~

1905.1.8 (Formerly 1905.1.9) ACI 318, Section 17.2.3. Modify ACI 318, Sections 17.2.3.4.2, 17.2.3.4.3(d) and 17.2.3.5.2 to read as follows:

17.2.3.4.2 - Where the tensile component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor tensile force associated with the same load combination, anchors and their attachments shall be designed in accordance with Section 17.2.3.4.3. The anchor design tensile strength shall be determined in accordance with Section 17.2.3.4.4.

Exception: Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11- or 12.14-10 and *Section 1604.8.2 of this code* shall be deemed to satisfy Section D.3.3.4.3 (d).

17.2.3.4.3(d) - The anchor or group of anchors shall be designed for the maximum tension obtained from design load combinations that include **E**, with **E** increased by Ω_0. The anchor design tensile strength shall be calculated from Section 17.2.3.4.4.

17.2.3.5.2 – Where the shear component of the strength-level earthquake force applied to anchors exceeds 20 percent of the total factored anchor shear force associated with the same load combination, anchors and their attachments shall be designed in accordance with Section 17.2.3.5.3. The anchor design shear strength for resisting earthquake forces shall be determined in accordance with Section 17.5.

Exceptions:

1. For the calculation of the in-plane shear strength of anchor bolts attaching wood sill plates of bearing or non-bearing walls of light-frame wood structures to foundations or foundation stem walls, the in-plane design shear strength in accordance with Sections 17.5.2 and 17.5.3 need not be computed and Section 17.2.3.5.3 shall be deemed to be satisfied provided all of the following are met:

1.1. The allowable in-plane shear strength of the anchor is determined in accordance with AWC NDS Table 11E for lateral design values parallel to grain.

1.2. The maximum anchor nominal diameter is $^{5}/_{8}$ inches (16 mm).

1.3. Anchor bolts are embedded into concrete a minimum of 7 inches (178 mm).

1.4. Anchor bolts are located a minimum of $1\frac{3}{4}$ inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate.

1.5. Anchor bolts are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.

1.6. The sill plate is 2-inch or 3-inch nominal thickness.

2. For the calculation of the in-plane shear strength of anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of light-frame construction to foundations or foundation stem walls the in-plane design shear strength in accordance with Sections 17.5.2 and 17.5.3 need not be computed and Section 17.2.3.5.3 shall be deemed to be satisfied provided all of the following are met:

2.1. The maximum anchor nominal diameter is $\frac{5}{8}$ inches (16 mm).

2.2. Anchors are embedded into concrete a minimum of 7 inches (178 mm).

2.3. Anchors are located a minimum of $1\frac{3}{4}$ inches (45 mm) from the edge of the concrete parallel to the length of the track.

2.4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the track.

2.5. The track is 33 to 68 mil designation thickness.

Allowable in-plane shear strength of exempt anchors, parallel to the edge of concrete shall be permitted to be determined in accordance with AISI S100 Section E3.3.1.

3. In light-frame construction, bearing or nonbearing walls, shear strength of concrete anchors less than or equal to **1 inch** [16mm] in diameter of sill plate or track to foundation or foundation stem wall need not satisfy Section 17.2.3.5.3(a) through (c) when the design strength of the anchors is determined in accordance with Section 17.5.2.1(c).

Notation:
Authority: Health and Safety Code § 16600 18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, 18934.5 & 18938(b)

ITEM 17. CBSC proposes to adopt Chapters 20, 21, 22, 23, 24, 25, and 26 of the 2015 IBC without new amendments. See Item 26 for existing California amendments being carried forward.

CHAPTER 20
ALUMINUM
. . .

CHAPTER 21
MASONRY
. . .

CHAPTER 22
STEEL
. . .

CHAPTER 23
WOOD
. . .
CHAPTER 24
GLASS AND GLAZING
. . .

CHAPTER 25
GYPSUM BOARD, GYPSUM PANEL PRODUCTS AND PLASTER
. . .

CHAPTER 26
PLASTIC
. . .

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 18. CBSC does not adopt Chapters 27, 28, and 29. See Item 26 for existing California editorial amendments being carried forward.

Chapter 27
ELECTRICAL
. . .

Chapter 28
MECHANICAL SYSTEMS
. . .
Chapter 29
PLUMBING SYSTEMS
. . .

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 19. CBSC proposes to adopt Chapter 30 Elevators and Conveying Systems of the 2015 IBC without amendment.

ITEM 20. **CBSC does not adopt Chapter 31; however, CBSC proposes to carry forward existing amendments to Chapter 31 Special Construction. Sections 3109.4.4 through 3109.6 contain provisions for private swimming pools (statewide). See Item 26 for existing California amendments being carried forward.**

ITEM 21. **CBSC proposes to adopt Chapter 32 Encroachments into the Public Right-of-Way of the 2015 IBC and carry forward existing amendment. See Item 26 for editorial amendment being carried forward.**

ITEM 22. **CBSC proposes to adopt Chapter 33 Safeguards during Construction of the 2015 IBC without amendment.**

ITEM 23. **CBSC proposes to repeal existing amendments to Chapter 34 Existing Structures as its contents were moved to the 2015 International Existing Building Code. CBSC will relocate amendments of Chapter 34, CBC, to the 2016 California Existing Building Code (CEBC), Part 10. The rulemaking for the CEBC, Part 10 will be heard by the SD/LF Code Advisory Committee.**

CHAPTER 34
RESERVED
(formerly EXISTING STRUCTURES)

Action taken during the 2012 Code Development process removed Chapter 34, Existing Structures, from the IBC. The provisions of this chapter *and California amendments* are contained in the ~~International~~ *California* Building Code. See Section 101.4.7

~~SECTION 3401~~
~~GENERAL~~

~~**3401.1 Scope.** The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing buildings and structures*, including state-regulated structures in accordance with sections 3401.1.1 and 3401.1.2*.~~

…

~~***3401.1.1 Existing state-owned structures.*** *The provisions of Sections 3417 through 3422 establish minimum standards for earthquake evaluation and design for retrofit of existing state-owned structures, including buildings owned by the University of California and the California State University.*~~

> ~~*The provisions of Section 3417 through 3422 may be adopted by a local jurisdiction for earthquake evaluation and design for retrofit of existing buildings.*~~

…

~~***3401.9 Dangerous conditions. [BSC]*** *Regardless of the extent of structural or nonstructural damage, the building official shall have the authority to require the elimination of conditions deemed dangerous.*~~

~~SECTION 3402~~
~~DEFINITIONS~~

~~**3402.1 Definitions.** The following terms are defined in Chapter 2:~~

~~DANGEROUS.~~

~~EXISTING STRUCTURE.~~

~~PRIMARY FUNCTION.~~

~~SUBSTANTIAL STRUCTURAL DAMAGE.~~

~~TECHNICALLY INFEASIBLE.~~

…

~~SECTION 3403~~
~~ADDITIONS~~

~~3403.1 General.~~ ~~Additions to any building or structure shall comply …~~

~~Exception:~~ *~~For state-owned buildings, including those owned by the University of California and the California State University and the judicial council, the requirements of Sections 3403.3 and 3403.4 are replaced by the requirements of Sections 3417 through 3422.~~*

~~SECTION 3404~~
~~ALTERATIONS~~

~~3404.1 General.~~ ~~Except as provided by Section 3401.4 …~~

~~Exceptions:~~
~~1. An existing…~~
~~2. Handrails …~~
~~3~~*~~. For state-owned buildings, including those owned by the University of California and the California State University and the judicial council, the requirements of Sections 3404.3 through 3404.5 are replaced by the requirements of Sections 3417 through 3422.~~*

~~SECTION 3405~~
~~REPAIRS~~

~~3405.1 General.~~ ~~Buildings and structures, and parts thereof, shall be repaired in compliance with Section 3405 and 3401.2. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter, Routine maintenance required by Section 3401.2, ordinary repairs exempt from permit in accordance with Section 105.2, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.~~

~~Exception:~~ *~~For state-owned buildings, including those owned by the University of California and the California State University and the judicial council, the requirements of Sections 3403.3 and 3403.4 are replaced by the requirements of Sections 3417 through 3422.~~*

. . .

~~SECTION 3406~~
~~FIRE ESCAPES~~

3406.1 Where permitted. Fire escapes shall be permitted only as provided for in Section 2406.1.1 through 3406.1.4.

3406.1.1 New buildings. . . .

. . .

SECTION 3408
CHANGE OF OCCUPANCY

3408.1 Conformance. No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancies or in a different group of occupancies, unless such building is made to comply with the requirements **. . .**

SECTION 3417
EARTHQUAKE EVALUATION AND DESIGN FOR RETROFIT OF EXISTING BUILDINGS

3417.1 Purpose.

3417.1.1 Existing state-owned structures. *The provisions of Sections 3417 through 3423 establish minimum standards for earthquake evaluation and design for retrofit of existing state-owned structures, including buildings owned by the University of California and the California State University.*

The provisions of Sections 3417 through 3423 may be adopted by a local jurisdiction for earthquake evaluation and design for retrofit of existing buildings.

. . .

3417.2 Scope. *All modifications, structurally connected additions and/or repairs to existing structures or portions thereof shall, at a minimum, be designed and constructed to resist the effects of seismic ground motions as provided in this section. The structural system shall be evaluated by a registered design professional and, if not meeting or exceeding the minimum seismic design performance requirements of this section, shall be retrofitted in compliance with these requirements.*

Exception: *Those structures for which Section 3417.3 determines that assessment is not required, or for which Section 3417.4 determines that retrofit is not needed, then only the requirements of Section 3417.11 apply.*

3417.3 Applicability.

3417.3.1 Existing state-owned buildings. *For existing state-owned structures including all buildings owned by the University of California and the California State University, the requirements of Section 3417 apply whenever the structure is to be retrofitted, repaired or modified and any of the following apply:*

1. *Total construction cost, not including cost of furnishings, fixtures and equipment, or normal maintenance, for the building exceeds 25 percent of the construction cost for the replacement of the existing building.*
   The changes are cumulative for past modifications to the building that occurred after adoption of the 1995 California Building Code and did not require seismic retrofit.
2. *There are changes in risk category.*
3. *The modification to the structural components increases the seismic forces in or strength requirements of any structural component of the existing structure by more than 10 percent cumulative since the original construction, unless the component has the capacity to resist the*

increased forces determined in accordance with Section 3419. If the building's seismic base shear capacity has been increased since the original construction, the percent change in base shear may be calculated relative to the increased value.

4. Structural elements need repair where the damage has reduced the lateral-load-resisting capacity of the structural system by more than 10 percent.

5. Changes in live or dead load increase story shear by more than 10 percent.

....

3417.4 Evaluation required. *If the criteria in Section 3417.3 apply to the project under consideration, the design professional of record shall provide an evaluation in accordance with Section 3417 to determine the seismic performance of the building in its current configuration and condition. If the structure's seismic performance as required by Section 3417.5 is evaluated as satisfactory and the peer reviewer(s), when Method B of Section 3421 is used, concur, then no structural retrofit is required.*

3417.5 Minimum seismic design performance levels for structural and nonstructural components. *Following the Notation:s of ASCE 41, the seismic requirements for design and assessment are based upon a prescribed Earthquake Hazard Level (BSE-1, BSE-2, BSE-R or BSE-C), a specified structural performance level (S-1 through S-5) and a non-structural performance level (N-A through N-E). The minimum seismic performance criteria are given in Table 3417.5 according to the Building Regulatory Authority and the Risk Category as determined in Chapter 16 or by the regulatory authority. The building shall be evaluated at both the Level 1 and Level 2 performance levels, and the more restrictive requirements shall apply.*

Basic Safety Earthquake 2 (BSE-2) in ASCE 41 shall be same as Risk-Targeted Maximum Considered Earthquake (MCER) in ASCE 7. Probabilistic response spectra defining other Earthquake Hazard Levels shall be developed using site-specific ground motions in accordance with ASCE 7 Section 21.2 utilizing the Next Generation Attenuation (NGA) relations used for the 2008 USGS seismic hazards maps for Western United States (WUS). When supported by data and analysis, other NGA relations, that were not used for the 2008 USGS maps, shall be permitted as additions or substitutions. No fewer than three NGA relations shall be utilized. Response spectra shall incorporate the risk coefficient C_R per ASCE 7 Section 21.2.1.1

Ground-motion response history analysis shall be as set forth in ASCE 7 Chapter 16, Section 17.3 or Section 18.2.3.

Exception: *If the floor area of an addition is greater than the larger of 50 per cent of the floor area of the original building or 1,000 square feet (93 m^2), then the Table 3417.5 entries for BSE-R and BSE-C are replaced by BSE-1 and BSE-2, respectively.*

TABLE 3417.5 SEISMIC PERFORMANCE REQUIREMENTS BY BUILDING REGULATORY AUTHORITY AND RISK CATEGORY. ALL BUILDINGS NOT REGULATED BY DSA ARE ASSIGNED AS "STATE-OWNED."

-		***PERFORMANCE CRITERIA***	
Building Regulatory Authority	***Risk Category***	***Level 1***	***Level 2***
State-Owned	*I, II, III*	*BSE-R, S-3, N-D*	*BSE-C, S-5, N-E*
State-Owned	*IV*	*BSE-R, S-2, N-B*	*BSE-C, S-4, N-C*
Division of the State Architect - Public schools	*I*	*BSE-1,S-3,N-C*	*BSE-2,S-5, N-E*
Division of the State Architect - Public schools	*II, III*	*BSE-1, S-2, N-C*	*BSE-2, S-4, N-D*
Division of the State Architect - Public schools	*IV*	*BSE-1, S-2, N-C*	*BSE-2, S-4,N-C*
Division of the State Architect - Community college	*I, II, III*	*BSE-R, S-3, N-D*	*BSE-2, S-5, N-E*
Division of the State Architect - Community college	*IV*	*BSE-R, S-2, N-B*	*BSE-2, S-4, N-C*

1. ~~*ASCE 41 provides acceptance criteria (e.g. m, rotation) for Immediate Occupancy (S1), Life Safety (S3), and Collapse Prevention (S5), and specifies that values for S-2 and S-4 are to be determined by interpolation between the adjacent performance level values.*~~

   ~~*The required method of interpolation is as follows:*~~

   ~~*For level S-2, the acceptance value is $^{1}/_{3}$ of the sum of the tabulated value for Immediate Occupancy (IO level) and twice the tabulated value for the Life Safety (LS level).*~~

   ~~*For level S-4, the acceptance value is one-half the sum of the value for the LS level and the value for the Collapse Prevention (CP) level.*~~

   ~~*For nonstructural components, N-A corresponds to the IO level, N-C to the LS level, and N-D to the Hazards Reduced (HR level).*~~

   ~~*For evaluation procedures, N-B shall be the same as for N-A. Where numerical values are used, the values for N-B are one half the sum of the appropriate IO and LS values. Where IO or CP values are not given by ASCE 41, then the LS values are permitted to be substituted.*~~

2. ~~*Buildings evaluated and retrofitted to meet the requirements for a new building, Chapter 16, Part 2, Title 24, in accordance with the exception in Section 3419.1, are deemed to meet the seismic performance requirements of this section.*~~

~~***3417.6 Retrofit required.** Where the evaluation indicates the building does not meet the required performance objectives of this section, the owner shall take appropriate steps to ensure that the building's structural system is retrofitted in accordance with the provisions of Section 3417. Appropriate steps are either: 1) undertake the seismic retrofit as part of the additions, modifications and/or repairs of the structure; or 2) provide a plan, acceptable to the building official, to complete the seismic retrofit in a timely manner. The relocation or moving of an existing building is considered to be an alteration requiring filing of the plans and specifications approved by the building official.*~~

~~***3417.7** The additions, modification or repair to any existing building are permitted to be prepared in accordance with the requirements for a new building, Chapter 16, Part 2, Title 24, C.C.R., 2007 edition, applied to the entire building.*~~

~~***3417.8** The requirements of ASCE 41 Chapter 9 are to apply to the use of seismic isolation or passive energy systems for the repair, modification or retrofit of an existing structure. When seismic isolation or passive energy dissipation is used, the project must have project peer review as prescribed in Section 3422.*~~

~~***3417.9** Any construction required by this chapter shall include structural observation by the registered design professional who is responsible for the structural design in accordance with Section 3419.10.*~~

~~***3417.10** Where Method B of Section 3421 is used or is required by Section 3419.7, the proposed method of building evaluation and design procedures must be accepted by the building official prior to the commencement of the work.*~~

~~***3417.11 Voluntary lateral-force-resisting system modifications.** Where the exception of Section 3417.2 applies, modifications of existing structural components and additions of new structural components that are initiated for the purpose of improving the seismic performance of an existing structure and that are not required by other portions of this chapter are permitted under the requirements of Section 3419.12.*~~

~~SECTION 3418~~
~~DEFINITIONS~~

~~**3418.1.** In addition to the definitions given in Section 3402, for the purposes of Sections 3417 through 3423, certain terms are defined as follows:~~

~~**ADDITION** means any work that increases the floor or roof area or the volume of enclosed space of an existing building, and is structurally attached to the existing building by connections that are required for transmitting vertical or horizontal loads between the addition and the existing structure.~~

~~**ALTERATION** means any change within or to an existing building, which does not increase and may decrease the floor or roof area or the volume of enclosed space.~~

~~**BSE-C RESPONSE ACCELERATION PARAMETERS** are the parameters (S_{XS} and S_{X1} taken from 5-percent /50-year maximum direction spectral response acceleration curves or by a Site Specific Response Spectrum developed in accordance with Section 3417.5. Values for BSE-C need not be greater than those for BSE-2.~~

~~**BSE-R RESPONSE ACCELERATION PARAMETERS** are the parameters (S_{XS} and S_{X1}) taken from 20-percent /50-year maximum direction spectral response acceleration curves or by a Site Specific Response Spectrum developed in accordance with Section 3417.5. Values for BSE-R need not be greater than those for BSE-1.~~

~~**BUILDING OFFICIAL** is that individual within the agency or organization charged with responsibility for compliance with the requirements of this code. For some agencies this person is termed the "enforcement agent."~~

~~**DESIGN** is the procedure that includes both the evaluation and retrofit design of an existing component, element or structural system, and design of a new component, element or structural system.~~

~~**ENFORCEMENT AGENCY (Authority Having Jurisdiction in ASCE 41)** is the agency or organization charged with responsibility for agency or organization compliance with the requirements of this code.~~

~~**METHOD A** refers to the procedures prescribed in Section 3420.~~

~~**METHOD B** refers to the procedures allowed in Section 3421.~~

~~**MODIFICATIONS.** For this chapter, modification is taken to include repairs to structures that have been damaged.~~

~~**N-A, N-B, N-C, N-D, N-E** are seismic nonstructural component performance measures as defined in ASCE 41. N-A corresponds to the highest performance level, and N-D the lowest, while N-E is not considered.~~

~~**PEER REVIEW** refers to the procedures contained in Section 3422.~~

~~**REPAIR** as used in this chapter means the design and construction work undertaken to restore or enhance the structural and nonstructural load-resisting system participating in the lateral response and stability of a structure that has experienced damage from earthquakes or other destructive events.~~

~~**S-1, S-2, S-3, S-4, S-5, S-6** are seismic structural performance measures as defined in ASCE 41. S-1 corresponds to the highest performance level, and S-5 the lowest, while S-6 is not considered.~~

SPECIFIC PROCEDURES *are the procedures listed in Section 3419.1.1.*

STRUCTURAL REPAIRS *are any changes affecting existing or requiring new structural components primarily intended to correct the effects of damage, deterioration or impending or actual failure, regardless of cause.*

SECTION 3419
SEISMIC CRITERIA SELECTION FOR EXISTING BUILDINGS

3419.1 Basis for evaluation and design. *This section determines what technical approach is to be used for the seismic evaluation and design for existing buildings. For those buildings or portions of buildings for which Section 3417 requires action, the procedures and limitations for the evaluation of existing buildings and design of retrofit systems and/or repair thereof shall be implemented in accordance with this section.*

One of the following approaches must be used:

1. *Method A of Section 3420;*
2. *Method B of Section 3421, with independent review of a peer reviewer as required in Section 3422; or*
3. *For state-owned buildings only, the use of one of the specific procedures listed in Section 3419.1.1.*

When Method B is chosen it must be approved by the building official, and, where applicable, by the peer reviewer. All referenced standards in ASCE 41 shall be replaced by referenced standards listed in Chapter 35 of this code.

Exceptions:

1. ***[BSC]*** *For buildings constructed to the requirements of California Building Code, 1998 or later edition as adopted by the governing jurisdiction, that code is permitted to be used in place of those specified in Section 3419.1.*
2. *[Reserved for DSA]*

3419.1.1 Specific procedures. *For state-owned buildings, the following specific procedures taken from the International Existing Building Code (IEBC) Appendix A may be used, without peer review, for their respective types of construction to comply with the seismic performance requirements for Risk Category I, II or III buildings:*

1. *Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings (Chapter A1 of the IEBC).*
2. *Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light Wood-Frame, Residential Buildings (Chapter A3 of the IEBC).*
3. *Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms (Chapter A2 of the IEBC).*

3419.1.2 *When a design project is begun under Method B the selection of the peer reviewer is subject to the approval of the building official. Following approval by the peer reviewer, the seismic criteria for the project and the planned evaluation provisions must be approved by the building official. The approved seismic criteria and evaluation provisions shall apply. Upon approval of the building official these are permitted to be modified.*

3419.1.3 *For state-owned and community college buildings, where unreinforced masonry is not bearing, it may be used only to resist applied lateral loads. Where unreinforced masonry walls are part of the structure they must be assessed for stability under the applicable nonstructural evaluation procedure.*

…

3419.2 Existing conditions. *The existing condition and properties of the entire structure must be determined and documented by thorough inspection of the structure and site, review of all available related construction documents, review of geotechnical and engineering geologic reports, and performance of necessary testing and investigation. Where samples from the existing structure are taken or in situ tests are performed, they shall be selected and interpreted in a statistically appropriate manner to ensure that the properties determined and used in the evaluation or design are representative of the conditions and structural circumstances likely to be encountered in the structure as a whole. Adjacent structures or site features that may affect the retrofit design shall be identified.*

The entire load path of the seismic-force-resisting system shall be determined, documented and evaluated. The load path includes all the horizontal and vertical elements participating in the structural response: such as diaphragms, diaphragm chords, diaphragm collectors, vertical elements such as walls frames, braces; foundations and the connections between the components and elements of the load path. Repaired or retrofitted elements and the standards under which the work was constructed shall be identified.

Data collection in accordance with ASCE 41 Section 2.2 shall meet the following minimum levels:

1. *For state-owned buildings, the requirements shall be met following the data collection requirements of ASCE 41 Section 2.2.*

….

Qualified test data from the original construction may be accepted, in part or in whole, by the enforcement agency to fulfill the data collection requirements.

Exceptions:

1. *The number of samples for data collection may be adjusted with approval of the enforcement agency when it has been determined that adequate information has been obtained or additional information is required.*
2. *Welded steel moment frame connections of buildings that may have experienced potentially damaging ground motions shall be inspected in accordance with Chapters 3 and 4, FEMA 352, Recommended Post Earthquake Evaluation and Repair Criteria for Welded Moment-Frame Construction for Seismic Applications (July 2000).*

Where original building plans and specifications are not available, "as-built" plans shall be prepared that depict the existing vertical and lateral structural systems, exterior elements, foundations and nonstructural systems in sufficient detail to complete the design.

Data collection shall be directed and observed by the project structural engineer or design professional in charge of the design.

3419.3 Site geology and soil characteristics. *Soil profile shall be assigned in accordance with the requirements of Chapter 18.*

~~***3419.4 Risk categories.*** *For purposes of earthquake-resistant design, each structure shall be placed in one of the risk categories in accordance with the requirements of this code.*~~

~~***3419.5 Configuration requirements.*** *Each structure shall be designated structurally regular or irregular in accordance with the requirements of ASCE 41, Sections 2.4.1.1.1. to 2.4.1.1.4.*~~

~~***3419.6 General selection of the design method.*** *The requirements of Method B (Section 3421) may be used for any existing building.*~~

~~***3419.7 Prescriptive selection of the design method.*** *The requirements of Method A (Section 3420) or the specific procedures for applicable building types given in Section 3419.1.1 are permitted to be used except under the following conditions, where the requirements of Method B (Section 3421) must be used.*~~

~~***3419.7.1*** *When the building contains prestressed or post- tensioned structural components (beams, columns, walls or slabs) or contains precast structural components (beams, columns, walls or flooring systems).*~~

~~***3419.7.2*** *When the building is classified as irregular in vertical or horizontal plan by application of ASCE/SEI 7 Section 12.3 and/or ASCE 41, Sections 2.4.1.1.1 to 2.4.1.1.4, unless the irregularity is demonstrated not to affect the seismic performance of the building.*~~

~~***Exception:*** *If the retrofit design removes the configurational attributes that caused the building to be classified as irregular, then Section 3419.7.2 does not apply and Method A may be used.*~~

~~***3419.7.3*** *For any building that is assigned to Risk Category IV.*~~

~~***3419.7.4*** *For any building using undefined or hybrid structural systems.*~~

~~***3419.7.5*** *When seismic isolation or energy dissipation systems are used in the retrofit or repair, either as part of the existing structure or as part of the modifications.*~~

~~***3419.7.6*** *When the height of the structure exceeds 240 feet (73 152 mm).*~~

~~***3419.8 Strength requirements.*** *All components of the lateral-force-resisting system must have the strength to meet the acceptance criteria prescribed in ASCE 41, Chapter 3, or as prescribed in the applicable Appendix A chapter of the IEBC if a specific procedure in Section 3419.1.1 is used. Any component not having this strength shall have its capacity increased by modifying or supplementing its strength so that it exceeds the demand, or the demand is reduced to less than the existing strength by making other modifications to the structural system.*~~

~~***Exception:*** *A component's strength is permitted to be less than that required by the specified seismic load combinations if it can be demonstrated that the associated reduction in seismic performance of the component or its removal due to the failure does not result in a structural system that does not comply with the required performance objectives of Section 3417. If this exception is taken for a component, then it cannot be considered part of the primary lateral-load- resisting system.*~~

~~***3419.9 Nonstructural component requirements.*** *Where the nonstructural performance levels required by Section 3417, Table 3417.5 are N-D or higher, mechanical, electrical and plumbing components shall comply with the provisions of ASCE 41, Chapter 11, Section 11.2.*~~

~~***Exception:*** *Modifications to the procedures and criteria may be made subject to approval by the building official, and concurrence of the peer reviewer if applicable. All reports and correspondence shall also be forwarded to the building official.*~~

~~***3419.10 Structural observation, testing and inspection.*** *Structural, geotechnical and construction observation, testing and inspection as used in this section shall mean meeting the requirements of Chapter 17, with a minimum allowable level of investigation corresponding to seismic design category*~~

(SDC) D. At a minimum the project site will be visited by the responsible design professional to observe existing conditions and to review the construction work for general compliance with approved plans, specifications and applicable structural regulations. Such visits shall occur at significant construction stages and at the completion of the structural retrofit. Structural observation shall be provided for all structures. The plan for testing and inspection shall be submitted to the building official for review and approval with the application for permit.

***Additional requirements:** For public schools and community colleges, construction material testing, inspection and observation during construction shall also comply with Section 4-333, Part 1, Title 24.*

***3419.10.1** The registered design professional, or their designee, responsible for the structural design shall be retained to perform structural observation and independently report to the owner of observations and findings as they relate to adherence to the permitted plans and good workmanship.*

***3419.10.2** At the conclusion of construction, the structural observer shall submit to the enforcement agency and the owner a final written statement that the required site visits have been made, that the work, to the best of the structural observers knowledge and belief, is or is not in general conformity to the approved plans and that the observed structural deficiencies have been resolved and/or listing those that, to the best of the structural observers knowledge and belief, have not been satisfactorily corrected.*

***3419.10.2.1** The requirement for structural observation shall be noted and prominently displayed on the front sheet of the approved plans and incorporated into the general notes on the approved plans.*

***3419.10.2.2 Preconstruction meeting.** A preconstruction meeting is mandatory for all projects which require structural observation. The meeting shall include, but is not limited to, the registered design professional, structural observer, general constructor, affected subcontractors, the project inspector and a representative of the enforcement agency (designated alternates may attend if approved by the structural observer). The structural observer shall schedule and coordinate this meeting. The purpose of the meeting is to identify and clarify all essential structural components and connections that affect the lateral and vertical load systems and to review scheduling of the required observations for the project's structural system retrofit.*

***3419.11 Temporary actions.** When compatible with the building use, and the time phasing for both use and the retrofit program, temporary shoring or other structural support is permitted to be considered. Temporary bracing, shoring and prevention of falling hazards are permitted to be used to qualify for Exception 1 in Section 3419.12 that allows inadequate capability in some existing components, as long as the required performance levels given in Section 3417 can be provided by the permanent structure. The consideration for such temporary actions shall be noted in the design documents.*

***3419.12 Voluntary modifications to the lateral-force resisting system.** Where modifications of existing structural components and additions of new structural components are initiated for the purpose of improving the lateral-force resisting strength or stiffness of an existing structure and they are not required by other sections of this code, then they are permitted to be designed to meet an approved seismic performance criteria provided that an engineering analysis is submitted that follows:*

1. The capacity of existing structural components required to resist forces is not reduced, unless it can be demonstrated that reduced capacity meets the requirements of Section 3419.8.

2. The lateral loading to or strength requirement of existing structural components is not increased beyond their capacity.

3. New structural components are detailed and connected to the existing structural components as required by this code for new construction.

4. New or relocated nonstructural components are detailed and connected to existing or new structural components as required by this code for new construction.

5. A dangerous condition is not created.

3419.12.1 State-owned buildings. *Voluntary modifications to lateral-force-resisting systems conducted in accordance with Appendix A of the IEBC and the referenced standards of this code shall be permitted.*

3419.12.1.1 Design documents. *When Section 3419.12 is the basis for structural modifications, the approved design documents must clearly state the scope of the seismic modifications and the accepted criteria for the design. The approved design documents must clearly have the phrase "The seismic requirements of Chapter 34 for existing buildings have not been checked to determine if these structural modifications meet CBC requirements: the modifications proposed are to a different seismic performance standard than would be required in Section 3419 if they were not voluntary as allowed in Section 3419.12."*

…

SECTION 3420
METHOD A

3420.1 General. *The retrofit design shall employ the Linear Static or Linear Dynamic Procedures of ASCE 41, Section 3.3.1 or 3.3.2, and comply with the applicable general requirements of ASCE 41, Chapters 2 and 3. The earthquake hazard level and performance level given specified in Section 3417.5 for the building's risk category shall be used. Structures shall be designed for seismic forces coming from any horizontal direction.*

Exception: *The ASCE 41 Simplified Rehabilitation Method of Chapter 10 may be used if the Level 1 seismic performance level is S-3 or lower, the building's structural system is one of the primary building types described in ASCE 41, Table 10-2, and ASCE 41, Table 10-1 permits it use for the building height.*

SECTION 3421
METHOD B

3421.1 *The existing or retrofitted structure shall be demonstrated to have the capability to sustain the deformation response due to the specified earthquake ground motions and meet the seismic performance requirements of Section 3417. The registered design professional shall provide an evaluation of the response of the existing structure in its modified configuration and condition to the ground motions specified. If the building's seismic performance is evaluated as satisfactory and the peer reviewer(s,) and the enforcement agency concurs, then no further structural modifications of the lateral-load-resisting system are required.*

When the evaluation indicates the building does not meet the required performance levels given in Table 3417.5 for the risk category, then a retrofit and/or repair design shall be prepared that provides a structure that meets these performance objectives and reflects the appropriate consideration of existing conditions. Any approach to analysis and design is permitted to be used, provided that the approach shall be rational, shall be consistent with the established principals of mechanics and shall use the known performance characteristics of materials and assemblages under reversing loads typical of severe earthquake ground motions.

Exception: *Further consideration of the structure's seismic performance may be waived by the enforcement agency if both the registered design professional and peer reviewer(s) conclude that the*

structural system can be expected to perform at least as well as required by the provisions of this section without completing an analysis of the structure's compliance with these requirements. A detailed report shall be submitted to the responsible building official that presents the reasons and basis for this conclusion. This report shall be prepared by the registered design professional. The peer reviewer(s) shall concur in this conclusion and affirm to it in writing. The building official shall either approve this decision or require completion of the indicated work specified in this section prior to approval.

***3421.2** The approach, models, analysis procedures, assumptions on material and system behavior and conclusions shall be peer reviewed in accordance with the requirements of Section 3422 and accepted by the peer reviewer(s).*

Exceptions:

1. *The enforcement agency may perform the work of peer review when qualified staff is available within the jurisdiction.*
2. *The enforcement agency may modify or waive the requirements for peer review when appropriate.*

***3421.2.1** The approach used in the development of the design shall be acceptable to the peer reviewer and the enforcement agency and shall be the same method as used in the evaluation of the building. Approaches that are specifically tailored to the type of building, construction materials and specific building characteristics may be used, if they are acceptable to the independent peer reviewer. The use of Method A allowed procedures may also be used under Method B.*

***3421.2.2** Any method of analysis may be used, subject to acceptance by the peer reviewer(s) and the building official. The general requirements given in ASCE 41, Chapter 2, shall be complied with unless exceptions are accepted by the peer reviewer(s) and building official. Use of other than ASCE 41 procedures in Method B requires building official concurrence before implementation.*

***3421.2.3** Prior to implementation, the procedures, methods, material assumptions and acceptance/rejection criteria proposed by the registered design professional will be peer reviewed as provided in Section 3422. Where nonlinear procedures are used, prior to any analysis, the representation of the seismic ground motion shall be reviewed and approved by the peer reviewer(s) and the building official.*

***3421.2.4** The conclusions and design decisions shall be reviewed and accepted by the peer reviewer(s) and the building official.*

SECTION 3422
PEER REVIEW REQUIREMENTS

***3422.1 General.** Independent peer review is an objective, technical review by knowledgeable reviewer(s) experienced in the structural design, analysis and performance issues involved. The reviewer(s) shall examine the available information on the condition of the building, the basic engineering concepts employed and the recommendations for action.*

***3422.3 Qualifications and terms of employment.** The reviewer(s) shall be independent from the design and construction team.*

***3422.3.1** The reviewer(s) shall have no other involvement in the project before, during or after the review, except in a review capacity.*

***3422.3.2** The reviewer(s) shall be selected and paid by the owner and shall have technical expertise in the evaluation and retrofit of buildings similar to the one being reviewed, as determined by the enforcement agency.*

~~***3422.3.3*** *The reviewer (or in the case of review teams, the chair) shall be a California-licensed structural engineer who is familiar with the technical issues and regulations governing the work to be reviewed.*~~

~~***Exception:*** *Other individuals with acceptable qualifications and experience may be a peer reviewer(s) with the approval of the building official.*~~

~~***3422.3.4*** *The reviewer shall serve through completion of the project and shall not be terminated except for failure to perform the duties specified herein. Such termination shall be in writing with copies to the enforcement agency, owner and the registered design professional. When a reviewer is terminated or resigns, a qualified replacement shall be appointed within 10 working days, and the reviewer shall submit copies of all reports, notes and correspondence to the responsible building official, the owner and the registered design professional within 10 working days of such termination.*~~

~~***3422.3.5*** *The peer reviewer shall have access in a timely manner to all documents, materials and information deemed necessary by the peer reviewer to complete the peer review.*~~

~~***3422.4 Scope of review.*** *Review activities shall include, where appropriate, available construction documents, design criteria and representative observations of the condition of the structure, all inspection and testing reports, including methods of sampling, analytical models and analyses prepared by the registered design professional and consultants, and the retrofit or repair design. Review shall include consideration of the proposed design approach, methods, materials, details and constructability. Changes observed during construction that affect the seismic-resisting system shall be reported to the reviewer in writing for review and recommendation.*~~

~~***3422.5 Reports.*** *The reviewer(s) shall prepare a written report to the owner and building official that covers all aspects of the review performed, including conclusions reached by the reviewer(s). Reports shall be issued after the schematic phase, during design development, and at the completion of construction documents but prior to submittal of the project plans to the enforcement agency for plan review. When acceptable to the building official, the requirement for a report during a specific phase of the project development may be waived.*~~

~~*Such reports should include, at the minimum, statements of the following:*~~

~~*1. Scope of engineering design peer review with limitations defined.*~~

~~*2. The status of the project documents at each review stage.*~~

~~*3. Ability of selected materials and framing systems to meet performance criteria with given loads and configuration.*~~

~~*4. Degree of structural system redundancy and the deformation compatibility among structural and nonstructural components.*~~

~~*5. Basic constructability of the retrofit or repair system.*~~

~~*6. Other recommendations that would be appropriate to the specific project.*~~

~~*7. Presentation of the conclusions of the reviewer identifying any areas that need further review, investigation and/or clarification.*~~

~~*8. Recommendations.*~~

~~*The last report prepared prior to submittal of permit documents to the enforcement agency shall include a statement indicating that the design is in conformance with the approved evaluation and design criteria*~~

~~***3422.6 Response and resolutions.*** *The registered design professional shall review the report from the reviewer(s) and shall develop corrective actions and responses as appropriate. Changes observed during*~~

~~*construction that affect the seismic-resisting system shall be reported to the reviewer in writing for review and recommendations. All reports, responses and resolutions prepared pursuant to this section shall be submitted to the responsible enforcement agency and the owner along with other plans, specifications and calculations required. If the reviewer resigns or is terminated prior to completion of the project, then the reviewer shall submit copies of all reports, notes and correspondence to the responsible building official, the owner and the registered design professional within 10 working days of such termination.*~~

~~***3422.7 Resolution of conflicts.*** *When the conclusions and recommendations of the peer reviewer conflict with the registered design professional's proposed design, the enforcement agency shall make the final determination of the requirement for the design.*~~

Notation:
Authority: Health and Safety Code §18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, & 18934.5

ITEM 24. CBSC proposes to adopt Chapter 35 Referenced Standards of the 2015 IBC without amendments.

CHAPTER 35
REFERENCED STANDARDS

. . .

Notation:
Authority: Health and Safety Code § 16600 18928 & 18934.5
References: Health and Safety Code §§18928, 18928.1, 18934.5 & 18938(b)

ITEM 25. APPENDIX CHAPTERS

CBSC proposes NOT to adopt Appendix A from the 2015 International Building Code. Carry forward editorial code reference amendments. See Item 26.

APPENDIX A
EMPLOYEE QUALIFICATIONS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix B from the 2015 International Building Code.

APPENDIX B
BOARD OF APPEALS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix C from the 2015 International Building Code.

APPENDIX C
GROUP U – AGRICULTURAL BUILDINGS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix D from the 2015 International Building Code.

APPENDIX D
FIRE DISTRICTS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix E from the 2015 International Building Code and the contents of Appendix E is not printed.

APPENDIX E
RESERVED

CBSC proposes NOT to adopt Appendix F from the 2015 International Building Code.

APPENDIX F
RODENTPROOFING
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix G from the 2015 International Building Code. Carry forward editorial code reference amendments. See Item 26.

APPENDIX G
FLOOD-RESISTANT CONSTRUCTION
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix H from the 2015 International Building Code.

APPENDIX H
SIGNS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix I from the 2015 International Building Code.

APPENDIX I
PATIO COVERS

The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix J from the 2015 International Building Code.

APPENDIX J
GRADING
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix K from the 2015 International Building Code.

APPENDIX K
ADMINISTRATIVE PROVISIONS
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix L from the 2015 International Building Code.

APPENDIX L
EARTHQUAKE RECORDING INSTRUMENTATION
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

CBSC proposes NOT to adopt Appendix M from the 2015 International Building Code.

APPENDIX M
TSUNAMI-GENERATED FLOOD HAZARD
The provisions contained in this appendix are not mandatory unless specifically adopted by a state agency, or referenced in the adopting ordinance.

. . .

Notation:
Authority: Health and Safety Code §18928 & 18934.5 18940.5
Reference: Health and Safety Code §§18928, 18928.1, 18934.5, 18938(b) & 18940.5

ITEM 26. CBSC proposes to carry forward existing CBSC amendments, non-substantive editorial and formatting amendments from the 2013 California Building Code for inclusion in the 2016 California Building Code.

CBSC does not adopt Chapter 1 SCOPE AND ADMINISTRATION, but proposes to carry forward existing editorial amendments and make additional editorial amendments for code consistency.

CHAPTER 1

DIVISION II
SCOPE AND ADMINISTRATION

101.2 Scope. . . .

Exception. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with the *California Residential Code*.

101.4.1 Gas. The provisions of the *California Mechanical Code* shall apply to the installation….

101.4.2 Mechanical. The provisions of the *California Mechanical Code* shall apply to the installation….

101.4.3 Plumbing. The provisions of the *California Plumbing Code* shall apply to the installation, alteration repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and were connected to a water or sewage system and all aspects of a medical gas system. The provisions of the International Private Sewage Disposal Code shall apply to the private sewage disposal system.

101.4.4 Property Maintenance. The provisions of the International Property Maintenance Code shall apply to the existing ….

101.4.5 Fire Prevention. The provisions of the *California Fire Code* shall apply to the matters ….

101.4.6 Energy. The provisions of the *California Energy Code* shall apply to all matters ….

102.4 Referenced Codes and Standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Section 102.4.1 *through 102.4.4.*

102.4.1. Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

102.4.2. Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the *California Codes* listed in Section 101.4, the provisions of this code or the *California Code* listed in Section 101.4, as applicable, shall take precedence over the provisions in the referenced code or standard.

102.4.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *California Building Code* or the *California Fire Code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

CHAPTER 3
USE AND OCCUPANCY

307.1. High-hazard Group H. High-hazard Group H occupancy includes, . . . Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with his section, the requirements of Section 415 and the *California Fire Code*. Hazardous material stored, or used on top of

roofs or cano0pies shall be classified as outdoor storage or use and shall comply with the *California Fire Code.*

Exceptions: the following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble.

1. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the *California Fire Code.*
2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *California Fire Code.*
3. . . .
4. . . .
5. . . .
6. . . .
7. . . .
8. . . .
9. Stationary batteries utilized for facility emergency power, uninterruptible power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and ventilation is provided in accordance with the *California Mechanical Code.*
10. . . .
11. Buildings and structures occupied for aerosol storage, shall be classified as Group S-1, provided that such building conform to the requirements of the *California Fire Code.*
12. . . .
13. The storage of black powder, smokeless propellant and small arms primers in Group M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the *California Fire Code.*
14. . . .

307.1.1 Hazardous materials. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the *California Fire Code.*

Table 307.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD

[Table not shown. Amendments are to the footnotes.]

a. **. . .**
b. **. . .**
c. **. . .**
d. **. . .**
e. **. . .** *California Fire Code* **. . .**
f. **. . .**
g. **. . .**
h. **. . .**
i. **. . .** *California Fire Code* **. . .**
j. **. . .**
k. **. . .**
l. **. . .**
m. **. . .** *California Fire Code* **. . .**
n. **. . .**
o. **. . .**
p. The following shall not be included in determining the maximum allowable quantities:
    1. Liquid or gaseous fuel in tanks and vehicles.

2. Liquid or gaseous fuel in fuel tanks and motorized equipment operated in accordance with ~~International Fire Code~~ *California Fire Code*.
3. Gaseous fuels in piping systems and fixed appliance regulated by the International Fuel Gas Code.
4. Liquid fuels in piping systems and fixed appliances regulated by the *California Mechanical Code.*
5. Alcohol-based hand rubs classified as Class I and II liquids in dispensers that are installed in accordance with Sections 5705.5 and 5702.5.1 of the ~~International Fire Code~~ *California Fire Code.* The location of the alcohol-based hand rub (ANHR) dispensers shall be provided in the construction documents

q. . . .

Table 307.1(2) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A HEALTH HAZARD

[Table not shown. Amendments are to the footnotes]

a. . . .
b. . . .
c. . . .
d. . . .
e. . . . *California Fire Code* . . .
f. . . . *California Fire Code.* . . .
g. . . . *California Fire Code.*
h. . . .
i. . . . *California Fire Code.* . . .

310.1. Residential Group R. Residential Group R includes, among others, the use of building or structure, or a portion thereof, for sleeping purposes when not classified as and Institutional Group I or when not regulated by the *California Residential Code.*

. . .

CHAPTER 4
SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

. . .

403.4.5 Emergency responder radio coverage. Emergency responder radio coverage shall be provided in accordance with Section 510 of the *California Fire Code*.

. . .

404.2 Use. The floor of the atrium shall not be used for other than low fire hazard uses and only approved materials and decorations in accordance with the *California Fire Code* shall be used in the atrium space.

CHAPTER 10
MEANS OF EGRESS

. . .

1001.3 Maintenance. Means of egress shall be maintained in accordance with the *California Building Code.*

1001.4 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided for all occupancies and buildings where required by the *California Fire Code.* Such fire safety and evacuation plans shall comply with the applicable provisions of Section 401.2 and 404 of the *California Fire Code.*

. . .

1006.2.2.3 (formerly 1015.5) Refrigerated rooms or spaces. Rooms or spaces having a floor area larger than 1,000 square feet (93 m^2), containing a refrigerant evaporator and maintained at a temperature below 68°F (20°C), shall have access to not less than two exits or exit access doorways.

Travel distance shall be determined as specified in Section 1016.1, but all portions of a refrigerated room or space shall be within 150 feet (45 720 mm) of an exit or exit access doorway where such rooms are not protected by an approved automatic sprinkler system. Egress is allowed through adjoining refrigerated rooms or spaces.

Exception: Where using refrigerants in quantities limited to the amounts based on the volume set forth in the *California Mechanical Code*.

. . .

CHAPTER 12
INTERIOR ENVIRONMENT

. . .

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *California Mechanical Code*.

. . .

1203.2.1 Openings into attic.
Exterior openings into the attic space of any building intended for human occupancy shall be protected to prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. Openings for ventilation having a least dimension of not less than 1/16 inch (1.6 mm) and not more than ¼ inch (6.4 mm) shall be permitted. Openings for ventilation having a least dimension larger than ¼ inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of not less than 1/16 inch (1.6 mm) and not more than ¼ inch (6.4 mm). Where combustion air is obtained from an *attic* area, it shall be in accordance with Chapter 7 of the *California Mechanical Code*.

. . .

1203.5.2 (formerly 1203.4.2) Contaminants exhausted. Contaminant sources in naturally ventilated spaces shall be removed in accordance with the *California Mechanical Code* and the *California Fire Code*.

. . .

1203.6 (formerly 1203.5) Other ventilation and exhaust systems. Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the *California Mechanical Code* or the *California Fire Code* shall be provided as required by both codes.

. . .

1205.4.1 Controls. The control for activation of the required stairway lighting shall be in accordance with *the California Electrical Code*.

. . .

1206.3.3 Court drainage. The bottom of every court shall be properly graded and drained to a public sewer or other approved disposal system complying with the *California Plumbing Code*.

. . .

1209.3 Mechanical appliances. Access to mechanical appliances installed in under-floor areas, in attic spaces and on roofs or elevated structures shall be in accordance with the *California Mechanical Code*.

. .

1210.1 Required fixtures. The number and type of plumbing fixtures provided in any occupancy shall comply with the *California Plumbing Code*.

. . .

CHAPTER 15
ROOF ASSEMBLIES AND ROOF TOP STRUCTURES

. . .

1503.4 Roof drainage. Design and installation of roof drainage systems shall comply with Section 1503 of this code and *Chapter 11* of the *California Plumbing Code*.

1503.4.1 Secondary (emergency overflow) drains or scuppers.
Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. The installation and sizing of secondary emergency overflow drains, leaders and conductors shall comply with *Chapter 11* of the *California Plumbing Code.*

. . .

1507.16 Vegetative roofs, roof gardens and landscaped roofs. Vegetative roofs, roof gardens and landscaped roofs shall comply with the requirements of this chapter, Sections 1607.12.3 and 1607.12.3.1 and the *California Fire Code.*

CHAPTER 16
STRUCTURAL DESIGN

. . .

1603.1.9 Systems and components requiring special inspections for seismic resistance.
Construction documents or specifications shall be prepared for those systems and components requiring special inspection for seismic resistance as specified in Section 1705.11 by the registered design professional responsible for their design and shall be submitted for approval in accordance with ~~Section *107.1,* Chapter 1, Division II~~. Reference to seismic standards in lieu of detailed drawings is acceptable.

. . .

TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

Carry forward corrected code references of International Fire Code to *California Fire Code* in Table 1604.5.

. . .

1612.5 Flood hazard documentation.
The following documentation shall be prepared and sealed by a registered design professional and submitted to the building official:

1. For construction in flood hazard areas not subject to high-velocity wave action:

    1.1. The elevation of the lowest floor, including the basement, as required by the lowest floor elevation inspection in Section 110.3.3, *Chapter 1, Division II.*

    . . .

2. For construction in flood hazard areas subject to high-velocity wave action:

    2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 110.3.3, *Chapter 1, Division II.*

. . .

CHAPTER 17
SPECIAL INSPECTIONS AND TESTS

. . .

1704.2.3 Statement of special inspections. The applicant shall submit a statement of special inspections in accordance with Section 107.1 *Chapter 1, Division II,* as a condition for permit issuance. This statement shall be in accordance with Section 1704.3.

. . .

1707.1 General. In the absence of approved rules or other approved standards, the building official shall make, or cause to be made, the necessary tests and investigations; or the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in Section 104.11 *Chapter 1, Division II*. The cost of all tests and other investigations required under the provisions of this code shall be borne by the applicant.

> ***[BSC]*** *In the absence of approved rules or other approved standards, the building official shall make, or cause to be made, the necessary tests and investigations; or the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in Section 1.2.2, Chapter 1, Division I. The cost of all tests and other investigations required under the provisions of this code shall be borne by the applicant.*

. . .

CHAPTER 18
SOILS AND FOUNDATIONS

. . .

1805.4.3 Drainage discharge. The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the *California Plumbing Code*.

. . .

1810.3.10.4 Seismic reinforcement. For structures assigned to Seismic Design Category C… **…**as an alternate system in accordance with Section 104.11, *Chapter 1, Division II.* The alternative system design, supporting documentation and test data shall be submitted to the building official for review and approval.

. . .

CHAPTER 19
CONCRETE

. . .

1905.1.2 ACI 318, 18.2.1 (formerly Section 21.1.1.)
Modify ACI 318 Sections 18.2.1.2 (formerly 21.1.1.3) and 18.2.1.6 (formerly 21.1.1.7) to read as follows:

18.2.1.2 - Structures assigned to Seismic Design Category A shall satisfy requirements of Chapters 1 through 17 and 19 through 26*; Chapter 18 does not apply*. Structures assigned to *Seismic Design Category* B, C, D, E or F also shall satisfy 18.2.1.3 through 18.2.1.7, as applicable. *Except for structural elements of plain concrete complying with* Section *1905.1.7 of the California Building Code, structural elements of plain concrete are prohibited in structures assigned to Seismic Design Category C, D, E or F*

. . .

1905.1.5 (formerly 1905.1.6) ACI 318, Section 18.13.1.1. Modify ACI 318, Section 18.13.1.1, to read as follows:

18.13.1.1 - Foundations resisting earthquake-induced forces or transferring earthquake-induced forces between a structure and ground shall comply with the requirements of Section 21.12 and other applicable provisions of ACI 318 unless modified by Chapter 18 of the *California Building Code.*

. . .

CHAPTER 21
MASONRY

. . .

2109.1 General. Empirically designed masonry shall conform to the requirements of Chapter 5 of TMS 402/ACI 530/ASCE 5, except where otherwise noted in this section.

2109.1.1 Limitations. . . .

Section A.1.2.2 of TMS 402/ACI 530/ASCE 5 shall be modified as follows:

A.1.2.2 Wind – Empirical requirements shall not apply to the design or construction of masonry for buildings, parts of buildings, or other structures to be located in areas where V_{asd} as determined in accordance with Section 1609.3.1 of the *California Building Code* exceeds 110 mph.

. . .

CHAPTER 23
WOOD

. . .

2304.5 Framing around flues and chimneys. Combustible framing shall be a minimum of 2 inches (51 mm), but shall not be less than the distance specified in Sections 2111 and 2113 and the *California Mechanical Code*, from flues, chimneys and fireplaces, and 6 inches (152 mm) away from flue openings.

. . .

2308.1 General. **. . .** accessory structures shall comply with the *California Residential Code*.

. . .

CHAPTER 26
PLASTIC

. . .

2603.4.1.12 Interior signs. Foam plastic used for interior signs in covered mall buildings in accordance with Section 402.6.4 shall be permitted without a thermal barrier. Foam plastic signs that are not affixed to interior building surfaces shall comply with Chapter 8 of the *California Fire Code*.

. . .

CHAPTER 27
ELECTRICAL

2701.1 Scope. This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of *California Electrical Code.*

. . .

2702.1 Installation. Emergency and standby power systems required by this code or the *California Fire Code* shall be installed in accordance with this code, NFPA 110 and 111.

. . .

2702.2.11 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly *toxic* or *toxic* materials in accordance with the *California Fire Code*.

2702.2.12 (formerly 2702.2.9) Membrane structures. Standby power shall be provided for auxiliary inflation systems in accordance with Section 3102.8.2. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with the *California Fire Code*.

2702.2.13 Pyrophoric materials. E emergency power shall be provided for occupancies with silane gas in accordance with the *California Fire Code*.

. . .

2703.4 (formerly 2702.3) Maintenance. Emergency and standby power systems shall be maintained and tested in accordance with the *California Fire Code*.

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CHAPTER 28
MECHANICAL SYSTEMS

2801.1 Scope. Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the *California Mechanical Code.* Masonry chimneys, fireplaces and barbecues shall comply with the *California Mechanical Code* and Chapter 21 of this code

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CHAPTER 29
PLUMBING SYSTEMS

(Not Adopted by the State of California)
Refer to California Plumbing Code, Title 24, Part 5)

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CHAPTER 31
SPECIAL CONSTRUCTION

. . .

3102.1 General. The provisions of Sections 3102.1 through 3102.8 shall apply to air-supported, air-inflated, membranecovered cable and membrane-covered frame structures, collectively known as membrane structures, erected for a period of 180 days or longer. Those erected for a shorter period of time shall comply with the *California Fire Code.* Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants, greenhouses and similar facilities not used for human occupancy are required to meet only the requirements of Sections 3102.3.1 and 3102.7. Membrane structures erected on a building, balcony, deck or other structure for any period of time shall comply with this section.

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3103.1 General.
The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than 180 days. Tents and other membrane structures erected for a period of less than 180 days shall comply with the *California Fire Code*. Those erected for a longer period of time shall comply with applicable sections of this code.

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3109.4.4 Private swimming pools (statewide).
These regulations are subject to local government modification. The applicable local government requirements at the time of application for a building permit should be verified. These standards become applicable commencing January 1, 1998, to a private, single-family home for which a construction permit for a new swimming pool has been issued on or after January 1, 1998.

3109.4.4.1 Definitions.
As used in this division, the following terms have the following meanings:

***ANSI/APSP PERFORMANCE STANDARD** means a standard that is accredited by the American National Standards Institute (ANSI) and published by the Association of Pool and Spa Professionals (APSP).*

APPROVED SAFETY POOL COVER *means a manually or power-operated safety pool cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with Standard F 1346-91.*

ENCLOSURE *means a fence, wall or other barrier that isolates a swimming pool from access to the home.*

EXIT ALARMS *means devices that make audible, continuous alarm sounds when any door or window that permits access from the residence to the pool area, that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.*

PUBLIC SWIMMING POOL *means a swimming pool operated for the use of the general public with or without charge, or for the use of the members and guests of a private club. Public swimming pool does not include a swimming pool located on the grounds of a private single-family home.*

SUCTION OUTLET *means a fitting or fixture typically located at the bottom or on the sides of a swimming pool that conducts water to a recirculating pump.*

SWIMMING POOL or POOL *means any structure intended for swimming or recreational bathing that contains water over 18 inches (457 mm) deep. Swimming pool includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas and nonportable wading pools.*

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115921

Ab 3305, Statutes 1996, c.925

3109.4.4.2 Construction permit; safety features required.
Commencing January 1, 2007, except as provided in Section 3109.4.4.5, whenever a building permit is issued for construction of a new swimming pool or spa, or any building permit is issued for remodeling of an existing pool or spa, at a private, single-family home, it shall be equipped with at least one of the following seven drowning prevention safety features:

1. *The pool shall be isolated from access to a home by an enclosure that meets the requirements of Section 3109.4.4.3.*

2. *The pool shall incorporate removable mesh pool fencing that meets American Society for Testing and Materials (ASTM) Specifications F 2286 standards in conjunction with a gate that is selfclosing and self-latching and can accommodate a key lockable device.*

3. *The pool shall be equipped with an approved safety pool cover that meets all requirements of the ASTM Specifications F 1346.*

4. *The residence shall be equipped with exit alarms on those doors providing direct access to the pool.*

5. *All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches (1372 mm) above the floor.*

6. *Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the ASTM Standard F 2208 "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser and infrared type alarms. For purposes of this article, "swimming pool alarms" shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water.*

7. *Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices set forth in items 1-4, and have been independently verified by an approved testing laboratory as meeting standards for those devices established by the ASTM or the American Society of Testing Mechanical Engineers (ASME).*

Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the local building code official shall inspect the drowning safety prevention devices required by this act and if no violations are found, shall give final approval.

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115922

AB 3305 (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007, c.596)

3109.4.4.3 Enclosure; required characteristics.
An enclosure shall have all of the following characteristics:

1. *Any access gates through the enclosure open away from the swimming pool and are self-closing with a self-latching device placed no lower than 60 inches (1524 mm) above the ground.*

2. *A minimum height of 60 inches (1524 mm).*

3. *A maximum vertical clearance from the ground to the bottom of the enclosure of 2 inches (51 mm).*

4. *Gaps or voids, if any, do not allow passage of a sphere equal to or greater than 4 inches (102 mm) in diameter.*

5. *An outside surface free of protrusions, cavities or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five years to climb over.*

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115923

AB 3305, Statutes 1996, c.925

3109.4.4.4 Agreements to build; notice of provisions.
Any person entering into an agreement to build a swimming pool or spa, or to engage in permitted work on a pool or spa covered by this article, shall give the consumer notice of the requirements of this article.

Pursuant to existing law, the Department of Health Services shall have available on the department's web site, commencing January 1, 2007, approved pool safety information available for consumers to download. Pool contractors are encouraged to share this information with consumers regarding the potential dangers a pool or spa poses toddlers. Additionally, pool contractors may provide the consumer with swimming pool safety materials produced from organizations such as the United States Consumer Product Safety Commission, Drowning Prevention Foundation, California Coalition for Children's Safety & Health, Safe Kids Worldwide, Association of Pool and Spa Professionals, or the American Academy of Pediatrics.

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115924

AB 3305 (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007, c.596)

3109.4.4.5 Exempt facilities.
The requirements of this article shall not apply to any of the following:

1. *Public swimming pools.*

2. *Hot tubs or spas with locking safety covers that comply with the American Society for Testing Materials Emergency Performance Specification (ASTM ES 13-89).*

3. *Any pool within the jurisdiction of any political subdivision that adopts an ordinance for swimming pool safety that includes requirements that are at least as stringent as this division.*

4. *An apartment complex or any residential setting other than a single-family home.*

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115925

Ab 3305, (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007,c.596)

3109.4.4.6 Application to facilities regulated by Department of Social Services.
This division does not apply to any facility regulated by the State Department of Social Services even if the facility is also used as a private residence of the operator. Pool safety in those facilities shall be regulated pursuant to regulations adopted therefor by the State Department of Social Services.

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115926

AB 3305, Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007, c.596)

3109.4.4.7 Modification and interpretation of division.
Notwithstanding any other provision of law, this article shall not be subject to further modification or interpretation by any regulatory agency of the state, this authority being reserved exclusively to local jurisdictions, as provided for in Item 5 of Section 3109.4.4.2 and Item 3 of Section 3109.4.4.5.

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115927

AB 3305 (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 382 (Statutes 2007, c.596)

3109.4.4.8 Construction requirements for building a pool or spa.
Whenever a building permit is issued for the construction a new swimming pool or spa, the pool or spa shall meet all of the following requirements:

1. *The suction outlets of the pool or spa for which the permit is issued shall be equipped to provide circulation throughout the pool or spa as prescribed in Paragraphs 2 and 3.*

2. *The swimming pool or spa shall either have at least two circulation suction outlets per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least three feet in any dimension between the suction outlets, or be designed to use alternatives to suction outlets including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump.*

3. *The circulation system shall have the capacity to provide a complete turnover of pool water, as specified in Section 3124B of Chapter 31B of the California Building Standards Code (Title 24 of the California Code of Regulations).*

4. *Suction outlets shall be covered with antientrapment grates, as specified in the ANSI/APSP-16 performance standard or successor standard designated by the federal Consumer Product Safety Commission, that cannot be removed except with the use of tools. Slots of openings in the grates or similar protective devices shall be of a shape, area and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.*

5. *Any backup safety system that an owner of a new swimming pool or spa may choose to install in addition to the requirements set forth in subdivisions (1) through (4) above shall meet the standards as published in the document, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," Publication Number 363, March 2005, United States Consumer Products Safety Commission.*

6. *Whenever a building permit is for the remodel or modification of any existing swimming pool, toddler pool, or spa, the permit shall require that the suction outlet or suction outlets of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with antientrapment grates, as specified in the ANSI/APSP-16 performance standard or a successor standard designated by the federal Consumer Product Safety Commission.*

Authority: Health and Safety Code Section 18942(b)

Reference: Health and Safety Code Section 115928 AB

3305 (Statutes 1996, c.925); AB 2977 (Statutes 2006, c.478); AB 478 (Statutes 2007, c.596)

3109.5 Entrapment avoidance.
Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

3109.6 Informative documents.

1. *The Legislature encourages a private entity, in consultation with the Epidemiology and Prevention for Injury Control Branch of the department, to produce an informative brochure or booklet, for consumer use, explaining the child drowning hazards of, possible safety measures for, and appropriate drowning hazard prevention measures for, home swimming pools and spas, and to donate the document to the department.*

2. *The Legislature encourages the private entity to use existing documents from the United States Consumer Product Safety Commission on pool safety.*

3. *If a private entity produces the document described in Subdivisions 1 and 2 and donates it to the department, the department shall review and approve the brochure or booklet.*

4. *Upon approval of the document by the department, the document shall become the property of the state and a part of the public domain. The department shall place the document on its Web site in a format that is readily available for downloading and for publication. The department shall review the document in a timely and prudent fashion and shall complete the review within 18 months of receipt of the document from a private entity.*

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CHAPTER 31A
SYSTEMS FOR WINDOW CLEANING OR EXTERIOR BUILDING MAINTENANCE

See Title 8, California Code of Regulations, Division 1, Chapter 4, Subchapter 7, General Industry Safety Orders, Group 1, Articles 5 and 6.

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CHAPTER 33
SAFEGUARDS DURING CONSTRUCTION

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3302.3 Fire safety during construction. Fire safety during construction shall comply with the applicable requirements of this code and the applicable provisions of Chapter 33 of the *California Fire Code.*

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3303.7 Fire safety during demolition. Fire safety during demolition shall comply with the applicable requirements of this code and the applicable provisions of Chapter 56 of the *California Fire Code.*

. . .

3305.1 Facilities required. Sanitary facilities shall be provided during construction, remodeling or demolition activities in accordance with the *California Plumbing Code.*

. . .

3309.2 Fire hazards. The provisions of this code and the *California Fire Code* shall be strictly observed to safeguard against all fire hazards attendant upon construction operations.

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APPENDIX A
EMPLOYEE QUALIFICATIONS

. . .

A101.2 Chief inspector.
The building official can designate supervisors to administer the provisions of the *California Building*, *Mechanical* and *Plumbing Codes* and ~~*California*~~ International Fuel Gas Code. Each supervisor shall have at least 10 years' experience or equivalent as an architect, engineer, inspector, contractor or superintendent of construction, or any combination of these, five years of which shall have been in a supervisory capacity. They shall be certified through a recognized certification program for the appropriate trade.

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SECTION A102
REFERENCED STANDARDS

IBC—15	*California* Building Code	A101.2
IMC—15	~~*California*~~ International Mechanical Code	A101.2
IPC—15	~~*California*~~ International Plumbing Code	A101.2
IFGC—15	~~*California*~~ International Fuel Gas Code	A101.2

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APPENDIX G
FLOOD-RESISTANT CONSTRUCTION

. . .

G102.1 General.
This appendix, in conjunction with the *California Building Code*, provides minimum requirements for development located in flood hazard areas, including the subdivision of land; installation of utilities; placement and replacement of manufactured homes; new construction and repair, reconstruction, rehabilitation or additions to new construction; substantial improvement of existing buildings and structures, including restoration after damage, temporary structures, and temporary or permanent storage, utility and miscellaneous Group U buildings and structures, and certain building work exempt from permit under Section 105.2.

G102.2 Establishment of flood hazard areas.
Flood hazard areas are established in Section 1612.3 of the *California Building Code*, adopted by the applicable governing authority on [INSERT DATE].

. . .

G201.1 General.
The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the *California Building Code* for general definitions.

. . .

G301.2 Subdivision requirements. The following requirements shall apply in the case of any proposed subdivision, including proposals for manufactured home parks and subdivisions, any portion of which lies within a flood hazard area:

1. The flood hazard area, including floodways and areas subject to high velocity wave action, as appropriate, shall be delineated on tentative and final subdivision plats;

2. Design flood elevations shall be shown on tentative and final subdivision plats;

3. Residential building lots shall be provided with adequate buildable area outside the floodway; and

4. The design criteria for utilities and facilities set forth in this appendix and appropriate *California Codes* shall be met.

. . .

G1001.1 Utility and miscellaneous Group U.
Utility and miscellaneous Group U includes buildings that are accessory in character and miscellaneous structures not classified in any specific occupancy in the *California Building Code*, including, but not limited to, agricultural buildings, aircraft hangars (accessory to a one- or two-family residence), barns, carports, fences more than 6 feet (1829 mm) high, grain silos (accessory to a residential occupancy), greenhouses, livestock shelters, private garages, retaining walls, sheds, stables and towers.

. . .

G1001.3 Elevation.
Utility and miscellaneous Group U buildings and structures, including substantial improvement of such buildings and structures, shall be elevated such that the lowest floor, including basement, is elevated to or above the design flood elevation in accordance with Section 1612 of the *California Building Code*.

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SECTION G1101
REFERENCED STANDARDS

ASCE 24—13	Flood Resistance Design and Construction	G103.1, G401.3, G401.4, G701.1,G801.1, G801.6, G801.7, G901.1, G1001.4,
HUD 24 CFR Part 3280 (2008)	Manufactured Home Construction and Safety Standards	G201
IBC—15	*California* Building Code	G102.2, G1001.1, G1001.3
IRC-15	*California* ~~International~~ Residential Code	G501.2, G501.4 G501.5
NFPA 70—11	*California* ~~National~~ Electrical Code	G1001.6

APPENDIX H
SIGNS

. . .

H102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the *California Building Code* for general definitions.

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SECTION H115
REFERENCED STANDARDS

ASTM D 635—10	Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position	H107.1.1
NFPA 70—11	~~National~~ *California* Electrical Code	H106.1, H106.2
NFPA 701—10	Methods of Fire Test for Flame Propagation of Textiles and Films	H106.1.1

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APPENDIX I
PATIO COVERS

. . .

I102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of *the California Building Code* for general definitions.

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APPENDIX J – GRADING

J102.1 Definitions.
The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the *California Building Code* for general definitions.

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J105.1 General.
Inspections shall be governed by Section 110, *Chapter 1, Division II* of this code.

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APPENDIX M
TSUNAMI-GENERATED FLOOD HAZARD

. . .

M101.2 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the *California Building Code* for general definitions.

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Notation:
Authority: Health and Safety Code §18928 & 18934.5 18940.5
Reference: Health and Safety Code §§18928, 18928.1, 18934.5, 18938(b) & 18940.5