CALIFORNIA BUILDING STANDARDS COMMISSION

MONOGRAPH of PUBLIC COMMENTS

2004 ANNUAL CODE ADOPTION CYCLE

NOTE: Bring this document and the May 2005, "CODE CHANGE SUBMITTALS FOR 2004 (4 Vol.) MONOGRAPH" to the California Building Standards Commission meeting on March 16, 2006. This meeting will be held at Department of Health Services Main Auditorium 1500 Capitol Avenue, Sacramento, CA 95814

October 2005

Stanley T. Nishimura, Executive Director
California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833
(916) 263-0916

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Preface

State Building Standards Law (Health and Safety Code Section 18929.1) requires state agencies that propose building standards for adoption to, amendment to, or repeal from the California Building Standards Code (California Code of Regulations, Title 24) to submit them for consideration in an annual code adoption cycle. In the 2004 Annual Code Adoption Cycle, proposed building standards are suggested by the California Building Standards Commission (BSC), Division of the State Architect—Access Compliance (DSA/AC), Division of the State Architect—Structural Safety (DSA/SS), Department of Housing and Community Development (HCD), Office of the State Fire Marshal (SFM), and Office of Statewide Health Planning and Development (OSHPD).

The purpose of this document is to make available public comments received during the 45-day comment period to the "Monograph of Code Change Submittals for 2004 Annual Code Adoption Cycle", with Code Advisory Committee recommendations, in accordance with the State Building Standards Law and the Government Code (Administrative Procedure Act). Comments are listed in order according to the item number on which comment was received. Only those proposed code changes that received public comment to the state agency's proposed modifications or to Code Advisory Committee recommendations are included in this monograph.

Commenter Reference Material

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OCTOBER 2005

California Building Standards Commission

Public Comments to the California Building Standards Code
California Code of Regulations
Title 24
(Submittals for 2004 Annual Code Adoption Cycle)

NOTE: In order to follow the proposed revisions through the code change cycle, it is important to retain parts 1, 2, 3, 4, 5, & 9 of the California Building Standards Code.

Contents

(UNDERLINED ITEMS DENOTE ITEMS THAT RECEIVED PUBLIC COMMENT)

per **Administrative Code – Part 1, 1-901.4.d.4**
4. No new issues will be raised before the Commission that were not printed in the monograph of challenges.

VOLUME I of IV

PART 1 - CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE

ITEM 1 OSHPD 1/04 ADMINISTRATIVE REGULATIONS FOR THE OSHPD
Chapters 6 & 7, amend various sections.

SUB-ITEM 1-1 Chapter 6, Article 1, section 1.4.5.1.2 and 1.4.5.1.3, Nonconforming hospital buildings
(HF CAC)-Recommendation-Approved as Submitted

SUB-ITEM 1-2 Chapter 6, Article 1, section1.5.2, Delay in Compliance
(HF CAC)- Recommendation-Approved as Submitted

SUB-ITEM 1-3 Chapter 7, Article 3, section 7-113, Application for Plan or Report Review
(HF CAC)-Recommendation-Approved as Submitted

SUB-ITEM 1-4 Chapter 7, Article 3, section 7-115, Preparation of Plans and Specifications and Reports
(HF CAC)- Recommendation-Approved as Submitted

SUB-ITEM 1-5 Chapter 7, Article 3, section 7-133, Fees
(HF CAC)- Recommendation-Approved as Submitted

SUB-ITEM 1-6 Chapter 7, Article 3, section 7-134, Fee Refund
(HF CAC)- Recommendation-Approved as Submitted

SUB-ITEM 1-7 Chapter 7, Article 4, section 7-144, Inspection
(HF CAC)- Recommendation-Approved as Submitted

PART 2 - CALIFORNIA BUILDING CODE

VOLUME II of IV

SUB-ITEM 6-7	Chapter 16A, Section 1631A.2 Ground Motion, Items 5 and 6; and sections 1631A.2.1 and 1631A.2.2 *(SDLF CAC)- Recommendation-Approved as Resubmitted*
SUB-ITEM 6-8	Chapter 16A, Section 1632A.1 General *(SDLF CAC) Recommendation-Approved as Resubmitted*
SUB-ITEM 6-9	Chapter 16A, Section 1632A.2 Design for Total Lateral Force *(SDLF CAC) Recommendation-Approved as Submitted*
SUB-ITEM 6-10	Chapter 16A, Section 1632A.6 HVAC Ductwork, Plumbing/Piping and Conduit Systems *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-11	Chapter 16A, Section 1633A.2.6 Collector Elements *(SDLF CAC)- Recommendation-Approved as Resubmitted*
SUB-ITEM 6-12	Chapter 16A, Section 1633A.2.12 Foundations and superstructure-to-foundation connections *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-13	Chapter 16A, Table 16A-M—PLAN STRUCTURAL IRREGULARITIES *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-14	Chapter 16A, Table 16A-O—HORIZONTAL FORCE FACTORS *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-15	Chapter 16A, Section 1637A *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-16	Chapter 16A, Section 1640A.2 Applicability *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-17	Chapter 16A, Section 1641A--DEFINITIONS *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-18	Chapter 16A, Section 1642A.1 The following symbols *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-19	Chapter 16A, Sections 1644A.9.2.3.3 and 1644A.9.13.1.2.1 *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-20	Chapter 16A, Section 1648A.2.4 and 1648A.2.4.1.1 *(SDLF CAC)- Recommendation-Approved as Resubmitted*
SUB-ITEM 6-21	Chapter 16A, Section 1649A.5.1 Reports *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-22	Appendix Chapter 16A, Section 1657A.3 Occupancy Categories *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-23	Appendix Chapter 16A, Section 1665A.2.3 Sequence and cycles *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-24	Appendix Chapter 16A, Section 1665A.4 System adequacy *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-25	Chapter 18A, Sections 1804A.1, 1806A.2 and 1809A.5.1 *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-26	Chapter 19A, Sections 1903A.3.2.1 and 1903A.11 *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-27	Chapter 19A, Section 1905A.2.3 Concrete specified *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-28	Chapter 19A, Sections 1905A.5.1 and 1905A.5.2 As data become *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-29	Chapter 19A, Section 1921A.0 Notations *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-30	Chapter 19A, Sections 1921A.3.2.1 and 1921A.5.3.1 *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-31	Chapter 21A, Section 2108A.2.2.6 Development *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-32	Chapter 21A, Section 2108A.2.6.2.6 Members subjected to axial force and flexure *(SDLF CAC)- Recommendation-Approved as Submitted*
SUB-ITEM 6-33	Chapter 22A, Sections 2213A.7.3 and 2213A.9.1 *(SDLF CAC)- Recommendation-Approved as Submitted*

ITEM 8 SFM 5/04 PART 2, California Building Code, Volume 1
Chapters 1, 2, 3, 5, 9, 10, 11A and 35, Various sections

SUB-ITEM 8-1 Chapter 1, Section *101.17.14 SFM - Office of the State Fire Marshal*
(BFO CAC) – Recommendation – Approved as Resubmitted

SUB-ITEM 8-2 Chapter 2, DEFINITIONS AND ABBREVIATIONS, Sections 202 and 215
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-3 Chapter 3, Section 305.1, Group E Occupancies Defined, Division 3
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-4 Chapter 3, Section *305.1.1 Special provisions for nonambulatory persons in Adult Day Programs*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-5 Chapter 3, Section *305.9.1 Fire Alarm Systems*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-6 Chapter 3, Section *305.11.3 Exempted Portable Buildings*
(BFO CAC) – Recommendation – Approved as Submitted

SUB-ITEM 8-7 Chapter 3, Sections 308.1 *and 308.1.1.1* Group I Occupancies
(BFO CAC) – Recommendation - Disapproved

SUB-ITEM 8-8 Chapter 3, Sections 308.2.1and *308.2.1.1* Construction Height and Allowable Area
(BFO CAC) – Recommendation – SFW Withdrew This Item

SUB-ITEM 8-9 Chapter 3, Table 3-A—DESCRIPTION OF OCCUPANCIES BY GROUP AND DIVISION
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-10 Chapter 3, Section 310.1 Group R Occupancies Defined; Relocate Division 6 Occupancies from Appendix Chapter 3A, Division 1, into sections 310.1 through *310.10.4.3*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-11 Appendix Chapter 3A, Division II, Sections *323A and 324A.2*
(BFO CAC) Recommendation – SFM Withdrew This Item

SUB-ITEM 8-12 Chapter 5, Section 506—MAXIMUM HEIGHT OF BUILDINGS AND INCREASES, Items 5 and 6
(BFO CAC) – Recommendation – SFM Withdrew This Item

SUB-ITEM 8-13 Chapter 5, Table 5-B—BASIC ALLOWABLE BUILDING HEIGHTS AND BASIC ALLOWABLE FLOOR AREA FOR BUILDINGS ONE STORY IN HEIGHT
(BFO CAC) – Recommendation – SFM Withdrew This Item

SUB-ITEM 8-14 Chapter 9, Sections 904.1.1 through *904.1.2.1* Installation Requirements
(BFO CAC) Recommendation – Approved as Resubmitted

SUB-ITEM 8-15 Chapter 9, Section 904.2.1 Where required
(BFO CAC) – Recommendation – Approved as Submitted

SUB-ITEM 8-16 Chapter 9, section *904.2.4.1.1 Nonambulatory persons in Adult Day Programs*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-17 Chapter 9, Section *904.2.7.1 Group I, Division 1.2.1*
(BFO CAC) – Recommendation – SFM Withdrew This Item

SUB-ITEM 8-18 Chapter 10, Section 1003.3.1.10 Special egress-control devices
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-19 Chapter 10, Section *1007.3.11.1 Fences and gates used for Adult Day Programs*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-20 Chapter 10, Section 1007.5.4 Corridors
(BFO CAC) – Recommendation – Approved as Resubmitted

SUB-ITEM 8-21 Chapter 10, TABLE 10-A—MINIMUM EGRESS REQUIREMENTS
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-22 Chapter 11A, Repeal section *1108A* and adopt new section*1118A EGRESS AND AREAS FOR EVACUATION ASSISTANCE*
(BFO CAC) – Recommendation – Approved as Submitted

SUB-ITEM 8-23 Chapter 35, Section 3504, PART II—UBC STANDARDS, CHAPTER 9
(BFO CAC) – Recommendation – Approved as Submitted

SUB-ITEM 8-24 Chapter 35, Section 3504, PART IV, sections *3504.1.2 and 3504.1.3 Standards*
(BFO CAC) – Recommendation – Further Study

SUB-ITEM 8-25 Chapter 35, Section 3505, sections 3505.1 through 3505.10
(BFO CAC) – Recommendation – 3505.1 Approved as Submitted / 3505.1.1, 3505.2, 3505.3 – Approved as Resubmitted

VOLUME III of IV

PART 3 - CALIFORNIA ELECTRICAL CODE

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SUB-ITEM 13-4		Chapter 5 – Exhaust Systems – Section 510.7 *(PEME CAC) – Recommendations – Further Study*
SUB-ITEM 13-5		Chapter 5 – Section 510.7.5 *(PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 13-6		Chapter 5 – Section 513.10 *(PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 13-7		Chapter 6 – Duct Systems *(PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 13-8		Chapter 9 – Installation of Specific Equipment *PEME CAC) – Recommendation – Approved as Resubmitted*
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SUB-ITEM 14-1		Chapter 1, Administration (*DSA/SS CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 14-2		Definitions (*DSA/SS CAC) – Recommendation – Approved as Submitted*
ITEM 15	HCD 1/04	2003 UNIFORM MECHANICAL CODE
SUB-ITEM 15-1		Matrix Tables (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-2		Chapter 1, - Administration (*PEME CAC) – Recommendation – Approved as Amended*
SUB-ITEM 15-3		105.5.3 - *Notwithstanding other…* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-4		105.6.2 - *Local Variances.* (*PEME CAC) – Recommendation – Approved as Amended*
SUB-ITEM 15-5		108.1.1 - *Vesting Authority* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-6		108.1.1.8.1 - *Application- Hotels…* (*PEME CAC) – Recommendation – Approved as Amended*
SUB-ITEM 15-7		108.1.1.8.2 - *Application-* (*PEME CAC) – Recommendation – Approved as Amended*
SUB-ITEM 15-8		108.1.1.9 - *Application- Permanent…* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-9		108.3.1.3 - *Limitations on Authority to Enter* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-10		108.6.2 - *AUTHORITY OF CITY …* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-11		114.2.1.1 - *Retention of Plans* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-12		115.1.1 - *Fees* (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-13		Chapter 2 - Definitions (*PEME CAC) – Recommendation – Approved as Submitted*
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SUB-ITEM 15-16		Chapter 6 – Duct Systems (*PEME CAC) – Recommendation – Approved as Submitted*
SUB-ITEM 15-17		Chapter 7 – Combustion Air & Chapter 8 – Chimneys and Vents (*PEME CAC) – Recommendation – Approved as Submitted*

PART 5 - CALIFORNIA PLUMBING CODE

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PART 9 - CALIFORNIA FIRE CODE

PART 12 - CALIFORNIA REFERENCE STANDARDS CODE

HEALTH & SAFETY CODE SECTION 18930

SECTION 18930. APPROVAL OR ADOPTION OF BUILDING STANDARDS; ANALYSIS AND CRITERIA; REVIEW CONSIDERATIONS; FACTUAL DETERMINATIONS

(a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:

(1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.
(2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.
(3) The public interest requires the adoption of the building standards.
(4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.
(5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.
(6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.
(7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.
  (A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.
  (B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.
(8) The format of the proposed building standards is consistent with that adopted by the commission.
(9) The proposed building standard, if it promotes fire and panic safety as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.

(b) In reviewing building standards submitted for its approval, the commission shall consider only the record of the proceedings of the adopting agency, except as provided in subdivision (b) of Section 11342.3 of the Government Code.

(c) Where the commission is the adopting agency, it shall consider the record submitted to, and considered by, the state agency that proposes the building standards and the record of public comment that results from the commission's adoption of proposed regulations.

(d) (1) The commission shall give great weight to the determinations and analysis of the adopting agency or state agency that proposes the building standards on each of the criteria for approval set forth in subdivision (a). Any factual determinations of the adopting agency or state agency that proposes the building standards shall be considered conclusive by the commission unless the commission specifically finds, and sets forth its reasoning in writing, that the factual determination is arbitrary and capricious or substantially unsupported by the evidence considered by the adopting agency or state agency that proposes the building standards.
(2) Whenever the commission makes a finding, as described in this subdivision, it shall return the standard to the adopting agency or state agency that proposes the building standards for a reexamination of its original determination of the disputed fact.

(e) Whenever a building standard is principally intended to protect the public health and safety, its adoption shall not be" factual determination" for purposes of subdivision (d). Whenever a building standard is principally intended to conserve energy or other natural resources, the commission shall consider or review the cost to the public or benefit to be derived as a "factual determination" pursuant to subdivision (d). Whenever a building standard promotes fire and panic safety, each agency shall, unless adopted by the State Fire Marshal, submit the building standard to the State Fire Marshal for prior approval.

(f) Whenever the commission finds, pursuant to paragraph (2) of subdivision (a), that a building standard is adopted by an adopting agency pursuant to statutes requiring adoption of the building standard, the commission shall not consider or review whether the adoption is in the public interest pursuant to paragraph (3) of subdivision (a).

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Part 1
California Administrative Code

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ITEM 1
OSHPD 01-04
Part 1
Chapter 7 Article 5

SUB-ITEM 1-8

7-161. Informal Conference

COMMENT #1
Jack V. Ivers
2497 East Harbor Blvd
Ventura, CA. 93001

Request that this item or reference provision be recommended: **Disapproved**

Reason:

The proposed change to increase the allowable time for completing an appeals process should be denied. Approving the proposed change will discourage legitimate appeals since even the present appeals time frame can be daunting for a typical construction project. Based on the number of days identified in the present code language, the reasonable interpretation would be that the days are calendar days rather than business days and that the scheduling of meetings and distribution of information would be completed within the maximum number of calendar days identified.

Nine point criteria: The public interest is not served by the proposed change. The increase in time for an appeal Is unreasonable, unfair, and capricious because it extends the allowable length of an appeal process with no justification that there is a problem with the present code language.

I served as the Electrical Engineer representative on the Hospital Building Safety Board from 1984 to 2002. During that time, I participated in several appeals, at least one of which was heard by the full board. After 2002, I have been an appellant during two appeals, one of which went through both committee and full board hearings. The decisions made during these appeals did not always support one party or the other. I do not recall any dissatisfaction from either OSHPD or appellants regarding the present building code requirements relates to the scheduling of hearings and distribution of information. I am aware that both OSHPD and appellants have successfully negotiated extensions to the time frames when both parties were agreeable.

Based on 9-Point Criteria: #**6**

SUB-ITEM 1-8 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 1
OSHPD 01-04
Part 1
Chapter 7 Article 5

SUB-ITEM 1-9

7-163. Formal Hearing Request

COMMENT #1
Jack V. Ivers
2497 East Harbor Blvd
Ventura, CA. 93001

Request that this item or reference provision be recommended: **Disapproved**

Reason:
The proposed change to increase the allowable time for completing an appeals process should be denied. Approving the proposed change will discourage legitimate appeals since even the present appeals time frame can be daunting for a typical construction project. Based on the number of days identified in the present code language, the reasonable interpretation would be that the days are calendar days rather than business days and that the scheduling of meetings and distribution of information would be completed within the maximum number of calendar days identified.

Nine point criteria: The public intent is not solved by the proposed change. The increase in time for an appeal is unreasonable, unfair, and capricious because it extends the allowable length of an appeal process with no justification that there is a problem with the present code language.

I served as the Electrical Engineer representative on the Hospital Building Safety Board from 1994 to 2002. During that time, I participated in several appeals, at least one of which was heard by the full board. After 2002, I have been an appellant during two appeals, one of which went through both committee and full board hearings. decisions made during these appeals did not always support one party or the other. I do not recall any dissatisfaction from either OSHPD or appellants regarding the present building code requirements related to the scheduling of hearings and distribution of information. I am aware that both OSHPD and appellants have successfully negotiated extensions to the time frames when both parties were agreeable.

Based on 9-Point Criteria: #**6**

SUB-ITEM 1-9 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 1
OSHPD 01-04
Part 1
Chapter 7 Article 5

SUB-ITEM 1-10

7-165. Formal Hearing

COMMENT #1
Jack V. Ivers
2497 East Harbor Blvd
Ventura, CA. 93001

Request that this item or reference provision be recommended: **Disapproved**

Reason:
The proposed change to increase the allowable time for completing an appeals process should be denied. Approving the proposed change will discourage legitimate appeals since even the present appeals time frame can be daunting for a typical construction project. Based on the number of days identified in the present code language, the reasonable interpretation would be that the days are calendar days rather than business days and that the scheduling of meetings and distribution of information would be completed within the maximum number of calendar days identified.

Nine point criteria: The public intent is not solved by the proposed change. The increase in time for an appeal is unreasonable, unfair, and capricious because it extends the allowable length of an appeal process with no justification that there is a problem with the present code language.

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Based on 9-Point Criteria: **#6**

SUB-ITEM 1-10 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 1
OSHPD 01-04
Part 1
Chapter 7 Article 5

SUB-ITEM 1-11

7-171. Decision on Appeal

COMMENT #1
Jack V. Ivers
2497 East Harbor Blvd
Ventura, CA. 93001

Request that this item or reference provision be recommended: **Disapproved**

Reason:
The proposed change to increase the allowable time for completing an appeals process should be denied. Approving the proposed change will discourage legitimate appeals since even the present appeals time frame can be daunting for a typical construction project. Based on the number of days identified in the present code language, the reasonable interpretation would be that the days are calendar days rather than business days and that the scheduling of meetings and distribution of information would be completed within the maximum number of calendar days identified.

Nine point criteria: The public intent is not solved by the proposed change. The increase in time for an appeal is unreasonable, unfair, and capricious because it extends the allowable length of an appeal process with no justification that there is a problem with the present code language.

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Based on 9-Point Criteria: #**6**

SUB-ITEM 1-11 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 1
OSHPD 01-04
Part 1
Chapter 7

SUB-ITEM 1-15

7-204. Minimum Qualification for Examination

COMMENT #1
Kurt A. Schaefer, P.E. , Deputy Director
Office of Statewide Health Planning and Development
1600 Ninth Street, Room 420
Sacramento CA 95814

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested:
Title 24, Part 1, California Building Standards Administrative Code
Section 7-204 Minimum Qualification for Examination

(c) Minimum Qualifications for Class "C" Hospital Inspector Exam:

1.High school graduation or equivalent … and possess a valid certificate issued by:

Plumbing—IAPMO Certification, ~~Level III~~
Mechanical – IAPMO Certification, ~~Level III~~...

Reason:

OSHPD is recommending that OSHPD 01/04, Item 1-15 be "approved as amended". The IAPMO certification for a "Certified Plumbing Inspector" and "Certified Mechanical Inspector" does not included designated "Levels". The recommended amendment is shown above in strikethrough, and will correct an inadvertent error in the proposed language:

Based on 9-Point Criteria: #**6**

SUB-ITEM 1-15 – Commission Action

A AA D FS

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(END OF ITEM)

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Part 2
California Building Code

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ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1102A.2

COMMENT #1
Ewa O'Neal
City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

Request that this item or reference provision be recommended: **Approved as Amended**

Reason:

Section 1102A.2 addresses the existing buildings after March 13, 1991 and before present. The note for section 1102A.2 should include reference to new additions of public use areas to the existing residential facilities.

Based on 9-Point Criteria: **6**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4

1112A.9 Detectable Warnings

COMMENT #1
Dirk Neyhart
1400 Hearst
Berkeley, CA

It gives me great pause that so many blind folks are injured or killed when trying to get around. I need all the help I can get. Several times in the last year I have crossed on a red light, several times I have strayed out of the crosswalk, and several times I have missed a mid block crosswalk.

The issue before you is the number and size of truncated domes.

I'm not well informed on the issue, have never held a proposed dome in my hand or tapped it with the cane.

I do know that I need all the help possible. Of course, it's possible to be independent without traveling, especially with the internet. There's more joy in independence with secure mobility.

Please do the right thing to advance the longetivity of your fellow citizens, especially us blind folks.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 2-4 – Commission Action

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4

1112A.9 Detectable Warnings

COMMENT #2
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested:
We would like to amend this section by striking out, ~~"a center-to-center spacing of nominal of 1.67 inches (42.4 mm) minimum to 2.35 inches (59.7 mm) maximum"~~ and replace with "a center-to-center spacing of nominal 2.00 inches (5.0 mm)".

Reason:

The new ADAAG specification for center-to-center spacing that is being proposed for this section is not based on scientific research, but is based on the range of existing products available from manufacturers. However, Japanese research *Report of fundamental research on standardization relating to tactile tiles for guiding the visually impaired*, 1998 summarized in Detectable Warnings: Synthesis of U.S. and International Practice, B.L. Bentzen, J.M. Barlow and L.S. Tabor, tested nine truncated dome surfaces (detectable warnings, or dot tiles) falling within the range specified in the new ADAAG, which resulted with only three that were discriminated from linear guiding surfaces (bar tiles). Comparable systematic research has not been conducted in the U.S. or elsewhere, so far as can be determined. Use of guiding surfaces is currently being considered by transportation researchers (Project NCHRP 3-78, Ron Hughes, Principal Investigator) to indicate the location of and guide blind pedestrians to crosswalks in unusual locations.

The only three truncated dome surfaces that were found to be discriminable on at least 90% of trials had the following dimensions:

- .9 inch(22 mm) base diameter with 2.0 inch (50 mm) spacing
- .9 inch(22 mm) base diameter with 2.4 inch (60 mm) spacing
- 1.1 inch (28 mm) base diameter with 2.4 inch (60 mm) spacing

Based on the above Japanese research, the nominal 1.67 inches (42.4 mm) minimum up to 2.00 inches (5.0 mm) measurement cannot be considered as a center-to-center spacing specification.
It has been found by researchers, Bentzen, B.L.; Nolin, T.L.; Easton, R.D.;Desmarais, L. & Mitchell, P.A. (1994). *Detectable warning surfaces: Detectability by individuals with visual impairments, and safety and negotiability for individuals with physical impairments.* Final report DOT-VNTSC-FTA-94-4 and FTA-MA-06-0201-94-2. U. S. Department of Transportation, Federal Transit Administration, Volpe National Transportation Systems Center, and Project ACTION, National Easter Seal Society, that the small domes that have .9 inch base diameter with a .45 inch top diameter dimension are more detectable underneath the foot than larger diameter domes. The .9 inch base diameter is the current Title 24 specification and also the proposed base diameter for domes; therefore, the following two dimensions can only be considered:

- .9 inch(22 mm) base diameter with 2.0 inch (50 mm) spacing
- .9 inch(22 mm) base diameter with 2.4 inch (60 mm) spacing

The above 2.4 inch (60 mm) center-to-center spacing creates a greater potential of instability for walkers, and more uneven wear of the domes which affects detectability and effectiveness. There are physically fewer domes underneath the foot with 2.4 inch spacing, which increases the detectability of each individual dome, but you get less support underneath the foot creating the potential for rocking, which impacts the walker's stability. With fewer domes underneath the foot, the domes wear down unevenly adversely affecting the detectable warning surface effectiveness because some domes will be more detectable than others due to the changes of height. Although the 2.4 inch (60 mm) spacing provides more width for wheelchair users to travel more easily, the best compromise is to use the 2.0 inch (50 mm) spacing, which enables wheelchair users to travel through, and provides greater stability for walkers, as well as lessens the uneven wear of the domes.

It is important that a standard for detectable warning surfaces consider not only their detectability, but their discriminability between individual domes, as well as between domes and guiding surfaces.

Consistency and standardization in the meaning (caution) and application (e.g., curb ramps, transit boarding platforms, and hazardous vehicular areas) of detectable warnings in its design specifications (width, depth, dome dimensions/spacing, etc.) provide a message that is clear and not open to interpretation. If there is no harmony, this may lead to situations in which the surface is not readily detected, and can lead to incorrect interpretation. The outcome may be an increased likelihood that the blind fails to avoid edge drop-offs or entering hazardous vehicular areas. Consistency is important in facilitating expectations in the general population, including the disabled. Consistency in design specifications helps the individual to develop expectations about what constitutes a detectable warning. The ADA guidelines recognize the importance of this concept in the definition of a detectable warning as "a standardized surface feature." This principle also guides the development of traffic control systems in general (*Manual on Uniform Traffic Control Devices for Streets and Highways 2003 edition,* US Department of Transportation, Federal Highway Administration, MUTCD). The MUTCD recognizes the absolute importance of uniformity as a nationwide objective to achieve effective traffic control results, economy in the manufacture, installation, maintenance and administration of control devices, and as a defense against adverse judgments in tort liability cases. Thus, it is paramount that there be consistency in the design specifications (width, depth, dome dimensions/spacing, etc.) and application in the use of detectable warnings. By providing a range of center-to-center spacing consistency and standardization is lost which compromises detectability and effectiveness.

We support this section for the following reasons:

1. Research has been conducted which addresses concerns about safety of detectable warnings, indicating that detectable warnings on slopes and on generally horizontal surfaces have minimal impact on the safety and ease of travel for persons having physical disabilities, Bentzen, B., Nolin, T., Easton, R., Desmaris, P., and Mitchell, P., 1994, *Detectable Warnings: Detectability by Individuals with Visual Impairments, and Safety and Negotiability on Slopes for Persons with Physical Impairments*, U.S. Department of Transportation Federal Transit Administration,

Final Report; Hauger, J., Rigby, J., Safewright, M. & McAuley, W., 1996, Detectable warning surfaces at curb ramps, *Journal of Visual Impairments and Blindness 90*:512-525.

2. Research has found that 36 inches of detectable warning material increases the reaction time for persons who are blind, thus reducing the potential of entering a hazardous vehicular area. 24 inch depth is often detected only by one foot, but rarely by both, which leaves the blind person with insufficient reaction time to acknowledge the warning and to respond accordingly. The research has found that persons who are blind more reliably detected detectable warnings at 36 inches than at 24 inches. 24 inch deep detectable warnings were repeatedly detected on 85-90% of trials (Peck, A., & Bentzen, 1987, *Tactile warnings to promote safety in the vicinity of transit platform edges*. US Department of Transportation, Urban Mass Transportation Administration, Report No. UMTA-MA-06-0120-87-1; Bentzen, B., Nolin, T., Easton, R., Desmaris, P., and Mitchell, P., 1994. *Detectable Warnings: Detectability by Individuals with Visual Impairments, and Safety and Negotiability on Slopes for Persons with Physical Impairments*, U.S. Department of Transportation Federal Transit Administration, Final Report). Additional research analysis of these studies show that 36 inches of a detectable warning surface are typically required to enable stopping on 95% of trials on which the surfaces are detected. Also, more than half of Americans who are blind and visually impaired (5.5 million of 10 million, American Foundation for the Blind, 1994-1995) are over the age of 65. As we know, this number is increasing and the reaction time of the aged decreases as their life progresses. Therefore, 36 inches is needed to enable persons who are to stop on 95 percent of approaches.

3. Research (Bentzen, B., Nolin, T. and Easton, R., 1994. *Detectable Warning Surfaces: Color, Contrast, and Reflectance.* US Department of Transportation, Federal Transit Administration, FTA-MA-06-0201-94-3) and other studies have found that the preferred color for warnings is safety yellow, or the color "yellow conforming to Federal Color No. 33538, as shown in Table IV of Standard No. 595B." There are several reasons for this. Physiologically, yellow is at the peak of the human photopic luminosity function, and thus is the color that appears brightest to the human eye. Yellow is quite unique, distinctive in its color appearance and easily differentiated from its immediate background, which makes it easily recognizable when used as a warning color. This is because yellow or colors close to it are rarely used for walking surfaces. Alternative warning markings, such as black or white, are more likely to loose conspicuousness against certain commonplace backgrounds, as walking surfaces are most commonly of neutral colors. Internationally and nationally, safety yellow denotes risk and the need for caution (ANSI Z535.1-1991, 6.3; ISO 3864-1984(E), 5.1).

Thus, the use of safety yellow results in detectable warnings that are universally recognized, reliably visually detectable, and highly salient to people having low vision.

Based on 9-Point Criteria: **2, 3, 5**, **and 7**.

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4

1112A.9 Detectable Warnings

COMMENT #3
Chad F. Allen
(No Address Given)

Request that this item or reference provision be recommended: **Disapproved**

Reason:

I am opposed to the consideration to extend a detectable warning from two feet to three feet because a blind person does not need three feet of warning space along with a curb ramp to know when a street crossing is in front of them. I as a blind person know when a street is coming up because I listen to the sound of the traffic and I use the curb ramp to line me up properly for a safe crossing of a street. The additional detectable warning only creates confusion and causes me to misinterpret what is in front of me. Traditionally, I only come across detectable warnings such as truncated domes at rail platforms, not streets. If it is necessary to implement into our streets, please minimize the width, not extend it.

Thank you.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4

1115A.5 Striping for the Visually Impaired

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested:

We agree that this language provides greater clarity, specificity, and to provide direction for the code user. Specifying a maximum depth of 4 inches prevents the installation of a striping, which is too wide and would potentially cover up the majority of the stair tread making it ineffective.

However, we would like to amend this section with the following text, which is underlined, "1115A.5 Striping for the Visually Impaired. Where stairways occur outside a building along accessible routes or where there are interior stairways, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least a minimum of 2 inches (50.8 mm) wide to a maximum of 4 inches (101.6 mm) wide and placed parallel to and not more than 1 inch (25.4 mm) from the nose of the step or landing to alert the visually impaired. Grooves shall not be an acceptable means for providing a strip of clearly contrasting color. The strip shall be of a material that is at least as slip resistant as the treads of the stair. A painted strip shall be acceptable."

Reason:

There are two problems with this section. The first is the failure to include interior stairs, which are equally dangerous as the exterior ones. DSA section 1133B.4.4 Striping for the Visually Impaired requires interior stairs to be striped, and these two sections need to be harmonized. There is a responsibility of government when funding a project to ensure that access as well as safety is provided for everyone, including those with visual impairments. The second is that there is a fallacy held by architects and building officials that grooves provide concealed shadows, which are black in color, and that this would provide a strip of clearly contrasting color. They often argue that marking steps and stairs is completely unnecessary, because the steps and stairs can be illuminated in such a manner as to produce shadows that will reveal their presence. This argument is fallacious, because:

1. In the case of steps and stairs that in the daytime depend on illumination from the sky or sun, the presence or absence of shadows cast by them and grooves changes from hour to hour depending on the position of the sun and on the light provided by the sky.
2. "1." is also true from daybreak to sunrise and from sunset to the onset of the darkness of the night.
3. In the case of the darkness of the night, the steps/stairs and grooves can only be illuminated so as to cast shadows that reveal their presence if the artificial illumination is placed very precisely so as to produce the required shadows. Unfortunately, the positioning of artificial illumination to achieve this effect is not very practical, and could prove to be counter-productive.
4. In the case of the illumination of steps/stairs and grooves inside buildings, with very few exceptions, this illumination is also expected to light up areas in addition to lighting up of the steps and stairs. To require that builders and building owners provide illumination for the steps/stairs and grooves in addition to the illumination of broader areas when the illumination of the broader areas illuminates the stairs adequately, is both costly and unjust. This is especially obvious when one realizes that the marking of the stairs as required in this section coupled with the overall room and/or hall lighting will accomplish the task to everyone's satisfaction and safety.

DSA section 1133B.4.4 Striping for the Visually Impaired needs to be harmonized with proposed HCD section 1115A.5 in the next code cycle.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 03-04
Part 2
Chapter 11A

SUB-ITEM 2-4

Section 1118A Egress and Areas for Evacuation Assistance

COMMENT #1
Michael Graham, Chief Building Official – City of Woodland
300 First Street
Woodland, CA 85695

Request that this item or reference provision be recommended: **Approve as Amended**

1118A.1 General. In buildings or portions of buildings required to be accessible, **an** accessible means of egress shall be provided in the same number as required for exits by chapter 10. When an exit, required by Chapter 10, is not accessible, an area for evacuation assistance shall be provided. Areas far evacuation assistance shall comply with the requirements of this ~~code~~ **section** and shall adjoin an accessible route of travel complying with this code.

Exceptions: 1. Areas of evacuation assistance are not required In buildings or facilities having a supervised automatic sprinkler system.

2. In alterations of existing buildings, area of evacuation assistance are not required.

3. Areas for evacuation assistance are not required on the upper floors of non-elevator, Group R, Division 1 Occupancies and Multistory Dwelling Units required to be Accessible per Section 1102A.3.1

Reason:

New item 3

Apartment dwelling units are not always inclusive within apartment buildings with common corridors and exit enclosures. The purpose of this code section is to provide for an area of refuge to non-sprinklered, non-elevator buildings. The current wording, as specified would include the second floor of atypical non-elevator, multi-story apartment buildings with multiple exterior exit stairways. Because the building as a whole is required to be accessible; *(even though only the first floor)* and all exits required by Chapter 10; *(this includes those exits on the second floor that are not accessible per the regulations*). In addition, not all of these building types are required to be sprinklers and those buildings that are not required to be sprinklered, would need to provide these area of refuges at each second floor exit stairway, landing and/or breezeway. The new proposed exception would not exempt large buildings that would generally need to comply with the regulations, (new non-spdnklered, elevator buildings that house Group ROccupancies) but exempt the small non-sprinklered non-elevator structures and those multistory dwelling units that are not required to have the first level located on a "Ground Floor', accessible.

The State fire marshals office included this language into the regulations because the existing language as specified in section 1008A did not comply with the minimum requirements for buildings set by the State Fire Marshal. Because of this and because of the new requirements for multi story buildings included in 11-A the proposed inclusion of regulations to non-sprinklered , non-elevator buildings could required areas for evacuation assistance to be required in these types of buildings as described above. We believe this was an oversight and propose an amendment to correct it. The amendment will not jeopardize the requirements for evacuation assistance in any building except for the types of buildings listed in the change and as such will not diminish any requirements for buildings under the State Fire Marshals jurisdiction.

Based on 9-Point Criteria: **1,2,3,4 & 6**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 03-04
Part 2
Chapter 11A

SUB-ITEM 2-4

Section 1118A.1 Egress and Areas for Evacuation Assistance

COMMENT #2
Daniel P. Larsen, Committee Chairman
CALBO Access compliance Committee
7610 Auburn Blvd
Citrus Heights, CA 95610

Request that this item or reference provision be recommended: **Approve as Amended**

Section 1118A Egress and Areas for Evacuation Assistance

1118A.1 General. In buildings or portions of buildings required to be accessible, an accessible means of egress shall be provided in the same number as required for exits by chapter 10. When an exit, required by Chapter 10, is not accessible, an area for evacuation assistance shall be provided. Areas for evacuation assistance shall comply with the requirements of this ~~code~~ section and shall adjoin an accessible route of travel complying with this code.

Exceptions: 1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.

2. In alterations of existing buildings, area of evacuation assistance are not required

3. Areas for evacuation assistance are not required on the upper floors of non-elevator, Group R, Division 1 Occupancies and Multistory dwelling units required to be accessible per Section 1102A.3.1.

Reason:

New item 3-

Apartment dwelling units are not always inclusive within apartment buildings with common corridors and exit enclosures. The purpose of this code section is to provide for an area of refuge to non-sprinklered, non-elevator buildings. The current wording, as specified would include the second floor of a typical non-elevator, multi-story apartment buildings with multiple exterior exit stairways. Because the building as a whole is required to be accessible; *(even though only the first floor)* and all exits required by Chapter 10; *(this includes those exits on the second floor that are not accessible per the regulations).* In addition, not all of these building types

are required to be sprinklered and those buildings that are not required to be sprinklered would need to provide these areas of refuges at each second floor exit stairway, landing and/or breezeway. The new proposed exception would not exempt large buildings that would generally need to comply with the regulations, (new non-sprinklered, elevator buildings that house Group R- Occupancies) but exempt the small non-sprinklered non-elevator structures and those multistory dwelling units that are not required to have the first level located on a "Ground Floor", accessible.

The State fire marshals office included this language into the regulations because the existing language as specified in section 1008A did not comply with the minimum requirements for buildings set by the State fire Marshal. Because of this and because of the new requirements for multi story buildings included in 11-A the proposed inclusion of regulations to non-sprinklered , non-elevator buildings could required areas for evacuation assistance to be required in these types of buildings as described above. We believe this was an oversight and propose an amendment to correct it- The amendment will not jeopardize the requirements for evacuation assistance in any building except for the types of buildings listed in the change and as such will not diminish any requirements for buildings under the State Fire Marshals jurisdiction.

Based on 9-Point Criteria: **1, 2, 3, 4 & 6.**

SUB-ITEM 2-4 – Commission Action

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1118A.1 Exception #1

COMMENT #3
Ewa O'Neal
City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

Request that this item or reference provision be recommended: **Approved as Amended**

Reason:

Section 1118A.1, exception #1
When newly constructed multi-family building is with supervised sprinklered system, would the exit stair shafts be exempt (not accessible) including doors, (1132A.6) door landing etc.

Based on 9-Point Criteria: **1 & 6**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1124A.3.3.2 Car Control Buttons, 1124A.8 Doorjamb Marking, and 1125A.4 Free-Standing Signs.

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

We support section 1124A.3.3.2 Car Control Buttons and would like to have it amended. Amend the second paragraph by placing at the end the following text, "Car control buttons shall be internally illuminated with a white light over the entire surface of the button." This amendment harmonizes this section with section 1116B.1.10 Hall Call Buttons. The language clarifies how an elevator button is to be made visible to a person who is low vision. DSA will need to add this text to the second paragraph of section 1116B.1.9 Car Controls to bring about harmony.

We support as written section 1124A.8 Doorjamb Marking because it brings about compliance with the current ADAAG 4.10.5 Raised and Braille Characters on Hoistway Entrances and section 407.2.3 Hoistway Signs of the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines dated July 23, 2004.

We support section 1125A.4 Free-Standing Signs because it prohibits signs that are mounted at head level or below to have sharp edges. Signs with sharp edges can cause serious injury to someone who walks into them, especially those who are blind or visually impaired. This requirement should be considered as a life and safety section for persons who are blind or visually impaired.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1124A.4 Hall Call Buttons

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

"Call operation buttons shall be centered 42 inches (1067 mm) above the floor. Buttons shall be a minimum of 3/4-inch (19.05 mm) in size and shall be raised 1/8-inch (3.17 mm) plus or minus 1/32-inch (0.8 mm) above the surrounding surface. Control buttons shall be illuminated, shall have square shoulders, and shall be activated by a mechanical motion that is detectable. Hall call buttons shall be internally illuminated with a white light over the entire surface of the button. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (101.6 mm) from the wall."

The first amendment, "Control buttons shall be illuminated, shall have square shoulders, and shall be activated by a mechanical motion that is detectable." harmonizes this section with section 1124A.3.3.2 Car Control Buttons. This text makes the car control button visually and tactually detectable to a person who is blind or visually impaired. Also, the mechanical motion gives reassurance to a blind person that their call has been registered by the elevator equipment. A non-mechanical button that does not move gives no indications to a blind person that the call has been registered. This text was originally introduced for the 1989 edition of Title 24 by the elevator industry and the blind community for car control buttons and hall call buttons. The text was adopted, but for unknown reasons did not get incorporated into Hall Call Buttons section.

The second amendment, "Hall call buttons shall be internally illuminated with a white light over the entire surface of the button" harmonizes this section with section 1116B.1.10 Hall Call Buttons. This language clarifies how an elevator button is to be made visible to a person who is low vision.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1003.3.1.5 & 1132A.6

COMMENT #1
Ewa O'Neal
City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

Request that this item or reference provision be recommended: **Approved as Amended**

Reason:

Section 1003.3.1.5 and Section 1132A.6 are in conflict.

Based on 9-Point Criteria: **1**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 03-04
Part 2
Chapter 11A

SUB-ITEM 2-4

Section 1132A.8.1 Lever Type Hardware

COMMENT #1
Daniel P. Larsen, Committee Chairman
CALBO Access compliance Committee
7610 Auburn Blvd
Citrus Heights, CA 95610

Request that this item or reference provision be recommended: **Approved As Amended**

1132A.8.1 Lever Type Hardware

1132A.8.1 Lever Type Hardware. Lever type hardware shall comply with Part 12, Title 24, and Section 12-10-202(f). For clarification the applicable section is repeated here for clarity:

Section 12-10-202(f). The lever or lever of actuated latches or locks shall be curved with a return to within 1/2 inch of the door to prevent catching on the clothing of persons during egress.

Exception- Lever hardware applied to doors within interior spaces of dwelling units located within a Group R-Divisions 1 Occupancies and R-3 dwelling units other than in Hotels and Motels required to be accessible, need not comply with this section.

Reason:

The building code has needed this language for years and it has been hidden within the confines of Chapter 12 if the building code Standards. All common use areas and entry doors associated with dwelling units within buildings required to be accessible are required to comply with these requirements. What this section now requires is that all doors in any occupancy and for any reasons will need to have lever type hardware installed that has the handle return to within ½" of the door face. The exception allows the interior rooms such as bathrooms, bedrooms, laundry rooms and closets other than the entry door of the unit to be provided with residential type hardware of any style for those units that are required to be accessible. Currently the interior rooms of apartments, condominiums, townhouses and single family dwellings have not been required to provide this type of hardware. Only when a dwelling unit is accessible and the dwelling unit is within a building that is required to accessible and provided with common use and public use areas is "commercial type" lever hardware been required and installed.

Based on 9-Point Criteria: **1, 2, 3, 4, 5, 6, 7, 8, 9**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 03-04
Part 2
Chapter 11A

SUB-ITEM 2-4

Section 1132A.8.1 Lever Type Hardware

COMMENT #2
Michael Graham, Chief Building Official – City of Woodland
300 First Street
Woodland, CA 85695

Request that this item or reference provision be: **Approved as Amended**

Section 1132A.8.1 Lever Type Hardware-

1132A.8.1 Lever Type Hardware. Lever type hardware shall comply with Part 12, Title 24, and Section 12-10-202(f). For clarification the applicable section is repeated here for clarity:

Section 12-10-202(f). The lever or lever of actuated latches or locks shall be curved with a return to within 1/2 inch of the door to prevent catching on the clothing of persons during egress.

Exception- Lever hardware applied to doors within interior spaces of dwelling units located within a Group R – Division 1 Occupancies and R-3 dwelling units other than in Hotels and Motels required to be accessible, need not comply with this section.

Reason:

The building code has needed this language far years and it has been hidden within the confines of Chapter 12 of the building code Standards. All common use areas and entry doors associated with dwelling units within buildings requited to be accessible are required to comply with these requirements. What this section now requires is that all doors in any occupancy and far any reasons will need to have lever type hardware installed that has the handle return to within ½" of the door face. The exception allows the interior rooms such as bathrooms, bedrooms, laundry rooms and closets other than the entry door of the unit to be provided with residential type hardware of any style for these units that are required to be accessible. Currently the interior rooms of apartments, condominiums, townhouses and single family dwellings have not been required to provide this type of hardware. Only when a dwelling unit is accessible and the dwelling unit is within a building that is required to accessible and provided with common use and public use areas is "commercial type" lever hardware been required and installed.

Based on 9-Point Criteria: **1, 2, 3, 4, 5, 6, 7, 8, 9**

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1133A.4 Countertops

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

Often persons with physical and sensory disabilities have associated medical conditions e.g., peripheral neuropathy, which prevents them from feeling, sensing, or detecting sharp/abrupt angles/edges. They can unknowingly cut or bruise themselves, which can result in serious injury or illness. We recommend that countertops be required not to have any sharp or abrupt edges when two or more planes meet. We wish to amend section 1133A.4 with item 4, "Countertops shall have no sharp/abrupt edges or angles where two or more planes meet."

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1134A Bathing and Toilet Facilities

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,

Sacramento, CA 95841
Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

Section 1134A needs to be amended to have a subsection 1134A.9 Signage. This section would read, “All bathrooms, bathing and toilet facilities signage shall comply with sections 1115B.5 Identification symbols and 1117B.5 Signs and Identification.” This amendment ensures that signage for these facilities is accessible to persons who are blind or visually impaired.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1134A.4 Sufficient Maneuvering Space

COMMENT #5
Ewa O’Neal
City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

Request that this item or reference provision be: **Approved as Amended**

Reason:

Section 1134A.4 Sufficient Maneuvering Space should have a reference to figure 11A-1D added to the body of the paragraph.

Based on 9-Point Criteria: **6**

SUB-ITEM 2-4 – Commission Action

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1135A.1 General

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

Access for persons who are blind or visually impaired is not addressed by this section. For independent operation of washers and dryers, persons who are blind or visually impaired need the controls to be marked with accessible labels. Accessible labels are often available through appliance manufacturers and electric gas utilities. Therefore, we propose the following amendment to be placed at the end of this section, “Management shall provide accessible labels in Braille or large print (minimum 14 point Arial font style) for operating controls, on request of the occupant.”

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

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(END OF ITEM)

ITEM 2
HCD 1/AC 03-04
Part 2
Chapter 11A,

SUB-ITEM 2-4.

1141A Accessible Swimming Pools

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Amendment Requested/ Reason:

This section needs to be amended to address the need for stair striping for swimming pools for persons who are visually impaired. Persons with visual impairments often have little or no depth perception, and need the nosing to be delineated by a strip of clearly contrasting color so to know where to place their feet when ascending or descending stairs. Grooves do not provide the needed strip of clearly contrasting color, refer to our explanation in HCD item 2-4 section 1115A.5 Striping for the Visually Impaired. Stair striping is already required in chapters 11A and 11B for non-swimming pool stairs. We propose adding to section 1141A the following, "Section 1141A.3 Striping for the Visually Impaired. Where stairways and steps occur outside and inside a swimming pool, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least a minimum of 2 inches (50.8 mm) wide to a maximum of 4 inches (101.6 mm) wide and placed parallel to and not more than 1 inch (25.4 mm) from the nose of the step or landing to alert the visually impaired. Grooves shall not be an acceptable means for providing a strip of clearly contrasting color. The strip shall be of a material that is at least as slip resistant as the treads of the stair."

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 2-4 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 2, Definitions

SUB-ITEM 3-2.

Section 217 – P (Person with Disability)

COMMENT #1
David F. Thorman, AIA - State Architect
Division of the State Architect – Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95814

Request that this item or reference provision be: **Approved as Amended**

ITEM 3-2: Section 217 – P (Person with Disability)
DSA is proposing to delete the definition of Person with Disability. DSA requested this language be included in the Express Terms and Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason: DSA/AC is proposing to remove the existing amendment language to be consistent with the proposed revised Chapter 11A. The term "Persons with Physical Disabilities" has been modified to remove the word "physical" resulting in two definitions that are very close in appearance. This term is not currently used in the text of the regulations. The removal of this definition will provide consistency for the code user and comply with the intent of the suggestion received from the California Building Standards Commission, Code Advisory Committee for Accessibility (see double strikeout below which DSA feels meets Criterion # 1, 4 & 6).

~~***[For DSA/AC] PERSON WITH DISABILITY.*** *See Chapter 11A, Section 1102A.16-P.*~~

ITEM 3-2: Section 217 – P (Persons with Physical Disabilities)
DSA is proposing to amend the definition of Persons with Physical Disabilities, by deleting the word 'physical'. DSA requested this language be included in the Express Terms and Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason: DSA/AC is proposing to modify the existing amendment language and amend the cross-reference to be consistent with the proposed revised Chapter 11A section numbers. The language has been modified to remove the word "physical" from the previously used term "Persons with Physical Disabilities". This reference will clarify for the user the current statutory definition inclusion of both physical and mental disabilities. The DSA/AC concurs with this modification suggested by the California Building Standards Commission, Code Advisory Committee for Accessibility (see underline and double strikeout below which DSA feels meets Criterion # 1, 4 & 6).

[For DSA/AC] PERSONS WITH ~~PHYSICAL~~ DISABILITIES. *[For DSA/AC] See chapter 11A, Section ~~1102A.16-P~~ 1107A.16-P.*

Based on 9-Point Criteria: **1, 4, and 6**

SUB-ITEM 3-2 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2, Vol. 1 Chapters 2, 10, 11B, Figures

CHANGES WITHOUT REGULATORY EFFECT

SUB-ITEMS 3-2, 3-3, 3-6, 3-8, 3-11, 3-13, 3-14, & 3-16.

COMMENT #1
David F. Thorman, AIA - State Architect
Division of the State Architect – Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95814

Request that this item or reference provision be: **Approved as Amended**

ITEM 3-2: Section 217 – P (Public Accommodation)
DSA proposes to make a small change without regulatory effect to further amend the definition of Public Accommodation by adding the word '**such**' to the proposed amendment. DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment. DSA/AC concurs with this modification suggested by the California Building Standards Commission, Code Advisory Committee for Accessibility based on Criterion 6.

Reason: The definition in the CBC for Public Accommodation departs from the federal definition in 36.104 and Section 9 Accessible Transient Lodging (see 9.1.1 General [Exception]). DSA/AC is proposing to amend, under examples of public accommodations Item #1 (An inn, hotel, motel or …), the CBC definition of Public Accommodation to be consistent with federal standard 36.104 and section 9.1.1 (Exception). This amendment is a tightening up of what Title 24 already requires. The cross-reference to 1102A.16-P in the Exception is shown in error. No definition for public accommodation is found in 1102A.16-P. DSA/AC is proposing to delete this exception (see underline below which DSA feels meets Criterion # 1, 4, 6 & 7).

~~[For DSA/AC]~~ PUBLIC ACCOMMODATION [For DSA/AC] *includes, but is not limited to, any building or facility or other specific public use facilities not listed in Items 1 through 12 if they fall into one or more of the following categories:*

1. *Places of public lodging.*
2. *Establishments serving food or drink open to public use.*
3. *Places of exhibition or entertainment open to public use.*
4. *Places of public gathering.*
5. *Sales or rental establishments open to public use.*
6. *Service establishments open to public use.*
7. *Stations used for public transportation.*
8. *Places of public display or collection.*
9. *Places of public recreation.*
10. *Places of public education.*
11. *Social service center establishments open to public use.*
12. *Places of exercise or recreation open to public use.*

Examples of public accommodations for purposes of this code shall include, but not be limited to, the following private entities:
1. An inn, hotel, motel or other place of public lodging, except for a lodging house located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of **such** *establishment as the residence of* ***such*** *proprietor.*
2. A restaurant, bar, or other establishment serving food or drink.
3. A motion picture house, theater, concert hall, stadium or other place of exhibition or entertainment.
4. An auditorium, convention center, lecture hall, or other place of public gathering.
5. A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or retail establishment.
6. A Laundromat, dry cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital or other service establishment.
7. A terminal, depot, or other station used for specified public transportation.
8. A museum, library, gallery, or other place of public display or collection.

9. A park, zoo, amusement park, or other place of recreation.
10. A nursery, elementary, secondary, undergraduate, or post-graduate private school, or other place of education.
11. A day-care center, senior citizen center, homeless shelter, food bank, adoption agency or other social service center establishment.
12. A gymnasium, health spa, bowling alley, golf course, or other place of exercise.
13. A church.
14. An office building.
15. A public curb or sidewalk.

~~***EXCEPTION**: See Chapter 11A, Section 1102A.16.~~

ITEM 3-3: Section 1005.1 General

DSA proposes to show a related change only to the definition of Exit (see 206-E). DSA/AC is proposing to include our adoption acronym in Section 206-E for the definition of Exit which cross references 1005.1. DSA/AC adoption indicator was included in the 1998 ed. of the California Building Code for the definition of "Exit" in Chapter 2. DSA feels this change without regulatory effect meets criterions # 1, 4 & 6. DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this related change.

Reason: In 1005 (THE EXIT) Section 1005.1 (General) there is no coordination between the definitions of Exit in Chapter 2 and the general provisions for Exit in Section 1005.1. DSA/AC adopts 1005.1 by reference in the definition of Exit in Chapter 2. DSA/AC is proposing to add our adoption acronym for 1005.1. See underline below.

SECTION 1005 – THE EXIT

1005.1 [*For DSA/AC*] General. The exit is that portion of the means of egress system between the exit access and the exit discharge or the public way. Components that may be selectively included in the exit include exterior exit doors, exit enclosures, exit passageways and horizontal exits, in addition to those common means of egress components described in Section 1003.3.

ITEM 3-2 Related Change to 1005.1 General (THE EXIT)

SECTION 206 – E

EXIT *[For DSA/AC]* See 1005.1.

ITEM 3-3: 1003.3.4 Ramps.

1003.3.4.4 Landings. Ramps having slopes steeper than 1 unit …

Doors in any position shall not reduce the minimum dimension of the landing of less than 42 inches (1067 mm) and shall not reduce the required width by more than 7 inches (178 mm) [*for HCD 1/AC] 3 inches (76 mm)* when fully open.

Where ramp access is provided to comply with …

***[For DSA/AC] NOTE:** For accessibility requirements for landings in public buildings, public accommodations, commercial buildings and publicly funded housing, see Chapter 11B, Section ~~1133B.5.4.1~~ 1133B.5.4.*

Related Change to 1003.3.4.4 Landings (Note)

ITEM 3-15

SECTION 1133B – GENERAL ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL

1133B.5 Ramps.

1133B.5.4 Landings.

1133B.5.4.3 Encroachment of doors. ~~*See Section 1133B.5.4.1.*~~ *Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76 mm) when fully open.*

ITEM 3-6: Sec. 1103B.1 General (Exception 2)

DSA is proposing a small change without regulatory effect to correct the spelling of 'nonpasssenger' to read 'nonpassenger'.

Reason: There are three letter S's in the word 'nonpassenger' (see the strikeout below which DSA feels meets criteria # 6).

SECTION 1103B – BUILDING ACCESSIBILITY

1103B.1 General. *Accessibility to buildings or …*

EXCEPTIONS:

1. *This section shall …*

2. *Floors or portions of floors not customarily occupied, including, but not limited to, nonoccupiable or employee spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways or freight (nonpass~~s~~enger) elevators, and frequented only by service personnel for repair or maintenance purposes: such spaces as elevator pits and elevator penthouses, piping and equipment catwalks and machinery rooms. Stair ~~stripping~~ striping shall be required on stairs.*

3. The following …

ITEM 3-8 Section 1116B.1.10 Hall Call Buttons

DSA proposes to further amend the first sentence by correcting the word 'button' to plural (button**s**').
DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason: In 1116B.1.10 (Car position indicator and signal) the title is incorrect. DSA/AC is proposing to amend the title to read 'Hall Call Buttons'. The first sentence is amended to be consistent with Chapter 11A amendments. The first sentence is amended to read: *"The centerline of the hall call button**s** shall be 42 inches (1067 mm) above the floor."* DSA is also moving the provisions of 1116B.1.13 (Hall buttons) into 1116B.1.10, which is now 'Hall call buttons'. DSA is deleting all of 1116B.1.13 with the exception of sentence 4. The provisions requiring that '*Hall call buttons shall be internally illuminated with a white light over the entire surface of the button.*' will remain in tact. In an effort to consolidate accessibility requirements in Chapter 11B DSA/AC moved accessibility language from Chapter 30 to Chapter 11B. We unintentionally moved some model code text into CA amendments into Chapter 11B and this revision corrects that (see the underline below which DSA feels meets criteria #6).

1116B.1.10 Hall Call Buttons. ~~Car position indicator and signal.~~ *The centerline of the hall call button**s** shall be ~~within~~ 42 inches (1067 mm) ~~of~~ above the floor. Buttons shall be a minimum of 3/4-inch (19.1mm) in size and shall be raised 1/8 inch (3.2 mm) [plus or minus 1/32 inch (0.8 mm)] above the surrounding surface. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (102 mm) from the wall. ~~**1116B.1.13 Hall buttons.** The centerline of the hall call buttons shall be a nominal 42 inches (1067 mm) above the floor.~~*

~~Direction buttons, exclusive of border, shall be a minimum of ¾ inch (19.1 mm) in size, raised, flush or recessed. Visual indication shall be provided to show each call registered and extinguished when the call is answered.~~ Hall call buttons shall be internally illuminated with a white light over the entire surface of the button. ~~Depth of flush or recessed button when operated shall not exceed 3/8 inch (9.5 mm).~~

ITEM 3-11: Sec 1117B.5.7 Mounting Location and Height

DSA is proposing a small change without regulatory effect to delete a comma after the words 'latch side'. DSA requested this language be included in the Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this statement.

Reason: The comma after the words 'latch side' is incorrect grammar (see the strikeout below which DSA feels meets criteria # 6).

1117B.5.7 Mounting location and height. *Where permanent identification is provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side~~,~~ ~~outside~~ of the door. Where there is no wall space on the latch side, including at double leaf doors, signs shall be placed on the nearest adjacent wall, preferably on the right.*
Where permanent identification signage are provided for rooms and spaces they shall be located on the approach side of the door as one enters the room or space. Signs that identify exits shall be located on the approach side of the door as one exits the room or space.
Mounting height shall be 60 inches (1524 mm) above the finish floor to the center line of the sign. Mounting location shall be determined so that a person may approach within 3 inches (76 mm) of signage without encountering protruding objects or standing within the swing of a door.

NOTE: *See also Section 1115B.5 for additional signage requirements applicable to sanitary facilities.*

ITEM 3-13: Sec. 1127B.5 Curb Ramps (#7 Detectable warnings)

DSA is requesting a small change without regulatory effect to delete the word 'of'.

Reason: In the 3rd sentence after the words 'spacing of nominal of 1.67 inches …', the word **of,** after the word 'nominal' is unnecessary, DSA requested this language and related changes to be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment (see the strikeout below which DSA feels meets criteria #6). See related changes to 1127B.5 for Curb Line (204-C) and Detectable warnings at transit boarding platforms (1133B.8.3).

1127B.5 Curb Ramps.

7. ~~8.~~ Detectable warnings. *~~A~~ Curb ramps shall have a detectable warning surface. The detectable warning surface shall be located so that the edge nearest the curb line is 6 inches (152 mm) minimum and 8 inches (203 mm) maximum from the curb line, and shall extend 36 inches (914 mm) in the direction of travel and the full width of the curb ramp. ~~that extends the full width and depth of the curb ramp inside the grooved border when the ramp slope is less than 1 unit vertical to 15 units horizontal (6.7% slope).~~ Detectable warnings shall consist of a surface of raised truncated domes aligned in a square grid pattern with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a height of nominal 0.2 inch (5.08 mm) and a center-to-center spacing of nominal ~~of~~ 1.67 inches (42.4 mm) minimum to 2.35 inches (59.7 mm) maximum in compliance with Figure 11B-23A. "Nominal" here shall be in accordance with Section 12-11A and B-102, State Referenced Standards Code. The detectable warning surface shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface. The domes may be constructed in a variety of methods, including cast in place or stamped, or may be part of a prefabricated surface treatment.*

Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

NOTE: *Detectable warning products …*

8. ~~9.~~ Obstructions. *Curb ramps shall be l….*

9. ~~10.~~ Diagonal curb ramps. *If diagonal (or corner-type) curb ramps …*

NOTES: …

Related Change to 1127B.5 Curb Ramp

ITEM 3-2 Definition of Curb Line

In 204 – C DSA/AC is adopting a cross-reference to definition of CURB LINE in section 1102B which is a related change in this rulemaking to Section 1127B.5. DSA requested this language be included in the Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this statement.

Reason: In 1102B (Definition of Curb Line) adopt a new definition for Curb Line to be consistent with changes in this rulemaking to section 1127B.5 (Curb Ramps). The adoption of this definition was a recommendation from the DSA Advisory Board/Universal Design Committee. The reason is to be consistent with the draft Guidelines for Accessible Public Right of Way section 1101.3 (Defined Terms). See underline below which DSA feels meets criterion
1, 4 & 6).

SECTION 204 – C

CURB LINE [For DSA/AC] *See Chapter 11B, Section 1102B.*

Related change to 1127B.5 Curb Ramp

1133B.8.3 (Detectable warnings at transit boarding platforms)

DSA is requesting a small change without regulatory effect to delete the word "**of".**

Reason: In 1133B.8.3 in the 4th sentence after the words 'spacing of nominal of 1.67 inches …' the word **of,** after the word 'nominal' is unnecessary. DSA requested this language and related changes to be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment (see the strikeout below which DSA feels meets criteria #6).

1133B GENERAL ACCESSIBILITY FOR ENTRANCES, EXITS AND PATHS OF TRAVEL

1133B.8 Hazards.

1133B.8.3 Detectable warnings at transit boarding platforms. *Transit boarding platforms shall have a detectable warning texture extending the full length of the loading area. This detectable warning texture shall have the following features:*

Width 24 to 36 inches (610 mm to 914 mm) placed at the edge of the drop-off or safe area.

Durable, slip-resistant material having a surface texture composed of raised, truncated domes aligned in a square grid pattern ~~in a staggered pattern~~ with a diameter of nominal 0.9 inch (22.9 mm) at the base tapering to 0.45 inch (11.4 mm) at the top, a

height of nominal 0.2 inch (5.08 mm), and a center-to-center spacing of nominal ~~2.35~~ ~~of~~ 1.67 inches (59.7 mm) in compliance with Figure 11B-23A. "Nominal" as used here shall be in accordance with California State Referenced Standards Code Sections 12-11A and B-102. The detectable warning shall contrast visually with adjoining surfaces, either light on dark or dark on light. The material used to provide contrast shall be an integral part of the walking surface. Warning surfaces shall differ from adjoining walking surfaces in resiliency or sound on cane contact. This surface shall be reserved for warning.
Color yellow conforming to Federal Color No. 33538, as shown in Table IV of Standard No. 595B. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1 inch-wide (25 mm) black strip shall separate the yellow warning from the main walking surface. Contrast shall be determined by:
Color yellow conforming to Federal Color No. 33538, as shown in Table IV of Standard No. 595B. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1 inch-wide (25 mm) black strip shall separate the yellow warning from the main walking surface. Contrast shall be determined by:

Contrast = [(B1-B2/B1)] × 100 percent where
B1 = light reflectance value (LRV) of the lighter area and
B2 = light reflectance value (LRV) of the darker area.

Only approved DSA/AC detectable warning products and directional surfaces shall be installed as provided in the California Code of Regulations (CCR), Title 24, Part 1, Articles 2, 3 and 4. Refer to CCR Title 24, Part 12, Chapter 12-11A and B, for building and facility access specifications for product approval for detectable warning products and directional surfaces.

***NOTE:** Detectable warning products and directional surfaces installed after January 1, 2001, shall be evaluated by an independent entity, selected by the Department of General Services, Division of the State Architect-Access Compliance, for all occupancies, including transportation and other outdoor environments, except that when products and surfaces are for use in residential housing evaluation shall be in consultation with the Department of Housing and Community Development. See Government Code Section 4460.*

ITEM 3-14: Sec. 1133B.2.3.4 Turnstiles, rails and pedestrian controls (Exception)
DSA/AC is proposing a small change without regulatory effect to correct cross-reference to read 101.17.11, "Item 5."

Reason: The cross-reference to Section 101.17.11, Item 4 is incorrect. DSA requested this language to be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment (see the strikeout and underline below which DSA feels meets criteria #4 & 6).

1133B.2.3.4 Turnstiles, rails and pedestrian controls. Where turnstiles …

EXCEPTION:** In existing buildings, Section 1133B.2.3 shall not apply when physical constraints or equivalent facilitation will not allow compliance with these building standards without creating an unreasonable hardship. See Section 101.17.11, ~~**Item 4**~~ **Item 5.

ITEM 3-15: Section 1133B.5.4.3 Encroachment of doors
DSA proposes to further amend the 1133B.5.4.3 to be consistent with reference in 1003.3.4.4. DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment. See the strikeout and underline below.

Reason: In 1133B.5.4.3 (Encroachment of doors.) is a related change to 1003.3.4.4. Section is amended to read: *"Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76 mm) when fully open."*

1133B.5.4.3 Encroachment of doors. ~~*See Section 1133B.5.4.1.*~~ *Doors in any position shall not reduce the minimum dimension of the landing to less than 42 inches (1067 mm) and shall not reduce the required width by more than 3 inches (76 mm) when fully open.*

Related change to 1133B.5.4 Encroachment of doors
1003.3.4.4 Landings. Ramps having slopes steeper than 1 unit …
Doors in any position shall not reduce he minimum dimension of the landing of less than 42 inches (1067 mm) and shall not reduce the required width by more than 7 inches (178 mm) [*for HCD 1/AC] 3 inches (76 mm)* when fully open.
Where ramp access is provided to comply with …

***[For DSA/AC] NOTE:** For accessibility requirements for landings in public buildings, public accommodations, commercial buildings and publicly funded housing, see Chapter 11B, Section ~~1133B.5.4.1~~ 1133B.5.4.*

ITEM 3-16: Chapter 11B Figures

Figure 11B-9A: DSA is proposing to amend Figure 11B-9A to be consistent with changes to adaptable bathrooms in Chapter 11A, Section 1127A.2.1 (Multiple-accommodation Toilet Facilities). This was included in the DSA Initial Statement of Reasons. DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Figure 11B-18A: DSA is proposing to remove an arrow to the right of the centerline dimensioning the accessible parking stall on the right.

Figures 11B-18A, 18B and 18C: In these Figures the cross-reference to 1129B.5 is incorrect. DSA is correcting the cross-reference to read 1129B.4. DSA requested this language be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason: This change will improve clarity of the figures.

Figures 11B-19A, 19B, 19C, 20A, 20B, 20C, 20D & 21
To better clarify the requirements for detectable warning surfaces at curb ramps, DSA is proposing to remove the detectable warning currently depicted on figures 11B-19A, 11B-19B and 11B-20C CASE E. DSA is proposing to add a note stating "FOR DETECTABLE WARNING REQUIREMENTS AT CURB RAMPS, SEE SECTION 1127B.5, ITEM 7" to figures 11B-19A, 11B-19B, 11B-19C, 11B-20A CASE A & B, 11B-20B CASE C & D, 11B-20C CASE E & F, 11B-20D CASE G, and 11B-21(a).

Reason: Currently, only three of the eleven curb ramp figures in Chapter 11B depict detectable warning on the curb ramp surface. This is inconsistent with proposed changes to 1127B.5, new item 7, which require detectable warning at all curb ramps by eliminating the exception for detectable warning at curb ramps when the ramp slope is less than 1 unit vertical to 15 units horizontal (6.7% slope).

Figure 11B-21
DSA is proposing to amend Figure 11B-21 to delete the graphic representation of the ½" beveled lip at the bottom of the ramp to be consistent with the proposed amendments I 1127B.5 Item #5. This was included in the DSA Initial Statement of Reasons.

Reason: Currently this figure shows the graphic representation of the ½-inch beveled lip at the bottom of the ramp. This is inconsistent with the proposed changes to 1127B.5 Item #5 which deletes the requirement for the beveled lip.

Based on 9-Point Criteria: **1, 4 & 6**.

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-5.

1102B Definitions

COMMENT #1
Kurt A. Schaefer, P.E., Deputy Director
State of California, Office of Statewide Health Planning and Development
1600 9th Street, Room 420,
Sacramento, CA 95814

Request that this item or reference provision be: **Approved as Amended**

Reason:

I recommend the following amendment to DSA's proposed changes to the California Building Code, Chapter 11B, based on criteria 3, 6 and 7. As written, the proposed regulations are not in the public interest, since they do not provide access for disabled persons. The proposed standards are ambiguous or vague, and they are in conflict with federal law and regulations as provided in the Americans with Disabilities Act (ADA).

DSA is proposing to add a definition of "Public Use Area" in Section 1102B, which will reference Section 1107A.16-P. Referring to the definition in chapter 11A, for Housing Accessibility, will cause confusion for users of Chapter 11B, for public and commercial buildings. The definition in Chapter 11A refers directly to another Chapter 11A definition, Common Use Areas, which contains language specific to multifamily residential facilities. It is preferable to add a separate definition for Public Use Areas in Chapter 11B.

A related and more significant problem is the Chapter 11B definition of Common Use Areas. As currently defined, "common use areas are *public areas* where the uses of the space is [sic] *not limited* exclusively to owners, residents, or individual employees" (emphasis added). This definition is essentially the same as "public use areas," and has the opposite meaning of what I believe is intended. For comparison, "common use areas" as defined in Chapter 11A "are *private use areas* … where the use of these areas *are [sic] limited exclusively* to owners, residents and their guests…" (emphasis added).

The ADA Standards for Accessible Design defines "common use" areas as "…those interior and exterior rooms, spaces or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants)." As with the Chapter 11A definition, this definition makes clear that common use areas are *not* public areas, as erroneously defined in the CBC, Chapter 11B.

The current definition of common use areas, together with the proposed definition of public use areas, will allow areas of buildings restricted to owners, residents or individual employees to be designed not to provide access to persons with disabilities. For example, CBC Section 1109B.3, item 2 requires that "[g]eneral-purpose hospitals…shall have at least 10 percent of patient bedrooms and toilets, and all public-use and common-use areas accessible." Nothing in this section requires access for persons with disabilities to be provided in areas serving only employees.

Suggested amendments:
Section 1102B – DEFINITIONS
~~*COMMON USE AREAS are public areas where the uses of the space is not limited exclusively to owners, residents or individual employees.*~~

COMMON USE AREAS are interior and exterior rooms, spaces or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).

~~*PUBLIC USE AREA. See Chapter 11A, Section 1107A.16-P.*~~

PUBLIC USE AREAS are interior or exterior rooms or spaces of a building that area made available to the general public and do not include Common Use Areas as defined in this section.

Based on 9-Point Criteria: **3, 6, and 7**

SUB-ITEM 3-5 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-7.

1115B.2.1.3 Accessible Showers & 1115B.6 Showers

COMMENT #1
Mark Wood, Chief Building Official
City of Davis
23 Russell Blvd.,
Davis, CA, 95616

Request that this item or reference provision be: **Disapproved**

Reason:

Entire section should be re-written because there are two sections of the building code that refer to accessible shower.; Sections 1115B.2.1.3 and 1115B6.2., and each contain separate and specific conditions for use. Both sections should be combined into a single shower requirement and not have duplicative requirements in two separate sections of the code.

The fix to just revise the location of the seat and controls is not complete as it related to other duplicative issues pertaining to showers. We need to revise this section to not have conflicting issues-

Based on 9-Point Criteria: **1, 4, and 6**

SUB-ITEM 3-7 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-7.

1115B.2.1.3 Accessible Showers & 1115B.6.2 Showers

COMMENT #2
Michael Graham, Chief Building Official – City of Woodland
300 First Street
Woodland, CA.

I do not agree with the Agency proposed modifications as submitted on: **Item 3-7 Section 1115B.2.1.3**

and request that this Item or reference provision be recommended: **Disapproved**

ITEM 3-7 Chapter 11B, Section 1115B.2.1.3 Accessible Showers and 1115B.6.2 Showers

Entire section should be re-written because there are two sections of the building code that refer to accessible showers. Section 1115B.2.1.3 and 1115B.6.2 and each contain separate and specific conditions for use. Both sections should be combined into a single shower requirement and not have duplicative requirements in two separate sections of the code.

Reason:

The code change does not comply with the 9 point Criteria under items **1; 4; 6;** The fix to just revise the location of the seat and controls is not complete as it related to other duplicative issues pertaining to showers. We need to revise this section to not have conflicting issues

Based on 9-Point Criteria **1, 4, & 6**

SUB-ITEM 3-7 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-7.

1115B.2.1.3 Accessible Showers & 1115B.6.2 Showers

COMMENT #3
Daniel P. Larsen, Committee Chairman
CALBO Access compliance Committee
7610 Auburn Blvd
Citrus Heights, CA 95610

I do not agree with the agency proposed modifications as submitted on:

ITEM 3-7 Part 2, Chapter 11B, Section 1115B.2.1.3

Request that this item or reference provision be recommended: **Disapproved**

1115B.2.1.3 Accessible Showers & Section 1115B.6 Showers

Entire section should be re-written because there are two sections of the building code that refer to accessible showers. Section 1115B.2.1.3 and 1115B6.2. and each contain separate and specific conditions for use. Both sections should be combined into a single shower requirement and not have duplicative requirements in two separate sections of the code.

Reason:
The code change does not comply with the 9-point criteria under items 1; 4; 6; The fix to just revise the location of the seat and controls is not complete as it related to other duplicative issues pertaining to showers. We need to revise this section to not have conflicting issues-

Based on 9-Point Criteria **1, 4, & 6**

SUB-ITEM 3-7 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-8.

1116B.1.9 Car controls

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved**

This corrects an editorial error that was made in the publication of the 1989 edition of Title 24. The elevator industry and the blind community jointly submitted language for the 1989 edition to require that raised characters and symbols on car control panels were to be white on a black background. Federal sponsored research, e.g., *Information Transfer Problems of the Partially Sighted* the Rehabilitation Services Administration of the U.S. Department of Health, Education and Welfare 1973, and *Information Systems For Low Vision Persons,* Architectural and Transportation Barriers Compliance Board, Final Report 1986 supports that white on black provides the greatest color contrast combination ensuring greater readability of signs by the sighted and low vision. Due to the editorial error, there are elevator car control panels, which have raised symbols that are in metallic color e.g., silver that are not easily discernable to persons with low vision.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 3-8 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-8.

1116B.1.10 Hall Call Buttons

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved as Amended**

This section needs to be amended to include, “Control buttons shall be illuminated, shall have square shoulders, and shall be activated by a mechanical motion that is detectable.” Also, we feel there needs to be an editorial amendment, which is moving, “Hall call buttons shall be internally illuminated with a white light over the entire surface of the button” to a different place in this section. This amended section would read as, “1116B.1.10 Hall Call Buttons. The centerline of the hall call button shall be 42 inches (1067 mm) above the floor. Buttons shall be a minimum of 3/4-inch (19.1mm) in size and shall be raised 1/8 inch (3.2 mm) [plus or minus 1/32 inch (0.8 mm)] above the surrounding surface. Control buttons shall be illuminated, shall have square shoulders, and shall be activated by a mechanical motion that is detectable. Hall call buttons shall be internally illuminated with a white light over the entire surface of the button. Visual indication shall be provided to show each call registered and extinguished when answered. Objects adjacent to, and below, hall call buttons shall not project more than 4 inches (102 mm) from the wall.” Recommend harmonizing millimeter measurements found in this section and HCD item no. 2-4 section 1124A.4 Hall Call Buttons.

Reason:

The non-editorial amendment harmonizes this section with section 1116B.1.9 Car controls, which has this text. This text makes the car control button visually and tactually detectable to a person who is blind or visually impaired. Also, the mechanical motion gives reassurance to a blind person that their call has been registered by the elevator equipment. A non-mechanical button that does not move gives no indications to a blind person that the call has been registered. Finally, this text was originally introduced for the 1989 edition of Title 24 by the elevator industry and the blind community for car control buttons and hall call buttons. The text was adopted, but for unknown reasons did not get incorporated into Hall Call Buttons section.

We are in support of the remaining changes because they are only editorial, and not substantive. The model code language, which allows flush and recessed buttons that is being proposed for deletion was never introduced or adopted in any of the code cycles. Since 1989 California has required elevator buttons to be raised to enable the blind to effectively locate them and to be operated by persons who have limited fine hand manipulation abilities. Flush and recessed buttons are not usable by the blind and physically disabled.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 3-8 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

Chapter 11B, sections 1117B.1.1, 1117B.1.2, 1117B.2.9.3, 1117B.3 and 1117B5.1

1117B.5.1 -item 4- Plan Review and Inspection

COMMENT #1
Mark Wood, Chief Building Official
City of Davis
23 Russell Blvd.,
Davis, CA, 95616

Request that this item or reference provision be: **Disapproved, Approved as Amended**

Amendment Requested:
Remove in its entirety-

~~4. Plan Review and Inspection.~~
~~Signage projects exceeding $200 in direct construction costs or projects exceeding $400 in direct construction costs where signage is to be included as any part of the project, shall comply with plan review and inspection procedures as described herein. Identification, directional, informational and accessibility signs specified in this section, in addition to elevator car control identification in Section 1116B.1.9 and elevator doorjamb marking in Section 1116B.1.15 are not features exempt from permit as cosmetic or finish work. Plans and specifications or other documents indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval for new construction, or when these features are added, replaced or altered due to renovation, alterations, structural repair or additions to existing buildings and facilities. See Section 1134B.2.1. Installations shall be field inspected for compliance with these regulations and approved prior to the issuance of a certificate of occupancy, or in the case where no certificate of occupancy is granted, prior to final inspection. Such inspections shall include, but not be limited to, confirmation that Braille dots and Braille cells are properly spaced and raised characters are properly sized and proportioned. Braille templates, guides, or other measurement tools shall be used.~~
Remove in its entirely-

Reason:

This section now requires plan review and inspection for the installation of signage- Typically signage is included in the normal plan review of building projects and is reviewed and properly inspected in the field. To require a plan review for the simplest of sign installation would cost the owner of the building an unreasonable cost for review and inspection. There is no way any building department could enforce this other than within the normal scope of work. A typical $15.00 ISA symbol bought by a building owner to replace one to comply with ADA requirements would cost him a permit fee, a plan review fee (based upon 65% of the permit fee) as well as an inspection fee; this could range from a minimum of $23.50 to as much as $100.00 or more depending upon the type of review, plans and inspection required. We believe that this does not comply with the 9'-point criteria as it relates to item 1; 3; 4; 5; 7; 8. In addition, the requirement for the inspector to have to verify the wording is also unreasonable- the signs as they are manufactured should be regulated by the UBC Standards and not be the requirement of the inspector in the field to verify the wording and Braille dot size for each and every sign.

A proposed revision would be the following:

4. Plan Review and Inspection.
When signs and identification, as specified in this section, are included in the construction of new buildings and facilities or included, modified or replaced within any addition or alteration to any existing building or facility the signs shall comply with all of the following requirements:

4.1 Plans and specifications. When permits are required, plans and specifications specifying the type of sign, location and configuration shall be submitted to the building department for review and approval prior to the installation of any signage.

4.2 Inspection. All signs shall be field inspected and approved prior to the issuance of the certificate of occupancy or final approval where no certificate of occupancy is issued. The inspection shall include, but is not limited to, verification that each sign is in full compliance with the regulations as it relates to the size of tactile lettering and raised symbols and Braille dots and cells are properly spaced.

4.3 Additional Signage. Required "Tactile Egress Signage" as specified in Sections 1003.2.8.6, "Tactile Restroom Door Signage" as specified in 1115B.5 and "Elevator Car and Doorjamb Signage" as specified in Section 1116B.1.9 & 1116B.1.11, are required to comply with these provisions.

Based on 9-Point Criteria: **1, 3, 4, 5, 7, and 8**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

DSA Item No. 3-10 (entire)

COMMENT #2
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved**

1. Editorial.
2. Ensures that all interior and exterior drinking fountains do not become protruding objects to persons with visual impairments.
3. The language found in section **1117B.5.1(4)** will implement the mandate, intent and spirit of SB1242. This will be the first major step of having all signage projects to go through a plan review and field inspection. As a consequence of the adoption of this subsection, persons who are blind or visually impaired can expect greater access to the environment.
4. As a result of section **1127B.3** Signs, accessible routes of travel will be more clearly distinguishable from non-accessible routes.

Based on 9-Point Criteria: **2, 3, 5, and 7**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

3-10 Section 1117B.5.1

COMMENT #3
Thomas Clause
Director of Government and Technical Affairs
International Sign Association

Robert Garcia
Attorney at Law
Golden State Advocacy Group

Request that this item or reference provision be: **Disapproved**

Reason:

On behalf on the International Sign Association, we wish to submit the public comments below in connection with the public hearing to be held August 1, 2005 at 10:00 a.m. at the California Building Standards Commission 2525 Natomas Park Drive, Sacramento, California.
As you might be aware, the International Sign Association (ISA), which is headquartered in Alexandria, Virginia, is normally preeminent trade association that interfaces with all levels of government across the country on matters involving governmental regulation of signage exclusive of outdoor advertising. In its capacity as a prominent representative of the sign industry ISA is committed to working with government officials, and other stakeholders, in a respectful and constructive manner which is highlighted by a commitment to assuring that statutes and regulations are written in a comprehensible manner so as to assure proper compliance, and with respect to proposed regulations, ISA acts vigilantly to assure that proposed regulations are supported by the requisite statutory authority and comport with the adoption criteria set forth by the adopting agency.

Keeping the above in mind and understanding that the subject proposed regulations will be evaluated under the criteria set out in California Health and Safety Code Regulation Section 18930, ISA wishes to challenge the regulations proposed by the Division of the State Architect / Access Compliance pertaining to signage as put forth in Item 1117B.5.1, Item 4 (Plan Review and Inspection) and item 1117B.5.2 (Finish and Contrast) for the reasons listed below.

Item 1117B.5.2, Finish and Contrast, proposes to place a currently unenforceable standard into the California Building Code. This provision has been recommended and voted down at least twice during the 1998 and 2003 development cycles of the ANSI Standard A117.1, the primary model for accessibility in the United States. The decision was made to leave the

information as a recommendation, where it presently exists in the federal ADAAG. While the proposed provision is good as a recommended guide, it is a poor mandatory requirement.

It is ISA's assertion that this proposed regulation fails to meet several of the requirements set forth in Health & Safety Code Sec. 18930 as follows:

1. The public interest *DOES* require that building owners and fabricators be more aware of signage contrast, but the public interest DOES NOT require that the State attempt to enforce something that cannot possibly be enforced at this point in time. Because of a lack of available equipment within California, testing will be difficult if not impossible. Further, research indicates that many common materials used in signage, such as laminates and colored stone, cannot be accurately tested. Many paint manufacturers currently provide Light Reflectance Values for paints, but not all. Some of the materials commonly used in signage are used for other objects such as furniture, and the idea that somehow the manufacturers for these materials will miraculously provide LRV numbers for use in signage is completely unrealistic. Light Reflectance Values allow only for solid color testing, and do no take color value into account. Many useful and legible color combinations exist just below the 70% figure.

2. This provision is unreasonable because it is unenforceable. How will an inspector check the 70% minimum contrast in the field? There is no methodology to measure contrast at the point of installation, further, the provision places the entire burden on the sign while not addressing related issues such as illumination and placement.

3. While the intentioned, this provision is vague in the sense that there is *no hard science* behind this very scientific provision.

4. Will this proposed provision be a cost to the public, and if so, is there an overall benefit to be derived from this cost? Yes there are great cost implications, both private and public. There would be significant costs to send material samples to testing labs somewhere out of state. Many commonly used materials in sign fabrication would have to be abandoned. There would be added costs to owners and sign fabricators to prepare documents certifying the 70% contrast. And there would be the significant cost to equip State inspectors with some kind of field measuring mechanism that has yet to be invented.

   In conclusion, I urge you reject this proposed provision entirely for the aforementioned reasons. I believe that building owners often do not follow the 70% contrast recommendation due to lack of awareness, not out of a purposeful shirking of responsibility. The State should spend its ever shrinking resources on education and dissemination of information, not on unwieldy, unenforceable regulations. Please do not allow California to be the only state in the union to accept this unreasonable provision in their building code.

   Thank you for you time.

1117B.5.1, Item #4, Plan Review and Inspection

4. Plan Review and Inspection. *Identification, direction, informational and accessibility signs specified in this section, in addition to elevator car control identification in Section 1116B.1.9 and elevator doorjamb marking in Section 1116B.1.15 are not features exempt from permit as cosmetic or finish work. Plans and specifications or other documents indicating compliance with these regulations shall be submitted to the enforcing agency for review and shall receive written approval for new construction or when these features an: added replaced or altered due to renovation alterations structural repair or additions to existing buildings and facilities. See 1134B.2.1. Installations shall be field inspected for compliance with these regulations and approved prior to the issuance of a certificate of occupancy, or in the case where no certificate of occupancy is granted prior to final inspection Such inspections shall include but not be limited to confirmation that Braille dots and Braille cells are Property spaced and raised characters are properly sized and proportioned. Prepunched Braille templates, guides, or other tools shall be used.*

Item 1117B.5.1, Item 4, Plan Review and Inspection is well-intentioned but it is clear that the implementation and costs of this proposed regulation needs more vetting and support. While ISA is sensitive to the assertion that many signs in the State of California do not comply with the ADA, the proposed regulations, by making signage subject to plan review and inspection, would escalate the costs and complexity of building permits without a concomitant public benefit.

It is ISA's assertion that this proposed regulation is deficient and should be withdrawn for further study on the grounds that it fails to satisfy Health & Safety Code Sec, 18930 provisions (a)(3), (a)(4), (a)(5) and (a)(6).
The proposed changes are supported only by general statements without addressing how they will satisfy the proposed need or how effective they will be in place of the existing regulations or of other less intrusive regulations. In addition, there is no data to support any benefits to be realized by the proposed regulations. On a related note, the additional costs that will be incurred by these new proposals is not discussed nor how they are to be defrayed.

1117B.5.2 Finish and Contrast

1117B.5.2 Finish and contrast. *Characters, symbols and their background shall have a non-glare finish. Characters and symbols shall contrast .a minimum of 70% with their background, either light ~~characters~~ on a dark background or dark ~~characters~~ on a light background.*

The LRV (light reflectance value) of a materials' finish shall be determined by ASTM E1349-90 (1998)or equivalent standard. To determine contrast, use the following formula, or per ASTM D2616-96 or equivalent gray scale standard:

Contrast = (B1 - B2) /B1 X 100 where
B1 = light reflectance value JLRV) of the lighter area, and
B2 = light reflectance of the darker area.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

3-10 Section 1117B.5.1

COMMENT #4
Michael Graham, Chief Building Official – City of Woodland
300 First Street
Woodland, CA 95695

I do not agree with the Agency proposed modifications as submitted on:

ITEM 3-10 – Chapter 11B, Section 1117B.5.1 #4 – Plan Review and Inspection

Request that this item or reference provision be recommended: **Disapproval** and **Approve as Amended**

1117B.5.1 item #4 - Plan review and inspection.

~~4. Plan Review and Inspection.~~

~~Signage projects exceeding $200 in direct construction costs or projects exceeding $400 in direct construction costs where signage is to be included as any part of the project, shall comply with plan review and inspection procedures as described herein. Identification, directional, informational and accessibility signs specified in this section, in addition to elevator car control identification in Section 1116B.1.9 and elevator doorjamb making in Section 1116B.1.15 are not features exempt from permit as cosmetic or finish work. Plans and specifications or other documents indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval for new construction, or when these features are added, replaced or altered due to renovation, alteration, structural repair or additions to existing building and facilities. See Section 1134B.2.1. Installations shall be field inspected for compliance with these regulations and approved prior to the issuance of a certificate of occupancy, or in the case where no certificate of occupancy is granted, prior to final inspection. Such inspections shall include, but not be~~

Remove in its entirety-

Reason:

This section now requires plan review and inspection for the installation of signage- Typically signage is included in the normal plan review of building projects and is reviewed and properly inspected in the field. To require a plan review for the simplest of sign installation would cost the owner of the building a unreasonable cost for review and inspection. There is no way any building department could enforce this other than within the normal scope of work. A typical $15.00 ISA symbol bought by a building owner to replace one to comply with ADA requirements would cost him a permit fee, a plan review fee (based upon 65% of the permit fee) as well as an inspection fee- this could range from a minimum of $23.50 to as much as $100.00 or more depending upon the type of review, plans and inspection required. We believe that this does not comply with the 9-point criteria as it relates to item 1; 3; 4; 5; 7; 8. In addition. the requirement for the inspector to have to verify the wording is also unreasonable- the signs as they are manufactured should be regulated by the UBC Standards and not be the requirement of the inspector in the field to verify the wording and Braille dot size for each and every sign.

A proposed revision would be the following. -

4. Plan Review and Inspection.

When signs and identification, as specified in this section, are included in the construction of new buildings and facilities or included, modified or replaced within any addition or alteration to any existing building or facility the signs shall comply with all of the following requirements:

4.1 Plans and specifications. When permits are required, plans and specifications specifying the type of sign, location and configuration shall be submitted to the building department for review and approval prior to the Installation of any signage.

4.2. Inspection. All signs shall be field inspected and approved prior to the issuance of the certificate of occupancy or final approval where no certificate of occupancy is issued. The inspection shall include, but is not limited to, verification that each sign is in full compliance with the regulations as it relates to the size of tactile lettering and raised symbols and Braille dots and cells are properly spaced.

4.3. Additional Signage. Required "Tactile Egress Signage' as specified in Sections 1003.2.8.6, "Tactile Restroom Door Signage" as specified in 1115B.5 and "Elevator Car and Doorjamb Signage" as specified in Section 1116B.1.9 & 1116B.1.11, are required to. comply with these provisions.

Based on 9-Point Criteria: **1, 3, 4, 5, 7, and 8**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

3-10 Section 1117B.5.1

COMMENT #5
Daniel P. Larsen, Committee Chairman
CALBO Access Compliance Committee
7610 Auburn Blvd
Citrus Heights, CA 95610

I do not agree with the agency proposed modifications as submitted on:

Item 3-10 Part 2, Vol. 2, Chapter 11B, Section 1117B.5.1 item #4

Request that this item or reference provision be recommended: **Approved as Amended**

1117B.5.1 item 4 Plan review and inspection.

4. Plan Review and Inspection.
~~Signage projects exceeding $200 in direct construction costs or projects exceeding $400 in direct construction costs where signage is to be included as any part of the project, shall comply with plan review and inspection procedures as described herein. Identification, directional, informational and accessibility signs specified in this section, in addition to elevator car control identification in Section 1116B.1.9 and elevator doorjamb marking in Section 1116B.1.15 are not features exempt from permit as cosmetic or finish work. Plans and specifications or other documents indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval for new construction, or when these features are added, replaced or altered due to renovation, alterations, structural repair or additions to existing buildings and facilities. See Section 1134B.2.1. Installations shall be field inspected for compliance with these regulations and approved prior to the issuance of a certificate of occupancy, or in the case where no certificate of occupancy is granted, prior to final inspection. Such inspections shall include, but not be~~

Remove in its entirety-

Reason:

This section now requires plan review and inspection for the installation of signage- Typically signage is included in the normal plan review of building projects and is reviewed and properly inspected in the field. To require a plan review for the simplest of sign installation would cost the owner of the building a unreasonable cost for review and inspection. There is no way any building

department could enforce this other than within the normal scope of work. A typical $15.00 ISA symbol bought by a building owner to replace one to comply with ADA requirements would cost him a permit fee, a plan review fee (based upon 65% of the permit fee) as well as an inspection fee- this could range from a minimum of $23.50 to as much as $100.00 or more depending upon the type of review, plans and inspection required. We believe that this does not comply with the 9-point criteria as it relates to item 1; 3; 4; 5; 7; 8. In addition, the requirement for the inspector to have to verify the wording is also unreasonable- the signs as they are manufactured should be regulated by the UBC Standards and not be the requirement of the inspector in the field to verify the wording and Braille dot size for each and every sign.

A proposed revision would be the following:

4. Plan Review and Inspection.

When signs and identification, as specified in this section, are included in the construction of new buildings and facilities or included, modified or replaced within any addition or alteration to any existing building or facility the signs shall comply with all of the following requirements:

4.1 **Plans and specifications**. When permits are required, plans and specifications specifying the type of sign, location and configuration shall be submitted to the building department for review and approval prior to the installation of any signage.

4.2. **Inspection**. All signs shall be field inspected and approved prior to the issuance of the certificate of occupancy or final approval where no certificate of occupancy is issued. The inspection shall include, but is not limited to, verification that each sign is in full compliance with the regulations as it relates to the size of tactile lettering and raised symbols and Braille dots and cells are properly spaced.

4.3. **Additional Signage**. Required "Tactile Egress Signage" as specified in Sections 1003.2.8.6, "Tactile Restroom Door Signage" as specified in 1115B.5 and "Elevator Car and Doorjamb Signage" as specified in Section 1116B.1.9 & 1116B.1.11, are required to comply with these provisions.

Based on 9-Point Criteria: **1, 3, 4, 5, 7, and 8**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

3-10 Section 1117B.5.1

COMMENT #6
David F. Thorman, AIA - State Architect

Division of the State Architect – Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95814

We do not agree with the agency proposed modifications as submitted on:

Item No. 3-10, Part 2, Vol. 1, Chapter 11B, Section 1117B.5.1 #4 – Plan Review and Inspection

Request that this item or reference provision be recommended: **Approved as Amended**

ITEM 3-10 Section 1117B.5.1 General (#4 Plan Review and Inspection)
In 1117B.5.1, Item #4 (Plan Review and Inspection) a recommendation for Further Study was made by the CBSC Accessibility Code Advisory Committee (CAC) during the Jan 26/27 meetings, citing Health & Safety Code Section (H&SC§) 18930, Criterion #6, as reason. DSA recognized the need for developing a more improved standard for plan review and inspection. Since the CAC meetings DSA has completed additional research on this issue. After consultation with the California Building Officials (CALBO), DSA feels the proposed language, as rewritten below, more clearly addresses the 9-point criteria in H&SC§ 18930 and the intent of SB 1242.

Reason: 1117B.5.1 Item #4 is in response to the mandate of Senate Bill (SB) 1242. DSA/AC is proposing to adopt a new Item #4 concerning plan review and inspection. This new proposed rule would improve on clarifying DSA obligations within SB 1242 which directs DSA to develop regulations ensuring Braille, tactile, or visual signage for elevators, rooms, spaces, functions, and directional information are installed. See underline and strikeout below for the corrected expressed terms for 1117B.5.1 Item 4 which DSA feels meet the 9-point criteria and the intent of SB 1242. DSA/AC requests that Item 3-10 (1117B.5.1 Item #4) be Approved as Amended below:

1117B.5.1 ~~International Symbol of Accessibility 1~~. General. *When new or …*
1. ~~2. Identification signs~~*. When signs identify …*
2. ~~3.~~ Directional and informational signs. *When signs direct …*
3. ~~4.~~ Accessibility signs. *When signs identify, direct or …*

4. Plan review and inspection. *Signs and identification as specified in section 1117B.5.1, when included in the construction of new buildings or facilities, or when included, altered or replaced due to additions, alterations or renovations to existing buildings or facilities, shall comply with the following plan review and inspection requirements:*

> ***4.1 Plan review.*** *Plans, specifications or other information indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval.*
>
> ***4.2 Inspection.*** *Signs and identification shall be field inspected after installation and approved by the enforcing agency prior to the issuance of a certificate of occupancy, or final approval where no certificate of occupancy is issued. The inspection shall include, but not be limited to, verification that Braille dots and cells are properly spaced and the size, proportion, and type of raised characters are in compliance with these regulations.*
>
> ***4.3 Other signs and identification.*** *Tactile exit signage in sections 1003.2.8.6. and 1003.2.8.6.1, tactile stair level identification signs in section 1003.3.3.13.1, tactile special egress-control device signs in 1003.3.1.10(6), elevator car control identification required in section 1116B.1.9, elevator doorjamb marking required in section 1116B.1.14, and sanitary facilities signage required in section 1115B.5 shall also comply with this section.*

~~4. Plan Review and Inspection.~~
~~Signage projects exceeding $200 in direct construction costs or projects exceeding $400 in direct construction costs where signage is to be included as any part of the project, shall comply with plan review and inspection procedures as described herein. Identification, directional, informational and accessibility signs specified in this section, in addition to elevator car control identification in Section 1116B.1.9 and elevator doorjamb marking in Section 1116B.1.15 are not features exempt from permit as cosmetic or finish work. Plans and specifications or other documents indicating compliance with these regulations shall be submitted to the enforcing agency for review and approval for new construction, or when these features are added, replaced or altered due to renovation, alterations, structural repair or additions to existing buildings and facilities. See Section 1134B.2.1. Installations shall be field inspected for compliance with these regulations and approved prior to the issuance of a certificate of occupancy, or in the case where no certificate of occupancy is granted, prior to final inspection. Such inspections shall include, but not be limited to, confirmation that Braille dots~~

~~*and Braille cells are properly spaced and raised characters are properly sized and proportioned. Braille templates, guides, or other measurement tools shall be used.*~~

ITEM 3-10 Section 1127B.3 Signs (related change to 1117B.5.1 General)
DSA proposes to further amend 1127B.3 (Signs) to change the word 'pathway' to **'circulation path'**. DSA requested this language as a related change to 1117B.5.1 be included in the Express Terms of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason: In 1127B.3 (Signs) this section is amended to clarify that at every primary public entrance and at every major junction 'where the accessible route of travel diverges from the circulation path;' along or leading to an accessible route of travel, 'entrance, or facility', there would be a sign displaying the International Symbol of Accessibility. Cross-references in the last sentence to Sections 1117B.5 through 1117B.5.9 are incorrect. DSA/AC is proposing to amend cross-references to read Sections '1117B.5.1 Item 2 and 1117B.5.8.1'. The words international symbol of accessibility should begin with capital letters. DSA/AC is proposing to amend to read International Symbol of Accessibility. See underline and strikeout below which DSA feels meets criteria #6.

SECTION 1127B – EXTERIOR ROUTES OF TRAVEL
1127B.3 Signs. *At every primary public entrance and at every major junction where the accessible route of travel diverges from the* **circulation path** ~~**pathway**~~*; along or leading to an accessible route of travel, entrance, or facility, there shall be a sign displaying the* ~~*i*~~*International* ~~*s*~~*Symbol of* ~~*a*~~*Accessibility. Signs shall indicate the direction to accessible building entrances and facilities and shall comply with the requirements found in Sections 1117B.5.1 Item 2 and 1117B.5.8.1.* ~~*1117B.5 through 1117B.5.9.*~~

Based on 9-Point Criteria: **6**

SUB-ITEM 3-10 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-10.

3-10 Section 1117B.5.1

COMMENT #7
Sharon Toji
(No Address Given)

I want to comment as someone who works with sign companies, inspectors, and the disability community, and as someone who owns a sign company that specializes in the design and manufacture of accessible signage.

It has been a constant problem for all those involved with signs to understand the meaning of "contrast" as it appears in both federal and state standards. Even though the term is clarified somewhat by specifying "dark on light or light on dark," we still see

signs such as evacuation plans with a red path of exit on a dark green background.

The 70 percent minimum with a simple formula using light reflectance values(LRV) that appears in the current ADAAG Appendix is not a figure arbitrarily plucked from the blue. It is the point at which there is a meaningful drop off in the number of people who can discern the difference between characters and their backgrounds when the percentage of difference in LRV is less than 70 percent.

There have been statements that the only colors that would comply would be white and black. That is not true. There is a whole range of colors that fall between 70 percent and 100 percent contrast. Besides that, we are only talking about the portion of the sign that conveys the required information. Decorative or non-required areas of the sign can have any amount of contrast.

Another statement has been that the information necessary to find the contrast is unavailable or extremely difficult or expensive to obtain. On the contrary, every paint manufacturer, and probably most other materials manufacturers who use colors, already determine the LRV of each of their colors, and often include the LRV in their swatch books. If the LRV becomes part of a requirement by the State of California, there will be no difficulty in obtaining the LRV for any commercially available colored material used in sign making. At that point, the architect need only submit the contrast percentage derived from the use of the formula with the other specifications submitted to the building department for plan approval. Inspectors can easily be trained to determine when contrast is close enough that a further check with an instrument is needed. That should only happen when someone deliberately ignores or mistakes the colors approved in advance.

Why is contrast so important when we have rules for tactile characters and Braille? The largest percentage of persons who are legally blind do have usable vision, but require dark/light contrast as well as other elements such as non-glare surfaces and readable typestyles with large enough characters if they are going to read signs. An increasing percentage of the public is experiencing vision impairment due to advancing age. Therefore, contrast is an important issue for an increasing percentage of the entire population as our population ages. Determining contrast requires the use of a very simple formula, along with values that have already been determined for most sign materials, and which are readily available. Without this standard, building departments are asked to guess what is meant by the term "contrast," and it becomes virtually meaningless.

Sharon Toji

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-10 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-11.

DSA Item No. 3-11 (entire)

COMMENT #1

Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved**

1. Editorial.

2. Section **1117B.5.2** Finish and contrast is supported by federal sponsored research, e.g., *Information Transfer Problems of the Partially Sighted,* the Rehabilitation Services Administration of the U.S. Department of Health, Education and Welfare 1973, and *Information Systems For Low Vision Persons,* Architectural and Transportation Barriers Compliance Board, Final Report 1986, which indicates that signs are more legible for persons with low vision when characters contrast with their background by at least 70 percent.

   The greatest readability is usually achieved through the use of light-colored characters or symbols on a dark background.

   Producers of paints, plastics, and other materials that are used for providing signage colors have developed a system for determining contrasting percentages, which are reliable.

3. Section **1117B.5.5 (4)** Character placement provides clarification as to the placement of raised elements that are found on signs. This will assist in the readability of accessible signs.

4. Section **1117B.5.6** Braille ensures that Braille dots are readable and non-abrasive to the fingertips of tactile readers. ANSI A117.1-2003 section 703.4.3 Dimensions as well as ADA and ABA Accessibility Guidelines for Buildings and Facilities published in the Federal Register on July 23, 2004 section 703.3.1 Dimensions and Capitalization require Braille dots to be “Braille dots shall be domed or rounded.”

5. Section **1117B.5.7** Mounting location and height provides clear signage mounting specifications needed by sign installers and building officials.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 3-11 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13.

1127B.5 (5) Beveled lip

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved**

We are in support of deleting the Beveled lip requirement for curb ramps as long as detectable warnings are required for all curb ramps regardless of their slope. A beveled lip does not provide the degree of warning, which is given by a detectable warning surface.

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13.

1127B.5 (7)

COMMENT #1
Michelle Bernstein
Individual
2035 West El Camino Ave., #329,
Sacramento, CA 95833

SUB-ITEM 3-13 Section 1127B.5- #7
Request that this item or reference provision be recommended: **Disapproved**

Reason:

As a professional in the blindness field and a member of the National Federation of the Blind, strongly oppose **Title 24, 1127B.5 Item #7**, which proposes to increase the size, surface area, and frequency of installment of truncated domes. Blind individuals use various cues to detect curbs, railroad tracks, and other allegedly dangerous situations in order to ensure their safety when approaching objects and circumstances that are perceived as obstacles by sighted society. With training, persons who are blind can use the sounds and patterns of traffic (this does NOT refer to audible pedestrian signals), knowledge of a city's layout, and, when applicable, the slope of the curb cut in conjunction with a cane or guide dog to safely and accurately locate and travel on or across even a busy street. Not only are truncated domes costly, they are consistently over installed and less effective than many (sighted) disability advocates would imply. It is my understanding that no research supports the use of truncated domes by justifying their installation with fewer accidents and/or fatalities of blind pedestrians. I implore you to disapprove the costly and ineffective installation of truncated domes throughout California.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13.

1127B.5 (7)

COMMENT #2
Nathaniel T. Wales
National Federation of the Blind
2714 Pole Line Rd., #4
Davis; CA 95616

Section 1127B.5- #7

Request that this item or reference provision be recommended: **Disapproved**

I oppose any mandate to require larger specifications for truncated domes. The kind currently required work well enough. I work as an engineer for the State, and my office is located in downtown Sacramento. I therefore have traveled through intersections with truncated domes installed on curb ramp. I can always identify these domes with my cane and underfoot; no larger or higher ones are necessary. It also seems to me that larger domes will not improve easier use by wheelchair users; I am aware that in line design, provisions are contained elsewhere. I do not believe that 36 inches in depth of truncated domes are needed. Even the most extreme federal requirements existing or proposed only require 24 inches, and realistically as few as 6 inches of domes are needed to provide a detectable warning.

I have traveled through intersections in Davis, for example, with what seems like well less than 36 inches of depth of truncated domes, and I have been able to identify these with my cane and underfoot. I, and as a matter of policy the National

Federation of the Blind, strongly oppose truncated domes on any club ramp with a slope of greater than 6.7%. A slope this steep is perfectly detectable as a curb ramp with a cane and even underfoot. I have traveled through intersections in downtown Sacramento with curb ramps renovated to a slope between 6.7% and 8.33% that don't have truncated domes, and I have easily detected these ramps because of their slope. I have also determined that I am approaching an intersection because of the cross traffic, any slowing or surging of the traffic on the street I am traveling along, the loss of any building on the side of me opposite the street, and the crowning of the street beginning in the gutter just beyond the entrance to the intersection (which I detect with my cane before stepping off the curb ramp). This measure is controversial, and. final federal guidelines from the U.S. Access Board have not resolved this controversy in regulation. The adoption of this specific provision may impose an unnecessary, unfunded mandate that may not be supported in. the future by federal regulations.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13.

COMMENT #3
John Paul Scott, AIA
73 Sumner Street, Loft 105
San Francisco, CA. 94107

Regarding Item

1127B.5 Curb Ramps.

7. 8. Detectable warnings. A Curb ramps shall have a detectable warning surface.
The detectable warning surface shall be located so that the edge nearest the curb line is 6 inches (1522 mm) minimum and 8 inches (203 mm) maximum from the curb line, and shall extend ***36 inches (914 mm…***

I object to two provisions in this change and related changes elsewhere.

1. APPLICATION TO ALL CURB RAMPS RATHER THAN HAZZARDOUS AREAS.
The code requirement would apply to all curb ramps and not just those that lead into hazardous vehicular areas. For example, a curb ramp leading into the pedestrian access aisle adjacent to the accessible parking space, passenger loading zone or other area HAS no vehicular traffic. This provision would only apply to curb ramps on Main Street in Disneyland and the same in other these parks where there is no vehicular traffic.

This sort of generic requirement dilutes the purpose and meaning of these detectable warnings. These are communication devices to

individuals whom are blind. The purpose is to provide warning of vehicular traffic, transit platform edges or other hazardous zones. Requiring these detectable warnings in other non-hazardous environments will give the user confusing and false environmental queue.

2. CHANGE TO 36 INCH RUNNING LENGTH. The requirement to change the running length of the detectable warning from 24 inches to 36 inches is arbitrary and anecdotal. Primarily this was based on one individual's opinion's, although this individual is highly regarded in the disabled community.

The US Access Board's current ADAAG, and the new accessibility guidelines for the ADA/ABA keep the running length at 24 inch minimum. The ICC ANSI A117.1 accessibility standard used by both the International Building Code and the NFPA 5000 has a 24 inch minimum running length requirement.

When this was presented to the Universal Design Committee for its review, the rational was to have a minimum of two foot prints in contact with the detectable warning material in a walking gate. These warnings are not meant to be detected through footwear, but with a white cane.

Also please note that the city of San Francisco and Sacramento have installed thousands of curb ramps with 24 inch minimum running length detectable warnings, both surface applied and cast in place. By making the code change to 36 inch minimum running length, the existing compliant curb ramps will not be in compliance with the State of California's' civil rights regulations under the Unruh Act. The test of measure under this act is the most current code requirement of the ADA.

Both cities will be exposed to predatory civil rights suits and have to replace or augment these curb ramps. This will take money away from the public right of way funds that are necessary for new curb ramps where none exist or the existing curb ramps are of an older style that are now considered unsafe and out of compliance.

Note as I recall from meeting notes and voting records, the Universal Design Committee was generally in support of making the technical corrections to the California Curb ramp requirements, but not on these two issues.

Thank you for your attention on these maters.

Sincerely Yours,

John Paul Scott, AIA
CREATE Access, Architects/Consultants

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13

COMMENT #4
Dirk Neyhart,
1400 Hearst
Berkeley, CA

Section 1127B.5 and 1112A.9 (SUB-ITEM 2-4)

SEE PUBLIC COMMENT #1 FROM **DIRK NEYHART FOR SUB-ITEM 2-4** REGARDING THE DSA-AC PROPOSED MODIFICATION OF THE 2001 CALIFORNIA BUILDING CODE.

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13

1133B.8.3 Detectable warnings at transit boarding platforms. (Related to section 1127B.5 (7))

COMMENT #5
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue,
Sacramento, CA 95841

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested:
We would like to amend this section by striking out, "~~a center-to-center spacing of nominal of 1.67 inches (42.4 mm) minimum to 2.35 inches (59.7 mm) maximum~~" and replace with **"a center-to-center spacing of nominal of 2.00 inches (5.0 mm)".**

Reason:

The reasons for this amendment are found in our comments to HCD item 2-4 section 1112A.9 and DSA/AC item 3-13 section 1127B.5 (7).

Based on 9-Point Criteria: **2, 3, 5, and 7**.

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-13

1127B.5 (7) Detectable Warnings (Related change for HCD 02-04 – Section 1112A.9 for Item 2-4)

COMMENT #6
Chad F. Allen
(No Address Given)

Request that this item or reference provision be recommended: **Disapproved**

Reason:

I am opposed to the consideration to extend a detectable warning from two feet to three feet because a blind person does not need three feet of warning space along with a curb ramp to know when a street crossing is in front of them. I as a blind person know when a street is coming up because I listen to the sound of the traffic and I use the curb ramp to line me up properly for a safe crossing of a street. The additional detectable warning only creates confusion and causes me to misinterpret what is in front of me. Traditionally, I only come across detectable warnings such as truncated domes at rail platforms, not streets. If it is necessary to implement into our streets, please minimize the width, not extend it.

Thank you.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-13 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-15.

COMMENT #1
David F. Thorman, AIA - State Architect
Division of the State Architect – Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95814

ITEM 3-15 Part 2, Vol. 1, Chapter 11B, Section 1129B.3 Parking Space Size

Request that this item or reference provision be recommended: **Approved as Amended**

ITEM 3-15: Section 1129B.3 Parking Space Size (#1 Dimensions)
DSA proposes to replace the word 'outline' with the word 'lined' in the 1st sentence. DSA requested this language be included in the Express Terms and Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason:
In 1129B.4 (Parking Space Size) In #1 (Dimensions) in the first sentence the word 'outline' has been replaced with 'lined' as suggested by the California Building Standards Commission, Code Advisory Committee for Accessibility. DSA/AC concurs with this modification and it is also consistent with HCD's proposed code change in 1109A.8.5.

~~1129B.4~~ 1129B.3 Parking Space Size. *Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:*

1. Dimensions. Where single spaces are provide, they shall be 14 feet (2743 mm) wide and ~~**outline**~~ **lined** to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area lined to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The minimum length of each parking space shall be 18 feet (5486 mm). The words NO PARKING shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (~~154 mm~~ 305 mm) high and located so that it is visible to traffic enforcement officials. See Figure 11B-18A.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 3-15 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-15.

Chapter 11B, Section 1129B.2 Parking Space Size

1129B.4 Parking Space Size

COMMENT #1
Mark Wood, Chief Building Official
City of Davis
23 Russell Blvd.,
Davis, CA, 95616

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested:

1129B.4 Parking Space Size. Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

1. Dimensions. Where single spaces are provided, they shall be 14 feet (4267 mm) wide and ~~outlined~~ **lined** to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area **lined** to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The minimum length of each parking space shall be 18 feet (5486 mm). The words "NO PARKING" shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (154 mm) high and located so that it is visible to traffic enforcement officials. See Figure 11B-18A **and Figure 11-B-18-B and C**

Reason:

Per the new illustrations shown in the figures and the language included to show how the striping is to be measured, (centerline to centerline) in accordance with the industry standards, this proposed revision will clear up the language and not contradict the new proposed figures.

Additional figures should be provided to provide a clear view of a parking space that is provided the "U" shaped markings. In addition, this will coincide with the parking space requirements currently being proposed in HCD's revised 11A rewrite. Additionally all figures should reflect the language-

Based on 9-Point Criteria: **1, 3, and 4**

SUB-ITEM 3-15 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-15.

COMMENT #2
Daniel P. Larsen, Committee Chairman
CALBO Access Compliance Committee
7610 Auburn Blvd
Citrus Heights, CA 95610

Item 3-15 Part 2, Vol. 2, Chapter 11B, Section 1129B.4 Parking Space Size

Request that this item or reference provision be recommended: **Approved as Amended**

1129B.4 Parking Space Size. Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

1. Dimensions. Where single spaces are provided, they shall be 14 feet (4267 mm) wide and ~~outlined~~ lined to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area lined to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The minimum length of each parking space shall be 18 feet (5486 mm). The words “NO PARKING” shall be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (154 mm) high and located so that it is visible to traffic enforcement officials. See Figure 11B-18A and Figure 11-B-18-B and C

Reason:

Per the new illustrations shown in the figures and the language included to show how the striping is to be measured, (centerline to centerline) in accordance with the industry standards, this proposed revision will clear up the language and not contradict the new proposed figures.

Additional figures should be provided to provide a clear view of a parking space that is provided the “U” shaped markings. In addition this will coincide with the parking space requirements currently being proposed in HCD’s revised 11-a rewrite. Additionally all figures should reflect the language-

Based on 9-Point Criteria: **1, 3, and 4**

SUB-ITEM 3-15 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-15.

COMMENT #3
Michael Graham, Chief Building Official – City of Woodland
300 First Street
Woodland, CA 85695

Item 3-15 Section 1129B.4

Request that this Item or reference provision be recommended: **Disapproval and Approved as Amended**

1129B.4 Parking Space Size. Accessible parking spaces shall be located as near as practical to a primary entrance and shall be sized as follows:

1. **Dimensions.** Where single spaces are provided, they shall be 14 feet (4267 mm) wide and ~~outlined~~ **lined** to provide a 9-foot (2743 mm) parking area and a 5-foot (1524 mm) loading and unloading access aisle on the passenger side of the vehicle. When more than one space is provided in lieu of providing a 14-foot-wide (4267 mm) space for each parking space, two spaces can be provided within a 23-foot-wide (7010 mm) area **lined** to provide a 9-foot (2743 mm) parking area on each side of a 5-foot (1524 mm) loading and unloading access aisle in the center. The minimum length of each parking space shall be 18 feet (5486 mm). The words "NO PARKING" shad be painted on the ground within each five-foot (1524 mm) loading and unloading access aisle. This notice shall be painted in white letters no less than 12 inches (154 mm) high and located so that it is visible to traffic enforcement officials. See Figure 118-18A **and Figure 11-8-18-B and C**

Reason:

Per the new illustrations shown in the figures and the language included to show how the striping is to be measured, (centerline to centerline) in accordance with the industry standards, this proposed revision will clear up the language and not contradict the new proposed figures.

Additional figures provided to provide a clear view of a parking space that is provided the 'U" shaped markings. In addition this will coincide with the parking space requirements currently being proposed in HCD's revised 11A rewrite. Additionally all figures should reflect the language.

Based on 9-Point Criteria: **1, 3, and 4**

SUB-ITEM 3-15 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-15.

ITEM 3-15 sections 1133B.4.3 Tactile stair level identification signage, 1133B.4.5.3 Open risers are not permitted, and 1133B.8.3 Detectable warning at Transit Boarding Platforms.

COMMENT #1
Eugene Lozano, Jr.
California Council of the Blind, Inc.
4537 Sycamore Avenue
Sacramento, CA 95841

Request that this item or reference provision be recommended: **Approved as Amended**

Reason:

We are in support of section 1133B.8.3, but want to amend it by striking out, "~~a center-to-center spacing of nominal of 1.67 inches (42.4 mm) minimum to 2.35 inches (59.7 mm) maximum~~" and replace with **"a center-to-center spacing of nominal of 2.00 inches (5.0 mm)"**. The reasons for this amendment are found in our comments to HCD item 2-4 section 1112A.9, DSA/AC item 3-13 sections 1127B.5 (7) and 1133B.8.3.

We are in support of sections 1133B.4.3 Tactile stair level identification signage and 1133B.4.5.3 Open risers are not permitted.

Based on 9-Point Criteria: **2, 3, 5, and 7**

SUB-ITEM 3-15 – Commission Action

A AA D FS

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*** * ***
(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-16.

Figures 11B-2A Roll-In Shower, 11B-2B Roll-In Shower, 11B-2C Open Shower, 11B-9A Location of Grab Bar Reinforcement for Adaptable Showers

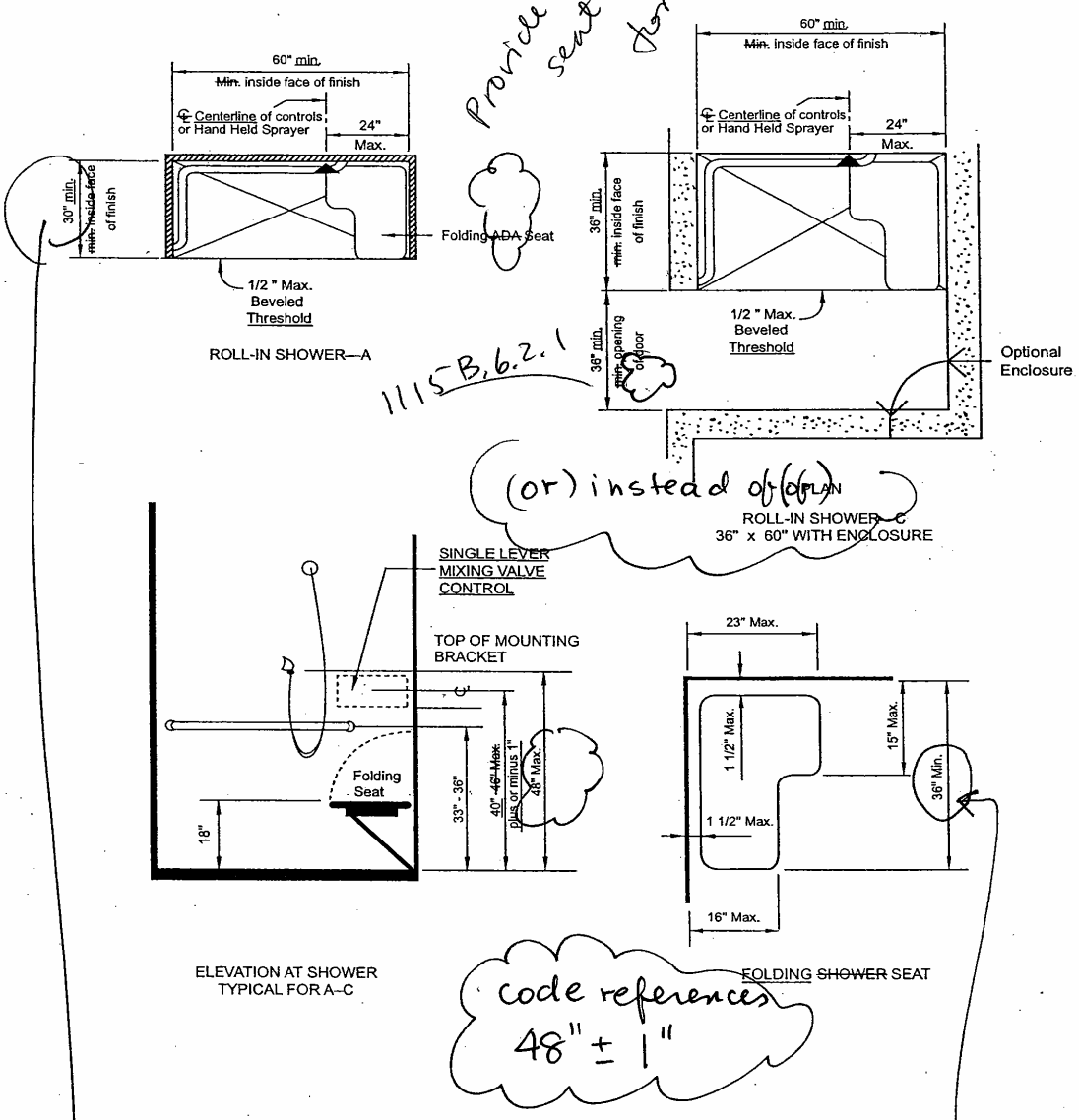
COMMENT #1
Ewa O'Neal

City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

Request that this item or reference provision be recommended: **Approved as Amended**

See attached amendments to figures.

Based on 9-Point Criteria: **6**



Provide seat dim. for 30" & 60" shower

1115-B.6.2.1

(or) instead of (d) PLAN

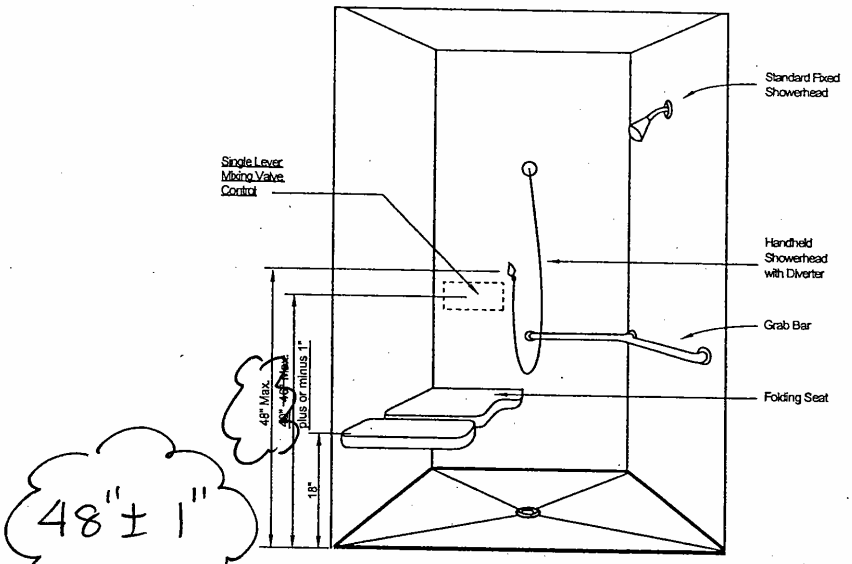
code references

48" ± 1"

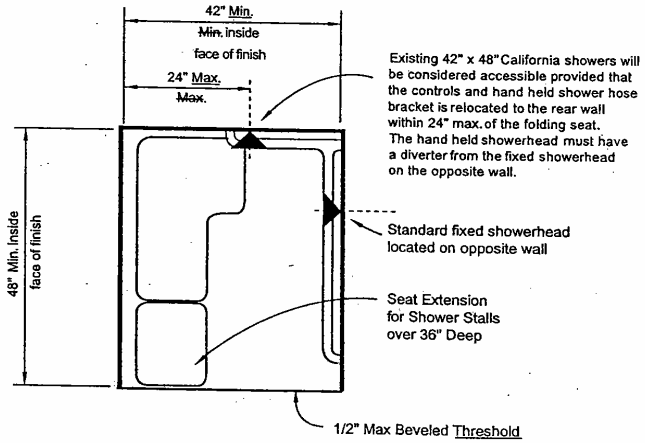
FIGURE 11B-2A—ROLL-IN SHOWER

2 of 5

? these dimensions ~~don't~~ match. Should



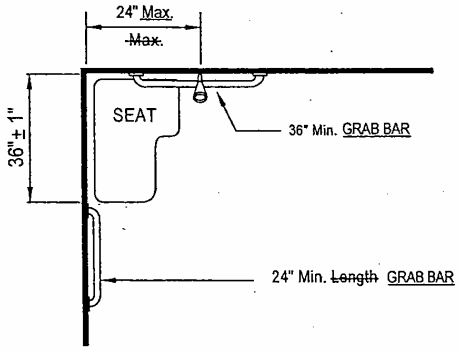
PERSPECTIVE OF ROLL-IN SHOWER—B
42" x 48" CALIFORNIA SIZE



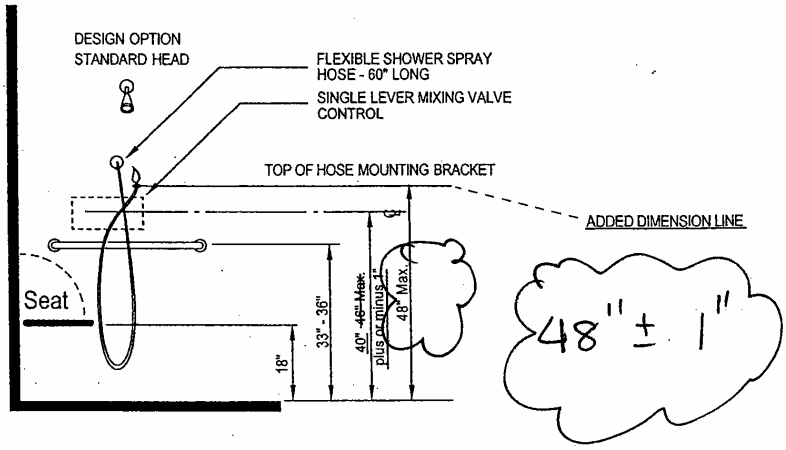
ROLL-IN SHOWER—B
42" x 48" CALIFORNIA SIZE

FIGURE 11B-2B—ROLL-IN SHOWER

395



PLAN

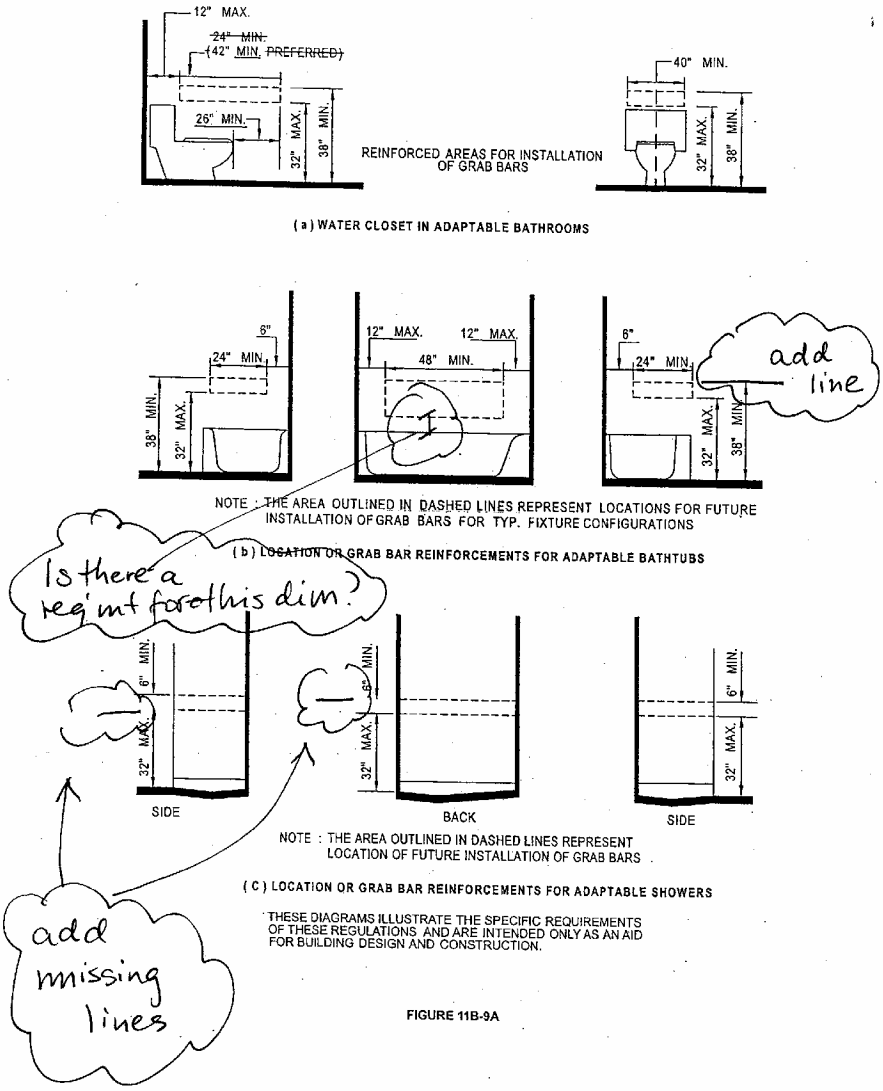


~~SECTION~~ ELEVATION

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

FIGURE 11B-2C—OPEN SHOWER

4 of 5



5 of 5.

SUB-ITEM 3-16 – Commission Action

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(END OF ITEM)

ITEM 3
DSA/AC 02-04
Part 2
Chapter 11B,

SUB-ITEM 3-16.

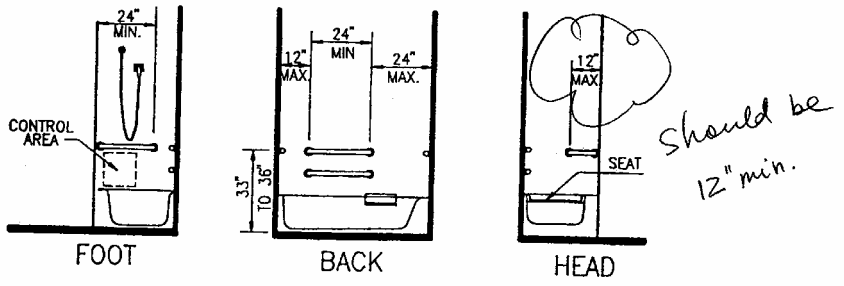
Figure 11B-9B Grab Bar and Location

COMMENT #1
Ewa O'Neal
City of Los Angeles
201 N. Figueroa St.
Los Angeles, CA 90012

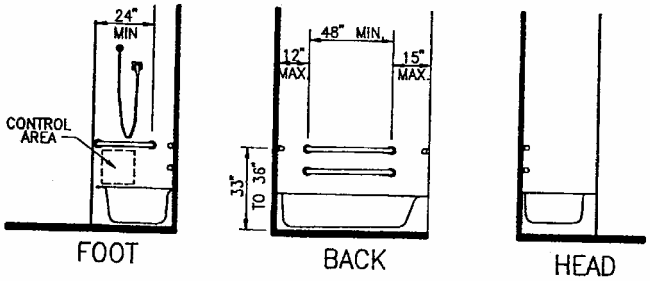
Request that this item or reference provision be recommended: **Approved as Amended**

See attached amendments to figures. (Conflicts with the ADA)

Based on 9-Point Criteria: **1**



(a) WITH SEAT IN TUB



(b) WITH SEAT AT HEAD OF TUB

THESE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

FIGURE 11B-9B—GRAB BARS AT BATHTUBS

1-134.76

SUB-ITEM 3-16 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 4
HCD 03-04
Part 2, Vol. 2
Chapter 23

SUB-ITEM 4-15.

CHAPTER 23 – WOOD
Division III – DESIGN SPECIFICATIONS FOR ALLOWABLE STRESS DESIGN OF WOOD BUILDINGS
Part I – ALLOWABLE STRESS DESIGN OF WOOD

COMMENT #1
Sheila Lee
CALBO
2215 21st St.,
Sacramento, CA 95818

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested/ Reason/ Criteria:
The CALBO State Code Committee recommends amending the proposed language to item 4-15 adopting the latest version, 2005 Edition of the National Design Specification for Wood Construction. This is based on **criteria 3** of the nine point criteria. The public should receive the benefit of the latest available design specifications and not outdated version.

CALBO also recommends deleting the amendments to 2316.2 based on **criteria no. 7**. No justification has been provided for the proposed amendments by HCD. The proposed amendments will result in different design requirements between residential and commercial projects.

Based on 9-Point Criteria: **3 and 7**

SUB-ITEM 4-15 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 6
DSA/SS 01-04
Part 2, Vol. 2
Chapter 23A,

SUB-ITEM 6-36.

Chapter 23A, Division III, Part I—ALLOWABLE STRESS DESIGN OF WOOD

COMMENT #1
David P. Tyree, P.E., C.B.O.
American Forest & Paper Association
American Wood Council

1090 Mesa Road
Colorado Springs,
Colorado 80904

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested:

SECTION 2316A -DESIGN SPECIFICATIONS

2316A.1 Adoption and Scope. The National Design Specification for Wood Construction, ~~Revised 1991~~ 2005 Edition (NDS), which is hereby adopted as a part of this code, shall apply to the allowable stress design and construction of wood structures using visually graded lumber, mechanically graded lumber, structural glued laminated timber, and timber piles. ~~National Design Specification Appendix Section F, Design for Creep and Critical Deflection Applications, Appendix Section G, Effective Column Length, and Appendix Section J, Solution of Hankinson Formula are specifically adopted and made a part of this standard. The Supplement to the 1991 Edition National Design Specification, Tables 2A, 4A except for the Repetitive Member Factor, Cr, 4B except for the Repetitive Member Factor, Cr, 4C except for the Repetitive Member Factor, Cr, 4D, 4E except for the Repetitive Member Factor, Cr, 5A, 5B and 5C are specifically adopted and made part of this standard.~~

~~Other codes, standards or specifications referred to in this standard are to be considered as only an indication of an acceptable method or material that can be used with the approval of the enforcement agency, except where such other codes, standards or specifications are specifically adopted by this code as primary standards.~~ *Where a standard specification referred to in this code conflicts with a standard or specification referenced in the NDS for wood construction, the 2005 edition of the NDS shall prevail.*

Reason:

AWC Comments: The 2005 Edition of the *National Design Specification® for Wood Construction* is now available. It was approved as an *American National Standard* on January 6, 2005, with a designation ANSI/AF&PA NDS-2005. The *2005* NDS was developed as a dual format specification incorporating design provisions for both allowable stress design (ASD) and load and resistance factor design (LRFD). The *NDS* is adopted in all model building codes in the U.S. and is used to design wood structures worldwide. See attached article detailing the changes that have been made between the 2001 and 2005 editions of the NDS. For California to be up-to-date in the wood standards, the 2005 edition of the NDS should be referenced.

Amendment Requested:

2316A.2 Amendments.

~~1. Sec. 1.1. Delete and substitute the following:~~

~~The design of elements of structures using visually graded, mechanically graded lumber, structural glued laminated timber, timber piles, and design of their own connections shall be in accordance with Chapter 23A, Division III, Part 1.~~

~~2. Secs. 1.2 through 1.5. Delete.~~

~~3. Sec. 2.2. Delete first sentence and substitute the following,~~

~~Allowable stress design values for visually graded structural lumber, mechanically graded structural lumber and structural glued laminated timber shall be in accordance with NDS Supplement Tables 2A, 4A except for the repetitive member factor, Cr, 4B except for repetitive member factor, Cr, 4C except for repetitive member factor, Cr, 4D, 5A, 5B and 5C. The repetitive member factor, Cr, shall not be used to adjust the allowable stresses set forth in Tables 4A, 4B, 4C and 4E. Values for species and grades not tabulated shall be submitted to the enforcement agency for approval.~~

~~4.~~ *1.* Sec. 2.3.2.1. In fourth sentence, delete .or Figure B1 (see Appendix B).

~~5.~~ *2.* Sec. 2.3.2.3. Delete and substitute the following:

2.3.2.3 When using Section 1612A, 3.1 basic load combinations, the Load Duration Factor, CD, noted in Table 2.3.2 shall NOT be permitted to be used. When using Section 1612A.3.2 alternate load combinations, the one-third increase shall not be used concurrently with the Load Duration Factor, CD.

~~6.~~ *3.* Table 2.3.2. Delete and substitute as follows:

TABLE 2.3.2-LOAD DURATION FACTORS, C_D

TABLE 2.3.2—LOAD DURATION FACTORS, C_D

DESIGN LOAD	LOAD DURATION	C_D
Dead Load	Permanent	0.9
Floor, Occupancy Live Load	Ten Years	1.0
Snow Load	Two Months	1.15
Roof Live Load[3]	Seven Days	1.25
Earthquake Load[1]	—	1.33
Wind Load[2]	—	1.33
Impact	—	2.0

C
A

[1] 1.60 may be used for nailed and bolted connections exhibiting Mode III or IV behavior, except that the increases for earthquake are not combined with the increase allowed in Section 1612A.3. The 60- percent increase for nailed and bolted connections exhibiting Mode III or IV behavior for earthquake shall not be applicable to joist hangers, framing anchors, and other mechanical fastenings, including straps and hold-down anchors. The 60-percent increase shall not apply to the allowable shear values in Tables 23A-II-H, 23A-II-I-1, 23A-II-I-2, 23A-II-J or in Section 2315A.3.

[2] 1.60 may be used *for* members and nailed and bolted connections exhibiting Mode III or IV behavior, except that the increases for wind are not combined with the increase allowed in Section 1612A.3. The 60-percent increase shall not apply to the allowable shear values in Tables 23A-II-H, 23A-II-I-1, 23A-II-I- 2, 23A-II-J or in Section 2315A.3.

[3] Provided the dead load includes the weight of at least one reroofing.

Reason:

AWC COMMENT: DELETE THIS AMENDMENT ENTIRELY. The National Design Specification for Wood Construction is a national consensus document that has been reviewed by a committee made up of design professionals, industry, academia, architects and structural engineers that are considered experts in the area of wood design. The NDS follows the ANSI procedures required to be an ANSI consensus document. When the 1991 NDS was adopted by reference in the 1997 Uniform Building Code, it was the first time this document had been adopted by reference. A major change was introduced in the 1991 NDS regarding the duration of load factor assigned to wind and seismic forces. In the past a 1-day duration was CONSERVATIVELY assumed for wind and seismic forces, and a corresponding duration factor of CD = 1.33 was the traditional value. Wind forces in the IBC and previously in the UBC are based on the wind force provisions in ASCE 7. Research has indicated that the peak forces in ASCE 7 have a cumulative duration of a few seconds. In addition, strong motion earthquake effects are typically less than a minute duration. Because of these duration studies, the 1991 NDS has adopted an accumulated duration of 10 minutes for wind and seismic forces to CD = 1.6 on the Madison curve.

The revisions made to the 1997 UBC were made in an effort to get SEAOC's support for the new NDS. Their concern was that there was not enough information to justify the CD increase for seismic to more than what had been actually tested, which is indicated in footnote #1. The footnote was further expanded to include wind, which is covered in footnote #2. Since this time, the engineering community was a much better concept of duration of load has become comfortable with the 1.6 duration of load factor. There are still a few engineers in the California area that are still grasping at the 1.33 factor. The ASTM procedure of determining the design values published in the NDS actually requires a REDUCTION in the design values for wind and seismic forces, therefore, when a designer uses the DOL for wind or seismic, it is only allowing the design value representative for that duration to be used in the design, it is not really a stress INCREASE.

Considering the fact that the NDS is an ANSI approved consensus document, any changes such as the one represented by this revision, should be taken through this process and not be considered for revision at the State level. This is NOT a new issue as it was in 1991, It has been discussed in the ANSI process and determined to be the most accurate in the design of wood structures. The 1.6 duration of load factor for allowable stress design will align directly with the time factor used in load and resistance factor design.

Amendment Requested:

7. *4.* Sec. ~~2.3.4.~~ 2.3.3. Add a second paragraph following Table 2.3.4 2.3.3:
The allowable unit stresses for fire-retardant-treated solid-sawn lumber and plywood, including fastener values, subject to prolonged elevated temperatures from manufacturing or equipment processes, but not exceeding 150° F (66° C), shall be developed from approved test methods that properly consider potential strength-reduction characteristics, including effects of heat and moisture.

Reason:

AWC COMMENT: In our opinion, this provision is not necessary. The temperature adjustments in the 2001 NDS are mandatory when structural members are exposed to temperatures exposed to temperatures between 100-150 degrees for extended periods of time. This requirement applies to both treated and untreated wood.

Request that this item or reference provision be: **Approved as Amended**

Amendment Requested:

8. *5.* Sec. ~~2.3.6.~~ 2.3.4. Add second, third and fourth paragraphs as follows:
The values for lumber and plywood impregnated with approved fire-retardant chemicals, including fastener values, shall be submitted to the enforcement agency for approval. Submittal to the enforcement agency shall include all substantiating data. Such values shall be developed from approved test methods and procedures that consider potential strength-reduction characteristics, including the effects of elevated temperatures and moisture. Other adjustments are applicable, except that the impact load-duration factor shall not apply.

The values for fasteners specified in Division II/ shall be reduced to 90 percent, except that values for light metal plate connectors shall be recommended by each truss plate manufacturer and approved by the enforcement agency. Values for glued-laminated timber, including fastener design values, shall be recommended by the treater and submitted to the enforcement agency for approval. Submittal to the enforcement agency shall include all substantiating data.

AWC COMMENT: The second paragraph does not appear to be necessary. In the past, the NDS had provisions which required a 10 percent reduction factor for fire retardant lumber. The 10 percent reduction factor was associated with the elevated temperatures used in the kiln drying treatment. Strength properties of materials air-dried after treatment were reported to have little affect. In other situations, the reduction may be more than 10 percent. Since there are so many processes and different drying techniques, the NDS now requires that the allowable design values, including connection design values, for lumber and glued laminated timber pressure-treated with fire retardant chemicals be obtained from the company providing treatment and redrying service. In many or most of these cases, these companies will have an ICBO or ICC Evaluation Report.

Our current the comment in the first paragraph above takes exception to the second paragraph but it seems that the entire item (paragraphs 1 through 3) is awkward since the NDS does not contain design values for FRT. NDS says to get design values elsewhere. The method for arriving at design values, where information should be submitted and who should do the testing just seems to be awkwardly placed as an NDS modification. The process for addressing proprietary information is handled elsewhere in the building code- correct? If so, this amendment should be dropped entirely especially since the process described does not seem to be rigorous enough to ensure that adequacy of the proprietary product in general.

In addition to the requirements specified in Section 207, fire retardant lumber having structural applications shall be tested and identified by an approved inspection agency in accordance with UBC Standard 23-5.

Amendment Requested:

~~**9. Sec. 2.3.8. Add new second and third paragraphs following Table 2.3.8:**~~

~~For lumber I beams and box beams, the form factor, Cf, shall be calculated as:~~

$$C_f = \left[1 + \left(\frac{d^2 + 143}{d^2 + 88} - 1\right) C_g\right]$$

For **SI:**
$$C_f = \left[1 + \left(\frac{\left(\frac{d}{25.4}\right)^2 + 143}{\left(\frac{d}{25.4}\right)^2 + 88} - 1\right) C_g\right]$$

~~**WHERE:**~~
~~*Cf* = form factor.~~
~~*Cg* = support factor = *p*2(6 − 8*p* + 3*p*2)(1 − *q*) + *q*.~~
~~*d* = depth of I or box beam.~~
~~*p* = ratio of depth of compression flange to full depth of beam.~~
~~*q* = ratio of thickness of web or webs to full width of beam.~~

~~**10. Sec. 2.3.10. Add a paragraph at end of section as follows:**~~

~~In joists supported on a ribbon or ledger board and spiked to the studding, the allowable stress in compression perpendicular to grain may be increased 50 percent.~~

~~**11. Sec. 3.2.1. Add a second sentence as follows:**~~

~~For continuous beams, the span shall be taken as the distance between centers of bearings on supports over which the beam is continuous.~~

~~**12. Sec. 3.2.3.2. *Delete and substitute* as follows:**~~

~~*Notches in sawn lumber bending members shall not exceed one tenth the depth of the member and shall not be located in the middle third of the span. Where members are notched at the ends, the notch depth shall not exceed one fourth the beam depth. The tension side of sawn lumber bending members of 4 inches (102 mm) or greater nominal thickness shall not be notched except at ends of members. Cantilevered portions of beams less than 4 inches (102 mm) in nominal thickness shall not be notched unless the reduced section properties and lumber defects are considered in the design. For effects of notch on shear strength, see Section 3.4.4.*~~

AWC COMMENT: Old Item 12, 13, 15. Theses sections deal with notching and are proposed for removal - which is good. Note that in all three cases, the NDS is more restrictive with regard to notch depth limits and location limits (e.g. notching of cantilevers is not permitted, notching on tension face of glulam not permitted except at ends, and there is a maximum depth for glulam compression side notch at ends). It is important that the 97 UBC amendments not be applied to 2001 NDS as notching provisions in the 2001 NDS were revised to address increased shear design values ill the 2001 NDS.

~~***13. Sec. 3.2.3.3. Delete and substitute as follows:***~~
~~*Notched glued laminated members shall be designed as required for sawn lumber using the allowable stress of the combination, with the outer lamination being the grade of laminations exposed by the notch. Where a notch is located on the tension face of the member, at least one fully threaded lag bolt, or equal, shall be provided on each side of the notch to prevent splitting.*~~

AWC COMMENT: Old Item 12, 13, 15. Theses sections deal with notching and are proposed for removal - which is good. Note that in all three cases, the NDS is more restrictive with regard to notch depth limits and location limits (e.g. notching of cantilevers is not permitted, notching on tension face of glulam not permitted except at ends, and there is a maximum depth for glulam compression side notch at ends). It is important that the 97 UBC amendments not be applied to 2001 NDS as notching provisions in the 2001 NDS were revised to address increased shear design values ill the 2001 NDS.

Amendment Requested:

~~**14. Sec. 3.3.2. Add a last paragraph as follows:**~~
~~A beam of circular cross section may be assumed to have the same strength as a square beam having the same cross sectional area. If a circular beam is tapered, it shall be considered a beam of variable cross section.~~

15. Sec. 3.4.4. Add a section as follows:

3.4.4.5 When girders, beams or joists are notched at points of support on the compression side, they shall meet design requirements for the net section in bending and in shear. The actual shear stress at such point shall be calculated as follows:

$$f_v = \frac{3V}{2b\left[d - \left(\frac{d-d'}{d'}\right)e\right]}$$

WHERE:

d = total depth of beam.

d_i = actual depth of beam at notch.

e = distance notch extends inside the inner edge of support.

V = shear force.

Where e exceeds d , the actual shear stress for the notch on the compression side shall be calculated as follows:

$$f_v = \frac{3V}{2bd'}$$

AWC COMMENT: Old Item 12, 13, 15. Theses sections deal with notching and are proposed for removal- which is good. Note that in all three cases, the NDS is more restrictive with regard to notch depth limits and location limits (e.g. notching of cantilevers is not permitted, notching on tension face of glulam not permitted except at ends, and there is a maximum depth for glulam compression side notch at ends). Jt is important that the 97 UBC amendments not be applied to 2001 NDS as notching provisions in the 2001 NDS were revised to address increased shear design values in the 2001 NDS.

Amendment Requested:

16. Sec. 3.7.1.4. Delete and substitute as follows:

The slenderness ratio for solid columns, le/d shall not exceed 50.

17. Sec. 3.8.2. Delete and substitute as follows:

Where designs that induce tension stresses perpendicular to grain cannot be avoided, mechanical reinforcement sufficient to resist such forces shall be provided.

18. Sec. 4.2.5.5. Delete.

19. Sec. 4.3.4. Delete and substitute as follows:

The provisions of Item (b) above apply.

20. Sec. 4.4.1.1. Delete and substitute as follows:

Rectangular sawn lumber beams, rafters, joists or other bending members shall be supported laterally to prevent rotation or lateral displacement in accordance with Section 4.4.1.2, or shall be designed in accordance with the lateral stability provisions in Section 3.3.3.

21. Sec. 4.4.1.2. Delete first sentence.

(c) Add: The provisions of Item (b) above apply.

(d) Delete and substitute as follows:

Six to 1; bridging, full-depth solid blocking or cross bracing shall be installed at intervals not exceeding 8 feet (2438 mm) and the

~~*provisions of Item (b) above shall apply unless:*~~

~~*Both edges of the member are held in line or,*~~

~~*The compression edge of the member is supported throughout its length to prevent lateral displacement, as by adequate sheathing or subflooring, and the ends and all points of bearing have lateral support to prevent rotation.*~~

~~22.~~ 6. Sec. 4.4.1. Add a section as follows:

4.4.1.4 Bridging for Floor Joists and Roof Joists or Rafters.
Roof joists or rafters of more than 8-inch (203 mm) depth and floor joists of more than 4-inch (102 mm) depth which are spaced 32 inches (813 mm) on center or less shall be provided with bridging to distribute superimposed loads. Floor joists shall be bridged every 8 feet (2438 mm) and roof joists or rafters every 10 feet (3048 mm) by solid blocking 2 inches (51 mm) thick and the full depth of the joist or rafter, or by wood cross bridging of not less than 1 inch by 3 inches (25 mm by 76 mm) or nailed metal cross bridging of equal strength. Where cross bridging is used, the lower ends of such cross bridging shall be driven up and nailed after the floor, subfloor or roof has been nailed.

AWC COMMENT: *This requirement appears to be very excessive and places undue hardship and expense on the builder. The provisions contained in Section 4.4.1 provide the general rules for providing restraint to prevent lateral displacement or rotation of lumber bending members and has been in the NDS since the 1944 edition. Is there some sort of engineering basis for such restrictive requirements. Has someone determined that the provisions in Section 4.4.1.1 are not adequate?*

Amendment Requested:

~~23. Sec. 5.2.2. Delete and substitute as follows:~~

~~[For DSA/SS] Reinforcement of radial tension.~~ *~~Where mechanical reinforcement is required to resist radial tension, reinforcement shall be as described in the 3rd Edition (1985) of the Timber ConstructionManual or as otherwise approved. The maximum spacing of mechanical reinforcement shall not exceed one half the effective embedded thread length of the member at the location of the reinforcement. The effective embedded thread length is the embedded thread length in the tension zone from the neutral axis of the member to the end of the reinforcement.~~*

~~24. Sec. 5.4.1. Delete second paragraph and substitute as follows:~~

~~For curved bending members having a varying cross section, the maximum actual radial stress induced, *fr*, is given by:~~

$$f_r = K_r \frac{6M}{bd^2}$$

~~WHERE:~~
~~*b* = width of cross section, inches (mm).~~
~~*d* = depth of cross section at the apex in inches (mm).~~
~~*Kr* = radial stress factor determined from the following relationship:~~

$$K_r = A + B\left(\frac{d}{Rm}\right) + C\left(\frac{d}{Rm}\right)^2$$

~~*M* = bending moment at midspan in inch-pounds (N·mm).~~

~~WHERE:~~
~~*Rm* = radius of curvature at the center line of the member at midspan in inches (mm).~~
~~*A, B* and *C* = constants as follows:~~

β (1)	A (2)	B (3)	C (4)
(0.0)	(0.0)	(0.2500)	(0.0)
2.5°	0.0079	0.1747	0.1284
5.0°	0.0174	0.1251	0.1939
7.5°	0.0279	0.0937	0.2162
10.0°	0.0391	0.0754	0.2119
15.0°	0.0629	0.0619	0.1722
20.0°	0.0893	0.0608	0.1393
25.0°	0.1214	0.0605	0.1238
30.0°	0.1649	0.0603	0.1115

and β = angle between the upper edge of the member and the horizontal in degrees.Values of *Kr* for intermediate values of â may be interpolated linearly.

When the beam is loaded with a uniform load, *Kr* may be modified by multiplying by the reduction factor *Cr* as calculated by the following formula:

$$C_r = A + B\left(\frac{L}{L_t}\right) + C\left(\frac{d_c}{R_m}\right) + D\left(\frac{L}{L_t}\right)^2 + E\left(\frac{d_c}{R_m}\right)^2 + F\left(\frac{d_c}{R_m}\right)\left(\frac{L}{L_t}\right) + G\left(\frac{L}{L_t}\right)^3 + H\left(\frac{d_c}{R_m}\right)^3$$

WHERE:

Cr = reduction factor.

L = span of beam.

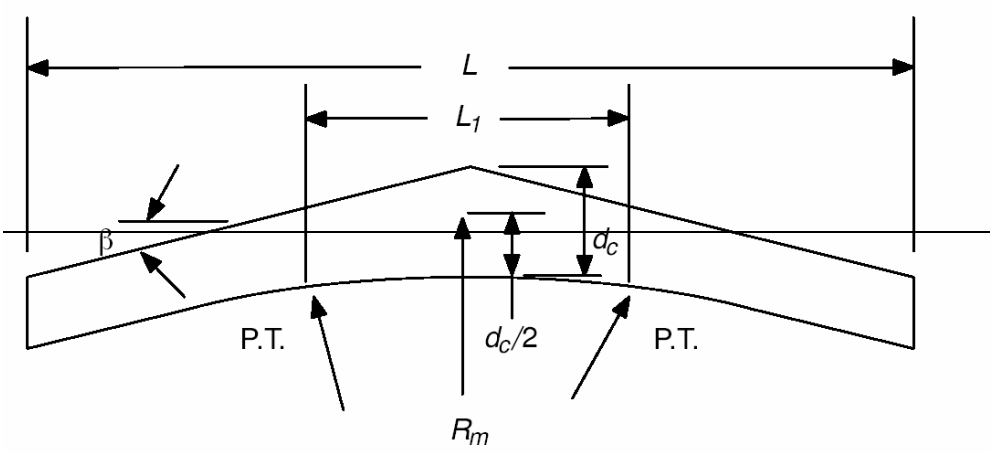
Lt = length of beam between tangent points.

A, B

. . . H = constants for a given â as follows:

β	A	B	C	D	E	F	G	H
2.3°	-0.142	0.418	-2.358	-0.053	—	—	0.002	—
9.7°	0.143	0.376	-0.541	-0.060	—	—	0.003	—
14.9°	0.406	0.293	-0.927	-0.041	—	—	0.002	—
20.0°	0.423	0.364	-1.022	-0.067	—	0.146	—	—
25.2°	0.540	0.360	-1.061	-0.070	—	0.156	—	—
29.8°	0.502	0.372	—	-0.076	-3.712	0.138	0.004	4.336

and β = angle between the upper edge of the member and the horizontal in degrees. Values of *Cr* for intermediate values may be interpolated linearly.



~~PITCHED AND TAPERED CURVED BEAM~~

~~**25. Sec. 5.4.1.2.** ***Delete and substitute as follows:***~~

~~*When M is in the direction tending to decrease the curvature (increase the radius), mechanical reinforcing sufficient to resist all radial tension stresses is required, but in no case shall the calculated radial tension stress exceed one third the allowable unit stress in horizontal shear. When mechanical reinforcing is used, the maximum moisture content of the laminations at time of manufacture shall not exceed 12 percent for dry conditions of use.*~~

~~**26.**~~ **7. Sec. ~~5.4.4.~~ 5.4. Add a new section as follows:**

~~**5.4.4**~~ **5.4.5 Ponding.** Roof-framing members shall be designed for the deflection and drainage or ponding requirements specified in Section 1506 and Chapter 16A. In glued-laminated timbers, the minimum slope for roof drainage required by Section 1506 shall be in addition to a camber of one and one-half times the calculated dead load deflection. The calculation of the required slope shall not include any vertical displacement created by short taper cuts. In no case shall the deflection of glued- laminated timber roof members exceed 1/2-inch (13 mm) for a 5 pound-per-square-foot (239 Pa) uniform load.

~~**27.**~~ ***8.*** **Sec. ~~5.4.5.~~ 5.4. Add a new section as follows:**

~~**5.4.5.**~~ **5.4.6. Tapered Faces.** Sawn tapered cuts shall not be permitted on the tension face of any beam. Pitched or curved beams shall be so fabricated that the laminations are parallel to the tension face. Straight, pitched or curved beams may have sawn tapered cuts on the compression face.

For other members subject to bending, the slope of tapered faces, measured from the tangent to the lamination of the section under consideration, shall not be steeper than 1 unit vertical in 24 units horizontal (4% slope) on the tension side.

EXCEPTIONS:

1. This requirement does not apply to arches.
2. Taper may be steeper at sections increased in size beyond design requirements for architectural projections.

~~***28.***~~ ***9. Sec. ~~5.4.6.~~ 5.4. Add a new section as follows:***

5.4.7 Manufacture and Fabrication. *The manufacture and fabrication of structural glued-laminated timber shall be in accordance with ANSI/AITC A 190.1 and the following requirements:*

Reason:

AWC/ AITC COMMENT: In general, the new section 5.4.7 should not contain amendments to the industry accepted consensus-manufacturing standard, ANSI/ AITC A 190.1. The AITC trademark on a glulam beam indicates conformance to the manufacturing standard, ANSI/AITC A 190.1, including proper spacing of end joints. Some of the modifications shown are not modifications at all and are redundant with the standard as it is written. If the state architect's office believes the standard has areas that are insufficient, they have an open invitation to participate in the ANSI/AITC standard writing

process. Their participation in the process would be greatly welcomed. Some of the modifications shown are not modifications at all and are redundant with the standard as it is written.

Amendment Requested:

1. Joints. *All portions of end joints in adjacent laminations shall be separated in accordance with ANSI/AITCA* 190.1 *and ASTMD3737. The areas requiring 6-inch* (152 *mm) spacing shall be shown on the approved drawings or described in the specifications.*

Joints in adjacent laminations of arched members shall be separated as required for bending members.

Reason:

AWC/AITC COMMENT: Remove in its entirety. The requirement that all bending members and tension members have end joints in adjacent laminations spaced a minimum of 6 inches is currently a requirement of ANSI/AITC A 190.1-2002, Section 4.5.2.4. Proof loading of laminations allows for a relief of this requirement (Section 4.5.2.4(e)) and had been employed by manufacturers for several years. Arches are specifically exempt from the spacing requirements (Section 4.5.2.4(g)) due to the complex nature of forces in the loaded member.

Section 5.4.7.1 also places the responsibility of glulam manufacturing on the designer of the beam. This is inappropriate and unreasonable for any designer not affiliated with a custom glulam operation. Proper manufacture of the glulam beam is the responsibility of the manufacturer under the supervision of an accredited third party inspection and testing agency, such as AITC. The AITC trademark on a glulam beam indicates conformance to the manufacturing standard, ANSI/AITC A 190.1, including proper spacing of end joints. Placing the responsibility on the designer to indicate end joint spacing requirements on shop drawings undermines the established system and places undue responsibilities on the designer. Designers can't be expected to have the expertise to design specific glulam layups. This is the responsibility of the manufacturer and the third party agency. Requiring the designer to specify things such as end joint placement and spacing will certainly have negative effects on glulam usage, and may result in non-conservative designs by well-meaning, but misinformed designers

Amendment Requested:

2. ***Adhesives.*** *Dry-use adhesives shall not be used.*

AWC/AITC COMMENT: Remove in its entirety. Dry-use adhesives are not permitted to be used in the current ANSI/AITC A 190.1 standard. All adhesives used in glulam meeting the requirements of ANSI/AITC A 190.1-2002 are wet-use adhesives. The AITC quality mark indicates compliance with the standard .

Amendment Requested:

3. ***Moisture content at the time*** **of** ***gluing.*** *The maximum moisture content of the wood laminating lumber at the time of gluing shall not exceed* 16 *percent for projects located in coastal areas,* 12 *percent for projects located in interior valleys or 10 percent for projects located in desert areas, with the geographical areas as determined by the enforcement agency. The moisture content of the wood for members that will be exposed to direct sunlight in the finished structure shall not exceed ~~the following limits~~ 12 percent at time of gluing:.*

~~*1. 12 percent for Alaskan Yellow Cedar*~~

~~*2. 10 percent for all other species*~~

~~*The minimum moisture content shall not be less than 7 percent.*~~ *The range of moisture content of laminations assembled into a single member shall not exceed 5 percent at the time of gluing.*

When mechanical reinforcing is used, such as radial tension reinforcement, the maximum moisture content of the laminations at time of manufacture shall not exceed 12 percent for dry conditions of use.

4. ~~***Reinforcement for radial tension.*** *Where mechanical reinforcement is required to resist radial tension, reinforcement shall be as described in 3rd Edition (1985) of the Timber Construction Manual or as otherwise approved. The maximum spacing of mechanical reinforcement shall not exceed one-half the effective embedded thread length of the member at the location of reinforcement. The effective embedded thread length is the embedded thread length in the tension zone from the neutral axis of~~

~~*the member to the end of the reinforcement.*~~

AWC/AITC COMMENT: Remove in its entirety. Section 5.4.7.3 is not necessary. The moisture content requirements of laminations used in glulam beams have been established by 70 years of experience and through a consensus of laminators, fabricators, educators, and design professionals familiar with glulam timbers in development of the ANSI/AITC A190.1 standard. Lamination moisture content is already limited to a maximum of 16% in the ANSII AITC A 190.1 standard. Prescriptively limiting moisture content to 12% for some areas is inappropriate and unnecessary. **The lower moisture content will have virtually no impact on the capacity of glulam beams.** The only reason that a lower moisture content might be desirable is to limit the formation of surface checks in dry areas. Checks are generally an aesthetic problem only. Because "beauty is in the eye of the beholder," appearance problems caused by checking should be resolved between the buyer and seller of the glulam, and not by building code prescriptions.

Amendment Requested:

4. ***Inspection.*** *See Section* 2337*A for inspection requirements.*

~~***29.***~~ ***10. Sec.*** ~~***5.4.7***~~***. 5.4. Add a new section as follows:***

5.4.8. Specifications. *For structural glued-laminated timber, the following shall be shown on the plans and in the specifications:*

Whether for dry or wet conditions of use
Species and applicable standard
Stress requirements and combination symbol
If the temperature of the timber exceeds 1500 *F (66°* C) *in service*
Tension zones for purposes of determining grades of laminations and location of spaced end joints
for all members except simple beams supporting uniform loads.

Those portions of glued-laminated timbers which form the structural supports of a building or other structure and are exposed to weather and not properly protected by a roof eave over- hangs or similar covering shall be pressure treated with an approved preservative or be manufactured from wood of natural resistance to decay.

All weather-exposed surfaces of members shall be protected in an approved manner to prevent decay where they are located in a high-humidity environment such as in direct contact with soil or water and where portions extend beyond the walls and roof coverage in buildings. When the member is protected with an approved pressure treatment, the treatment process shall not impair the structural integrity of the member. When the member is protected by flashing or is encased, care must be taken to provide ventilation and prevent moisture entrapment on the member.

All members shall have appropriate weather protection during transit, storage and erection.

AWC/AITC Comment: Section 5.4.8 again requires the designer of the glulam member to be intimately familiar with the manufacturing requirements for glulam. It is not the responsibility of the designer to indicate the location of tension zones or end joint spacing requirements. Presumably, inclusion of this information on drawings is intended to help the building inspector to determine if a beam was manufactured in accordance with the standard. The building inspector should not be required to be intimately familiar with the layup and manufacture of glulam beams, either. The building inspector should be familiar with recognized accredited inspection and testing agencies, such as AITC, and their trademark stamps as well as the significance of the marks on the glulam beam. Requiring building inspectors to determined whether glulam beams are manufactured in accordance with the standard undermines the process of accrediting quality assurance agencies and opens the door for unqualified plants and non-accredited agencies to manufacture and certify glulam. Leave this responsibility with the manufacturers and the accredited third party agencies. Requirements for weather exposure and decay resistance are already covered in Section 2306 and are not necessary in this section.

Amendment Requested:

~~***30. Sec. 8.2. Delete and substitute as follows:***~~

~~***8.2.3*** Allowable shear values for bolts used to connect a wood member to concrete or masonry are permitted to be determined as one half the tabulated double shear value for a wood member twice the thickness of the member attached to the concrete or masonry.~~

31. 11. Sec. ~~12.2.3.~~ 11.5.4. Delete.

AWC COMMENT: *Why delete the toe nail factor from the NDS? While toe nails my not be used for the transferring seismic lateral loads, they certainly can also be used in other applications. Toe nails are an everyday common construction practice with specific provisions on how they are to be installed in accordance with Section 11.1.5.4.*

~~32. Sec. 12.3.7. Delete.~~

~~33.~~ *12.* Sec. ~~12.4.1.~~ 11.1.5.6. Delete and substitute as follows:

~~12.4.1~~ 11.1.5.6 For wood-to-wood joints, the spacing center to center of nails in the direction of stress shall not be less than the required penetration. Edge or end distances in the direction of stress shall not be less than one-half of the required penetration. All spacing and edge and end distances shall be such as to avoid splitting of the wood.

~~34. Sec. 13.2.1. Delete and substitute as follows:~~

~~13.2.1 Test for design values.~~ ~~Tests to determine design values for metal plate connectors in lateral withdrawal, net section shear and net section tension shall be conducted in accordance with the test and evaluation procedures in ANSI/TPI 1-1995. Design values determined in accordance with these test procedures shall be multiplied by all applicable adjustment factors (see Table 7.3.1) to obtain allowable design values.~~

~~35. NDS Supplement Table 5A. Add combinations and design values as follows:~~

COMBINATION SYMBOL[4]	SPECIES OUTER LAMINATIONS/CORE LAMINATIONS[5]	DESIGN VALUES IN POUNDS PER SQUARE INCH (psi)													
		BENDING ABOUT X-X AXIS (Loaded Perpendicular to Wide Faces of Laminations)						BENDING ABOUT Y-Y AXIS (Loaded Parallel to Wide Faces of Laminations)					AXIALLY LOADED		
		Bending		Compression Perpendicuair to Grain											
		Tension Zone Stressed in Tension F_{bxx}	Compression Zone Stressed in Tension[6] F_{bxx}	Tension Face[9,1] ${}^{0}F_{c\perp xx}$	Compression Face[9,10] $F_{c\perp xx}$	Shear Parallel to Grain[1] ${}^{0}F_{vxx}$	Modulus of Elasticity E_{xx}	Bending F_{byy}	Compression Perpendicular to Grain (Side Faces) $F_{c\perp yy}$	Shear Parallel to Grain F_{vyy}	Shear Parallel to Grain (For Members With Mulitple Piece Laminations Which are not Edge glued)[13] F_{vyy}	Modulus of Elasticity E_{yy}	Tension Parallel to Grain F_t	Compression Parallel to Grain F_c	Modulus of Elasticity E
VISUALLY GRADED SOUTHERN PINE															
~~26F-V1~~	~~SP/SP~~	~~2600~~	~~1300~~	~~650~~	~~650~~	~~200~~	~~1,800,000~~	~~1900~~	~~560~~	~~175~~	~~90~~	~~1,600,000~~	~~1150~~	~~1600~~	~~1,600,000~~
26F-V2	SP/SP	2600	1300	650	650	200	1,900,000	2200	650	175	90	1,800,000	1200	1650	1,800,000
26F-V3	SP/SP	2600	1300	650	650	200	1,900,000	2100	560	175	90	1,800,000	1150	1600	1,800,000
26F-V4[8]	SP/SP	2600	2600	650	650	200	1,900,000	2100	560	175	90	1,800,000	1150	1600	1,800,000
E-RATED SOUTHERN PINE															
28F-E1	SP/SP	2800	1400	650	650	200	2,000,000	1600	560	175	90	1,700,000	1300	1850	1,700,000
28F-E2[8]	SP/SP	2800	2800	650	650	200	2,000,000	1600	560	175	90	1,700,000	1300	1850	1,700,000
30F-E1[15]	SP/SP	3000	1500	650	650	200	2,000,000	1750	560	175	90	1,700,000	1250	1750	1,700,000
30F-E2[8,15]	SP/SP	3000	3000	650	650	200	2,000,000	1750	560	175	90	1,700,000	1250	1750	1,700,000

[15]These combinations are only for nominal widths 6 inches and less, in accordance with AITC 117-93.

2318A.3.3 Spacing and penetration. Common wire nails shall have penetration into the piece receiving the point as set forth in Tables 23A-III-C-1 and 23A;.III-C-2.Nails or spikes for which the gages or lengths are not set forth in Tables 23A-III-C-1 and 23A-III-C-2 shall have a required penetration of not less than 11 diameters, and allowable loads may be interpolated. Allowable loads shall not be increased when the penetration of nails into the member holding the point is larger than required by this section. *Spacing shall be in accordance with Section 2316A.2, Item ~~33~~ 12.*

Common wire 10d, 12d and 16d nails may be used to join two members of 2-inch (51 mm) nominal thickness at the tabulated values indicated for these nails.

Nails in plywood shall not be overdriven such that the nail heads penetrate the face ply by more than the thickness of the nail head or break the face-ply wood fibers.

2318A.3.4 Corrosion resistance. *Nails and spikes used in wet or exterior locations, such as exterior wall coverings of hospitals, public elementary and secondary schools, community college buildings, and state- owned or state-leased essential services buildings, shall be corrosion resistant and shall have a hot-dipped or tumbled galvanized coating of not less than ~~1.5~~ 1.0 ounces of zinc per square foot (458 gmlm^2) or be fabricated of copper, stainless steel or brass.*

2320A.8.3 Framing details. Joists shall be supported laterally at the ends and at each support by solid blocking except where the ends of joists are nailed to a header, band or rim joist or to an adjoining stud or by other approved means. Solid blocking shall not be less than 2 inches (51 mm) in thickness and the full depth of joist.

Notches on the ends of joists shall not exceed one fourth the joist depth, Holes bored in joists shall not be within 2 inches (51 mm) of the top or bottom of the joist, and the diameter of any such hole shall not exceed one third the depth of the joist. Notches in the top or bottom of joists shall not exceed one ~~*tenth*~~ *sixth* the depth and shall not be located in the middle third of the span. *Notches or holes shall not be placed in joists unless fully detailed in the approved plans.*

Joist framing from opposite sides of a beam, girder or partition shall be lapped at least 3 inches (76 mm) or the opposing joists shall be tied together in an approved manner.

Ledger strips applied to the sides of girders for support of joists shall not be less than 2 inches by 4 inches (51 mm by 102 mm).

2320A.8.7 Bridging*. Floor joists more than 4 inches (102 mm) in depth shall be provided with bridging in accordance with the provisions of Section 2316A.2, Item ~~22~~ 6 , ~~4.4.1.4.~~*

AWC Comment: *This requirement appears to be very excessive and places undue hardship and expense on the builder. The provisions contained in Section 4.4.1 provide the general rules for providing restraint to prevent lateral displacement or rotation of lumber bending members and has been in the NDS since the 1944 edition. Is there some sort of engineering basis for such restrictive requirements. Has someone determined that the provisions in Section 4.4.1.1 are not adequate?*

Amendment Requested:

2320A.12.8 Blocking. Roof rafters and ceiling joists shall be supported laterally to prevent rotation and lateral displacement when required by Division III, Part I, Section 4.4.1.2. *In addition, rafters of more than 8 inches (203 mm) in depth shall be provided with bridging in accordance with the provisions of Section 2316A.2, Item ~~22~~ 6.*

AWC Comment: *This requirement appears to be very excessive and places undue hardship and expense on the builder. The provisions contained in Section 4.4.1 provide the general rules for providing restraint to prevent lateral displacement or rotation of lumber bending members and has been in the NDS since the 1944 edition. Is there some sort of engineering basis for such restrictive requirements? Has someone determined that the provisions in Section 4.4.1.1 are not adequate?*

AWC/AITC GENERAL COMMENT: In Sections 4.4.1, 2320A.8.3, 2320A.8.7, and 2320A.12.8, metric equivalents to English dimensions are shown. For nominal lumber sizes, direct conversion to millimeters does not make sense and could be misinterpreted to imply that the actual dimensions are intended. If metric dimensions must be shown, they should be equal to the actual lumber cross section dimensions. For example, 8 inch nominal lumber measures 7.25 inches in depth. This should be shown as "8 inch (185 mm)" to avoid confusion. There may be other sections with this problem, but these are the ones that were noticed.

SUB-ITEM 6-36 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 7
OSHPD 02-04
Part 2, Vol. 1 & 2
Chapters 1, 4A, 16, 16A, 18A, 19, 22, 22A, 23, and 23A

SUB-ITEM 7-42

Chapter 23, Division III, Part I—ALLOWABLE STRESS DESIGN OF WOOD

COMMENT #1
David P. Tyree, P.E., C.B.O.
American Forest & Paper Association
American Wood Council
1090 Mesa Road
Colorado Springs,
Colorado 80904

SEE PUBLIC COMMENT #1 FROM **DAVID TYREE FOR SUB-ITEM 6-36** REGARDING THE DSA/SS PROPOSED ADOPTION OF CHAPTER 23A.

SUB-ITEM 7-42 – Commission Action

A AA D FS

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(END OF ITEM)

SUB-ITEM 7-43

Chapter 23A, Division III, Part I—ALLOWABLE STRESS DESIGN OF WOOD

COMMENT #1
David P. Tyree, P.E., C.B.O.
American Forest & Paper Association
American Wood Council
1090 Mesa Road
Colorado Springs,
Colorado 80904

SEE PUBLIC COMMENT #1 FROM **DAVID TYREE FOR SUB-ITEM 6-36** REGARDING THE DSA/SS PROPOSED ADOPTION OF CHAPTER 23A.

SUB-ITEM 7-43 – Commission Action

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(END OF ITEM)

Part 4
California Mechanical Code

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ITEM 12
OSHPD 04-04
Part 4
Chapter 3 General Requirements

SUB-ITEM 12-3

Section 316.0 Essential Mechanical Provisions

COMMENT #1
Kurt A. Schaefer, P.E. , Deputy Director
Office of Statewide Health Planning and Development
1600 Ninth Street, Room 420
Sacramento CA 95814

Request that this item or reference provision be recommended: **Approved as Amended**

Reason:
Based on 9-Point Criteria #6 the OSHPD is recommending that OSHPD 04/04, Item 12-3 be "approved as amended".

The proposed code change, as originally submitted, would require that some of the existing essential mechanical provisions of Section 316.0 would apply to "all" licensed clinics. However, this was not the intended purpose of the proposal. The intent, as clearly indicated in the statement of reason, is to specify that those requirements apply only to "surgical clinics". If this proposal is not modified, it would unnecessarily require fans in "all" licensed clinics that maintain positive or negative air balances be supplied by emergency electrical power. This requirement, however, should only apply to surgical clinics where operating rooms must be positively pressurized for infection control and health safety. Consequently, it would be an onerous requirement for non-surgical clinics and it would not provide those clinics with any additional benefits.

The OSHPD is proposing an editorial change to Section 316.0 (shown below in underline) that will provide necessary clarification.

SECTION 316.0 – ESSENTIAL MECHANICAL PROVISIONS [FOR OSHPD 1, 2, 3 (surgical clinics only) & 4]
During periods of power outages emergency electrical power shall be provided for the following equipment:

316.1 (Does not apply to OSHPD 3.) *All heating equipment necessary to maintain a minimum temperature of 60ºF (15.6º) in patient areas which are not specified in Table 315.*

316.2 *All heating equipment necessary to maintain the minimum temperatures for sensitive areas as specified in Table 315.*

316.3 *Equipment necessary for humidification of the areas listed in Table 315.*

316.4 *All supply, return and exhaust fans required to maintain the positive and negative air balances as required in Table 4-A.*

316.5 *All control components and control systems necessary for the normal operation of equipment required to have emergency electrical power.*

Based on 9-Point Criteria: **6**

SUB-ITEM 12-3 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 15
HCD 01-04
Part 4
Chapter 12

SUB-ITEM 15-19

Section 1201.2.1.4.2.1 Mechanically Formed Tee Fittings

COMMENT #1
Richard D. Nelson, Committee Chairman
T-DRILL Industries, Inc.
1740 Corporate Drive
Norcross, GA 30093

Request that this item or reference provision be recommended: **Approved**

Requested is the adoption of the 2003 Uniform Plumbing Code Section 606.1.3 Mechanically Formed Tee Fittings and the 2003 Mechanical Code, Section 1201.2.1.4.2.1 Mechanically Formed Tee Fittings.
Criteria #1.

Reason:

Although researched, there has been no reason given for the lack of adoption of the above-mentioned method of installation into the 2001 and 2003 California Plumbing and Mechanical Codes.

This comment/Challenge is based on this method of installation (known as T-DRILL in some code listings) having been approved for use by the Sate of California since 1983 and every major municipality in the state since 1985(City of Los Angeles General Approval dates back to 1981). IAPMO Certificate of Listing, file No. 1935 was first issued in 1979. IAPMO Material and Property Standard - PS 85 - 95 were awarded in 1995. The ASTM designation for this method is F 2014-00. ASME/ANSI B31.9 - Building Services Piping also lists this method. Two hundred fifty California contractors currently own over eight hundred systems that mechanically form tee fittings. During the last twenty-four years these contractors have paid significant sums for systems that benefit building owners with fast track, structurally sound, lower cost copper tube installations.

Based on 9-Point Criteria: **3**

(Commenter "Reference Material" is located inside the front cover, after the Preface of this monograph)

SUB-ITEM 15-19 – Commission Action

A AA D FS

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(END OF ITEM)

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Part 5
California Plumbing Code

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ITEM 16
BSC 03-04
Part 5
Chapter 4 Plumbing Fixtures and Fixture Fittings

Section 413.1 Fixture Count

SUB-ITEM 16-3

COMMENT #1
Sheila Lee, Committee Chair
CALBO STATE CODE COMMITTEE
2215 21st Street
Sacramento, CA 95818

SUB-ITEM 16-3 Chapter 4 – Plumbing Fixtures and Fixture Fittings

Request that this clam or reference provision be recommended: **Approved As Amended**

Reason:

Chapter 4 - Plumbing Fixtures and Fixture Fittings

Model Code Adoption/Repeal: Repeal entire 2000 edition UPC Chapter 4 (Plumbing Fixtures), and adopt entire 2003 edition UPC Chapter 4 as amended.

(Amend) Section 413.0 Minimum Number of Required Fixtures

Section 413.1 Fixture Count ***[Not adopted]*** Plumbing fixtures shall be-provided for the type of building occupancy and In the minimum number shown in Table 4-1.

The re-adoption of Section 413.0 In Its entirety would subject designers and developers to excessive costs due to the required number of plumbing fixtures that are listed in Table 4-1. The occupant load used in this Table is based on the minimum exiting requirements which leads to Chapter 10A of the CBC. For fire life safety purpose, the exiting requirements (Table 10A) are based on the concept that the facility is fully occupied at any one time leading to the maximum number of occupants based on the applicable occupant load factor. We believe that utilizing exiting requirements as a base for determining the number of plumbing fixtures is flawed and yields an unreasonable excessive number of plumbing fixtures. In addition, Table 4-1 fails to address many uses such as mercantile, Laundromats. sports facilities, storage buildings, etc. Also, unlike Table 4-1, the number of plumbing fixtures in the Building Code is based on the specific occupancy group classifications rather than the description of the uses and therefore, it makes it easier to apply and enforce. The plumbing fixture count provisions contained in both the building and plumbing codes have been tried, and have created much difficulties, and confusion for both the design communities and the enforcement problem for local jurisdictions.

Based on 9-Point Criteria: **1**

SUB-ITEM 16-3 – Commission Action

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(END OF ITEM)

ITEM 16
BSC 03/04
Part 5
Chapter 6

SUB-ITEM 16-5

COMMENT #1
California Legislature

RE: Proposed Approval of PEX and PEX-AL-PEX

(Commenter "Reference Material" is located inside the front cover, after the Preface of this monograph)

As Chairs of the policy committees covering the areas of Environmental Quality, Housing and Community Development, Environmental Safety and Toxic Materials, Natural Resources, and Air and Water Quality, we are responsible for ensuring that state law adequately safeguards the health and safety of California citizens and also protects the California environment. We are concerned that the process being used for the recent proposal to approve the use of PEX and PEX-AL-PEX plastic drinking water pipe for statewide use may threaten the people and environment of California.

We understand that the Commission is currently reviewing regulations proposed by the Department of Housing and Community Development (HCD) that would amend the current California Plumbing Code (CPC) to permit the use of PEX and PEX-AL-PEX for potable water piping in all residential occupancies. In addition, the Commission and the Division of the State Architect (DSA) have proposed the adoption of regulations that would permit the use PEX-AL-PEX (but not PEX) for potable water piping in occupancies under their jurisdiction.

As far as we can determine, with regard to the possible approval of PEX and PEX-AL-PEX, the Commission, HCD and DSA have made no attempt to comply with -the California Environmental Quality Act (CEQA) despite the fact that approval of the use of these pipes has the potential to impact the environment and public health. Compliance with CEQA would seem to be essential, given the arguments made by the Commission in a recent case regarding approval of PEX, *Plastic Pipe and Fittings Association v. the California Building Standards Association, (2004) 124* Cal.App.4th 1390. There, the Commission argued that approval of PEX was a project subject to CEQA. The court held that compliance with CEQ A is required prior to the approval of PEX by the State. We have attached a copy of the case for your review. You will notice that on page 1415, the court finds that PEX may have significant impacts, thus triggering the requirement to prepare an Environmental Impact Report pursuant to CEQA.

In that case, the state regulatory agencies responsible for approving new building standards and materials unanimously decided that conducting a CEQA review before approving potentially hazardous new potable water piping was necessary to protect the health and safety of all Californians. The Court of Appeal in *Plastic Pipe and Fittings Assoc. v. California Building Standards* determined that the state agencies' prudent decision was legally correct after being challenged by the plastic pipe manufacturers.
Moreover, in the Commission's *2002* analysis of the nine criteria for adoption of building standards stated: "The public interest requires the deletion of authorization for the use of PEX until further exploration of the health and safety issues raised." There is no indication that environmental review or review of the impacts on public health and public safety (particularly with regard to impacts on fire-fighting) has occurred since that time.
We seek the Commission's commitment to undertake environmental review pursuant to CEQA prior to the approval of PEX or PEX-AL-PEX. We believe that the proposed approval without resolving the numerous concerns associated with these pipes is not only bad public policy, but is inconsistent with the requirements of CEQA. The Legislature has never taken action to exempt the approval of potentially hazardous new building materials from CEQA review.

Given the history of controversy regarding the approval of PEX and PEX-AL-PEX potable water piping, and given the numerous potential health, safety, and environmental concerns raised about the piping, we urge the Commission not to approve its use until an EIR has been prepared. This action would enable the state regulatory agencies to take necessary

steps and to properly inform the public and decision makers to ensure protection of all Californians and would avoid the cost and delay that would result from further litigation.

Alan Lowenthal
Chair, Senate Committee on Environmental Quality

Loni Hancock
Chair, Assembly Committee on Natural Resources

Gene Mullin
Chair, Assembly Committee on Housing and Community Development

Ira Ruskin
Chair, Assembly Committee on Environmental Safety and Toxic Materials

Fran Pavley
Chair, Assembly Select Committee on Air and Water Quality

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

ITEM 16
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Part 5
Chapter 6

SUB-ITEM 16-5

COMMENT #2

(Commenter "Reference Material" is located inside the front cover, after the Preface of this monograph)

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OF COUNSEL
LLOYD W. PELLMAN

July 30, 2005

Re: Proposed California Plumbing Code

Brown, Winfield & Canzoneri, Inc. represents the Plastic Pipe and Fittings Association ("PPFA"). PPFA challenges the proposed changes to the Uniform Plumbing Code by the Commission and agencies, insofar as they propose removal of PEX from the California Plumbing Code ("CPC")

A. The Holding in the Case*, Plastic Pipe Fittings Association v. California Building Standards Commission,* Does Not Require CEQA Review of PEX Prior To Adoption of the 2004 California Plumbing Code.

The holding in the Case, *Plastic Pipe Fittings Association v. California Building Standards Commission, et. al (2004) 124 Cal. App. 4th 1390* (the "Case") is based **only** on the facts before the Commission, and thus the Court, during the 2001 code adoption cycle.

This is obvious from the many statements in the opinion.

The Commission provided a final statement of reasons in April 2002 stating in pertinent part: `***At this time,*** the CBSC [Commission] feels it is obligated to give both the positive and negative comments and evidence equal credibility. it is ***unable at this time*** to conclude the negative comments concerning leachable products and permeation are unfounded. The CBSC has limited resources and the need to complete the triennial code adoption cycle has prevented the CBSC from addressing and investigating the issues raised regarding the PEX and the public interest in approving or not approving PEX.

Although the CBSC has not determined yet whether the claims of Mr. Cardozo are valid, the CBSC will not adopt PEX, ***at this time***, due to insufficient time remaining in its 2001 triennial code adoption cycle to adopt the 2000 UPC and to determine if this change in the model code is compliant with the laws of the State of California. Therefore, the CBSC does not believe the adoption of PEX would ... be in the public interest ***at this time.'*** (*Id*. at 1400, 1401.) (Emphasis added.)

* * *

The Commission and the Agencies argued in opposition that substantial evidence supported their conclusion that the ***information available to them was insufficient to overcome their concerns*** about potential problems with PEX; (*Id*. at 1402) (Emphasis added.)

* * *

The Commission's approval of building standards under the Building Standards Law is a quasi-legislative act of administrative rulemaking. (Citations omitted.) Judicial review of a quasi-legislative act in an ordinary mandamus proceeding (Code Civ. Proc., § 1085) is limited to determining whether the agency's action was arbitrary, capricious, entirely without evidentiary support, or procedurally unfair. (*Associated Builders & Contractors, Inc. v. San Francisco Airports Com.* (1999) 21 Cal.4th 352, 361 (87 Cal. Rptr. 2d 654, 981 P.2d 499].) ***This generally means that a court cannot disturb the agency's decision if substantial evidence in the administrative record supports the decision.*** *(Id.* at pp. 361, 374; *Western States Petroleum Assn, v. Superior Court* (1995) 9 Cal.4th 559, 571-574 (38 Cal. Rptr. ad 139, 888 P.2d 1268].) ***A court's review is limited to evidence in the administrative record.*** n5 *(Associated Builders, supra,* at p. 374; *Western States, supra,* at pp. 571, 579.) A court reviewing a quasi-legislative act cannot reweigh the evidence or substitute its own judgment for that of the agency. *(Shapell Industries, Inc. v. Governing Board* (1991) 1 Cal.App.4th 218, 230 [1 Cal. Rptr. 2d 818].) This deferential standard of review reflects `deference to the separation of

powers between the Legislature and the judiciary, to the legislative delegation of administrative authority to the agency, and to the presumed expertise of the agency within its scope of authority.' (Citations omitted.) (*Id*. at 1404.) (Emphasis added.)

* * *

Because our review is ***limited to the (2001) administrative record,*** we reject PPFA's attempt to impeach the decision by the Department of Housing and Community Development by reference to the department's initial statement of reasons dated July 2004 in connection with a code adoption cycle subsequent to the one here at issue. (Id. at 1407, fn.5) (Emphasis added.)

* * *

The Agencies and the Commission adopted and approved the 2000 Model Plumbing Code with the exception of certain provisions allowing the use of PEX. The Agencies' decision not to allow the use of PEX was based on their common conclusion that the use of PEX potentially could present an unacceptable danger to public health and safety and that ***the information in [that] administrative record was insufficient*** for them to assuage their concerns. The Commission agreed with the Agencies' conclusion and approved the adopted standards, including the exclusion of PEX, for the same reason.

We conclude that ***the evidence in the [2001] administratIve record supports the decision*** by the Commission and the Agencies. The-Reid Letter. . , (Id. at 1407) (Emphasis added.)

* * *

The question is not whether the evidence supports the conclusion that PEX is unsafe and unsound for plumbing uses; the Commission and the Agencies made no such finding. Rather,' the question is ***whether the [2001] evidence supports the conclusion*** that the use of PEX potentially may present an unreasonable risk of harm and that ***the information available to flee Commission and the Agencies was insufficient*** for them to determine whether the use of PEX actually would present an unreasonable risk of harm. We conclude that the Reid letter is substantial evidence , . . (Id. at 140-1408) (Emphasis added.)

Specifically regarding CEQA review, the court held that CBSC's decision to conduct a preliminary review under CEQA, was based **on the evidence produced during the 2001 code cycle of PEX's potential effects.**

PPFA contends the enactment of regulations allowing the use of PEX is not *a project* because the causal link between the enactment of regulations and a physical change in the environment is too remote. . . A project, however, includes an activity that `may cause ... a reasonably foreseeable indirect physical change in the environment.' (Pub. Resources Code. § 21065.) . . .We conclude that the regulations here at issue may have a reasonably foreseeable indirect environmental impact ***for the reasons expressed by Reid.*** *(Id. at 1413)* (Emphasis added.)

* * *

An agency must conduct a preliminary review to determine whether CEQA applies to a proposed activity. (Guidelines, § 15060. subd. (c); Association *for a Cleaner Environment v. Community College Dist.* (2004) 116 Cal.App.4th 6291 6,3,.6110 Cal. Rptr. 3d 560.) if the agency determines that the activity is a discretionary project that may result in a direct or reasonably foreseeable indirect physical change in the environment and that the activity is not exempt, the agency must either prepare an initial study or proceed directly to the preparation of an EIR *(Guidelines,* § § 15002, subd. (k), 15060. subds. (c) & (d), 15061, 15063, subd, (d); *Association for a Cleaner Environment, supra, at* pp. 639-640.) (*Id*. at 1414)

* * *

. . .An agency's decision whether to prepare an initial study is subject to judicial review under the abuse of discretion standard. (Pub. Resources Code. § 21168.5; *Association for a Cleaner Environment v. Yosemite Community College Dist. supra* 116 Cal App.4th at p. 636.) Abuse of discretion means the agency did not proceed in a manner required by law or there was no substantial evidence to support its decision. (Pub. Resources Code, § 21168.5.)

. . . Regardless of whether we construe the Commission's decision as a decision to conduct a preliminary review to determine whether an initial study was warranted or a decision to conduct an initial study, the abuse of discretion standard applies and our conclusion is the *same.* ***We conclude that substantial evidence (in the 2001 record] supports the Commission's decision. The Reid letter*** is substantial evidence. . . (*Id*. at 1415) (Emphasis added.)

Thus, the Court concluded that, **based on the 2001 administrative record,** substantial evidence supports the Commission's decision to conduct a CEQA preliminary review of PEX, because PEX may have a potential effect on the environment.

Nothing in the Court's decision requires that PEX must be reviewed under CEQA prior to approval of the 2004 CPC. Nowhere does the Court state that under this 2004 administrative record, the conclusions reached under the 2001 record apply or are necessarily relevant. Each administrative record must be reviewed an its own merits. Here, the Commission must review the 2004 record to determine if under the record in 2004 there is substantial evidence that PEX may have a potential effect on the environment.

If the evidence in the 2004 record shows that PEX has no potential environmental effects, no further CEQA review of PEX is required prior to its full inclusion in the 2004 California Plumbing Code (CPC).

B. If the Commission Determines There Is Substantial Evidence In The 2004 Administrative *Record* that PEX Poses No Potential Risks, The Commission Can Approve PEX Without Any Further CEQA Review.

The Commission has considerable discretion to determine whether or not to approve PEX. If the Commission's decision is supported by substantial evidence, the Court will not substitute its judgment for that of the Commission.

In deciding whether or not CEQA applies to the approval of PEX, the Commission must consider all of the evidence before it. In considering what, if any, environmental review is required, the lead agency must determine whether there is "substantial evidence in light of the **whole record**" before indicating the project may have a "significant effect on the environment." (See, e.g., Pub. Res. Code, § 21080, subds. (c) & (d), 21082.2, subds. (a) & (d), emphasis added; State CEQA Guidelines, § 15064(c).) Thus, if the Commission decides, **based oh the 2004 administrative record**, that no further review of PEX is required under CEQA, its decision will be sustained if supported by substantial evidence in the 2004 record.'
The Case addressed what constitutes substantial evidence.

Evidence is substantial if a reasonable trier of fact could conclude that the evidence is reasonable, credible, and of solid value. *(Wilmot v. Commission on Professional Competence* (1998) 64 Cal.App.4th 1130 1139 [75 Cal.Rptr. 2d 656].) The uncorroborated testimony of one witness can constitute substantial evidence, unless the testimony is inherently unreliable. (Evid. Code, § 411: *People v. Scott* (1978) 21 Cal.3d 284, 296 [145 Cal. Rptr. 876 578 P.2d 123].) (*Id*. at 1407.)

The Case holds that the decision not to do an initial study, is reviewed under the abuse of discretion standard. Abuse of discretion means the agency did not proceed in a manner required by law or there was no substantial evidence to support its decision. (*Id*. at 1415, citing Pub. Res. Code Section 21168.5.) The fair argument test does not apply.

If the Commission again refuses to approve PEX without additional CEQA review, it must do so based solely on all the evidence before the Commission, which is the evidence in the 2004 administrative record, and not because of the holding in the Case, which is solely based on the 2001 record.

C. Since 2001, New Evidence In The 2004 Administrative Record Shows That PEX Poses No Potential Risks.

PPFA in thus submission incorporates by reference the 2001 record documents submitted in support of the inclusion of PEX?

The permeation of PEX from termiticides by external exposure from the meter to the home as claimed by Reid, is irrelevant. The Commission and Agencies do not have jurisdiction outside of structures. The use of PEX piping outside of structures has already been approved by DHS in Section 64644.

Department of Housing and Community Development ("HCD") confirmed in its Final Statement of Reasons in the 2001 record, that PEX is already approved *statewide* for outdoor use:

PEX is currently approved statewide for use outside residential structures under the authority of the California Water Works Standards in Title 22 of the California Code of Regulations. (See Approval of plastic pipe for use as connections to residential structures under section 64644 of Title 22). This section provides for the approval of any plastic pipe material that has been tested and certified as suitable for use in potable water piping systems by the National Sanitation Foundation Testing Laboratory (NSF International). NSF International has certified PEX, copper and other materials for use in potable water piping. (R 2035.)

In addition, HCD's 2004 Initial Statement of Reasons, states there is no evidence that PEX is unsafe. Since the 2001 Cycle, HCD has further studied PEX, and found no evidence to support Reid's claims.

The-Department is proposing the adoption of UPC Section 604.1 which includes PEX as an approved material. PEX was not proposed for adoption in the 2001 CPC because the Department determined at that time that it did not have sufficient time to evaluate the consequences of the use of the material, including environmental factors, due to the time constraints imposed in the previous triennial code adoption process. ***Since the adoption of the 2001 CPC by the California Building Standards Commission, the Department finalized the review of this product and has determined that there was no basis in the record to exclude this IAPMO approved material.*** (HCD's 2004 Initial Statement of Reasons at 3-243.) (Emphasis added.)

The results of the further study of PEX by HCD, as well as other documents received from HCD, have *been* submitted to be included as part of the 2004 record.

Finally, there is no factual basis for the claim by Reid that PEX pipes may rupture and create openings in the event of a fire.

CPC § 604.1 already approves several types of plastic pipe, CPVC, PE, PVC, PEX for many uses, where the susceptibility to fire is arguably a concern, thereby clearly demonstrating that the Commission has already determined this is not a sufficient basis to withdraw a product approved in the model code. The CPC also addresses the "poking through" issue by requiring installation of fire-stopping devices where either metallic or plastic pipe is used. (CPC §313.7.) In the 2003 Uniform Plumbing Code, chapter 15 covers fire stopping for all building materials.

Significantly, in 2001 and again in 2004, the State Fire Marshal (the state official who determines whether building standards pose fire safety concerns) makes no negative comments or findings regarding PEX.

The above evidence, in support of the inclusion of PEX in the 2004 CPC, is substantial, and clearly shows that PEX has no potential environmental effects.

If the Commission again, after review of the 2004 administrative record, orders a CEQA review of only PEX, such a discriminatory rejection will no doubt again be before the Courts.

For the reasons stated above, the Commission should approve without exception the model code provision allowing PEX.

Sincerely,

Brant H. Dveirin

Based on 9-Point Criteria: **Not Specified**

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[2] 2001 record cites are delineated herein by "R"and then the page number, e.g., R 2035.

(END OF ITEM)

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COMMENT #3
Richard Drury
(8-1-05 Public Hearing Comment)

I'm a lawyer with the law firm Adams, Broadwell, Joseph and Cardozo, and I'm representing the Coalition for Safe Building Materials. I'm also a chemist, and I also sit on the board of Communities for a Better Environment, which is one of the members of the Coalition for Save Building Materials. Coalition members include the Sierra Club, who you just heard from, the Planning and Conservation League, Communities for a Better Environment, the Consumer Federation of California, the Center for Environmental Health, California Professional Firefighters Association, and the California Pipe Trades Council.

This, these organizations collectively represent literally millions of Californians who are concerned about health concerns and environmental concerns related to -- plastic pipe and CPVC plastic pipe, which the state is now proposing to authorize the use for carrying drinking water. And we're advocating that prior to any decision on whether to allow these, these materials, they ought to be studied thoroughly under the California Environmental Quality Act to determine whether they do have adverse environmental impacts, to determine what mitigation measures could be implemented to reduce those impacts, and also to study the full range of alternative piping materials to determine the most environmentally preferable pipe materials for use to safeguard the health of Californians and the well-being of the environment.

HCD is proposing to allow the use of both PEX plastic pipe, and PEX is cross and linked polyethylene pipe, as well as PEX AL-PEX, which is basically two layers of, of PEX sandwiched around a sheath of aluminum. Now, I'll call that PEX Aluminum for shorthand. DSA and the California Building Standards Commission are proposing to allow the use of PEX Aluminum, but not PEX. We're concerned about both of these, these materials for a variety of factual reasons that I'll go into.

Both proposals fly in the face of a very recent California Court of Appeal decision called Plastic Pipe and Fittings Association versus California Building Standards Commission. That was a six-month, that's a six-month old published decision. I'm quite familiar with that case because I argued it at the Court of Appeal. In that case, the Court of Appeal held that because of grave concerns and environmental hazards posed by PEX Plastic pipe, CEQA review was required as a matter of law prior to the approval of those products. Today, the agencies are flaunting that decision and, and acting in, in what is tantamount to contempt of court by proposing to allow the use of those materials with absolutely no CEQA review.

The Court of Appeal noted, and I quote from the decision, because it is so recent and it, and it concerned these very agencies and this exact pipe material. The court stated, quote,

"There was credible evidence raising grave concerns about the potential hazards posed by the use of PEX, including the potential for, one, chemical leaking of substances, including MTBE, from the pipes. Two, permeation of the pipes by toxic substances contained in the surrounding soil and groundwater. Three, mechanical failure of the pipes. Four, rupturing of the pipes when exposed to high heat, which may create openings that could contribute to the spread of fire". End quote.

That's the Court of Appeal holding that for those reasons, CEQA -- CEQA review was required by the state of California prior to the approval. Now, in what is tantamount to contempt of court, HCD, CBSC and DSA are all defying the order of the court and barreling forward with the approval of PEX and PEX-Aluminum with absolutely no CEQA review whatsoever, despite even more overwhelming evidence. Today, we present to these agencies and, and to you, our detailed comment letter here in that box, which includes not just our legal comments, which should be significant in the light of that recent decision, but also extensive expert testimony from world-renowned experts, some of the, the leading experts literally in the world on plastic pipe materials, and in particular, on the problems related to PEX.

Also, under, under the doctrine of collateral estoppel, since these precise legal issues have already been litigated and finally resolved, the collateral estoppel precludes the parties from re-litigating the issues that have been decided.

So what's really going on here? Nothing has changed with PEX. The material is the same as it was six months ago. Nothing has changed with the environmental impacts of the material. Nothing has changed with the law. CEQA is still CEQA. It hasn't been amended, it hasn't, there's no exemption for PEX or plastic pipe materials, or for building materials. Nothing's changed with the facts. Nothing's changed with the, the law. The only thing that has changed here is the politics.

Now Lucetta Dunn (phonetic), who was the vice-president of the California Building Industry Association at the time of that lawsuit, and she -- well, the CBIA filed a brief opposing the application of CEQA to plastic pipe materials. Lucetta Dunn is now not the head of the CBIA. Now, she's the head of HCD, the Director of HCD. And so not only do you have a situation of the fox guarding the henhouse, this is the fox running the henhouse. And that's the only thing that is changed here. The facts are the The law is the same. Luckily, politics doesn't change the law. And if the law required CEQA review of PEX six months ago, the law still requires CEQA review of PEX today, irrespective of changes in the political winds.

Now, I'd like to analyze here what the experts say about PEX. We have filed, as you see in that box, extensive comments from Dr. Robert Clerk (phonetic), who has a Ph.D. in material science and engineering from the University of California, Berkeley. He has been recognized by many courts as a leading expert in the world on plastic pipe material and on PEX, in particular. We've also filed expert comments from Thomas Reed and Associates. Thomas Reed has twice, at least twice been recognized by the California Courts of Appeal as an expert on plastic pipe material, including, in that six-month old PPFA decision. They state that PEX raises very serious environmental and public health concerns.

First, I'd like to talk about MTBE. MTBE is a topic with which I'm intimately familiar. I was lead counsel in the first lawsuit brought by Communities for a Better Environment against 14 oil companies that ultimately resulted in banning MTBE from the state of California because it was contaminated -- contaminating drinking water supplies across the state. That case led to the clean-up of about 2,000 MTBE contaminated drinking water sites.

Now, the evidence is clear that PEX, certain forms of PEX, in fact, some of the most common types of PEX, leach MTBE directly from the pipe into the drinking water. According to studies, including Norwegian studies, studies that have been peer reviewed, and studies even done by the National Sanitation Foundation, have shown that PEX can leach MTBE directly into drinking water at levels of up to 47 parts per billion. Now, what does that mean? The State Office of Environmental Health Hazard Assessment has set up health-based maximum contaminant levels of 13 parts per billion. In other words, PEX leaches MTBE into drinking water at levels up to three times, over three times the health-based standard in the state of California.

California has also set a taste and odor threshold of five parts billion. In other words, PEX leaches MTBE into drinking water at levels almost ten times above California's officially set taste and odor threshold. This is particularly troubling, because OSHPD, one of the agencies that, involved in this decision-making process, has found that MTBE is, quote, a known human carcinogen. USEPA has recently released studies concluding that MTBE is also a probable human carcinogen.

Having a cancer-causing substance leach directly into drinking water is really quite ironic when the state went to such great lengths to try to protect our drinking water from MTBE by banning it from gasoline. Now we're going to allow that same drinking water to be carried through pipes that can leach the MTBE directly into the drinking water at the source where most people are going to be exposed to it, namely, the tap.

Second issue. Permeation of the pipe. PEX has been shown to allow, because of its, its molecular structure it is quote porous to low molecular weight compounds. For that reason, compounds such as Benzene, which is a known human carcinogen, some pesticides, especially termite pesticides, have been found to leak directly through PEX plastic pipe into drinking water. Now, why would this be a problem? PEX is often laid through soil. That soil may be contaminated through the storage, underground storage tanks that may have leaked.

Also, soil underneath homes is often treated with termite pesticides. Termite pesticides are often blown into walls around drinking water pipes, because that's where the wood gets wet from condensation. And so oftentimes, the, the pipe can come directly into contact with pesticides, termite pesticides, other toxic chemicals. In Arizona, a lawsuit was brought by homeowners in a complex that was plumbed with PEX plastic pipe. The water in those pipes was found to be contaminated with MTBE, also with

benzene compounds, at extremely high levels. Some of the residents of that compound -- complex had to be evacuated due to chemical contamination.

Our expert, Thomas Reed, has testified that Benzene can leach through PEX plastic pipe. Even if the levels are only 0.2 percent in soil, that Benzene, in one week's time, can reach levels of 100 parts per billion in the drinking water inside the pipe. To put that into perspective, the state health level for Benzene maximum contaminant level is one part per, per billion. So we're talking about in one week's time, the level of Benzene in drinking water can reach 100 times above the state health-based standard, due to permeation of the pipe.

Third issue. Degradation. PEX, like most plastics, is subject to degradation when exposed to oxidizing agents such as UV radiation and sunlight, chlorine. Anyone who's put a child's plastic toy in the sun for a couple of weeks, you know that the, the plastic becomes brittle, it becomes hard, it becomes weak. The same is true with plastic pipe materials. As a result of this, they're treated with stabilizers, anti-oxidants to prevent the degradation. However, studies have shown that if PEX plastic pipe is exposed to the sunlight for even one week, the sunlight can reduce the PEX life -- life span by 50 percent. Also, chlorine at over four parts per million can degrade PEX quite dramatically.

Now, it's not uncommon for levels of chlorine in the United States to reach up to five parts per million. That's obviously above the four part per million threshold. If the PEX degrades, it will rupture, it will cause catastrophic failures, it can cause black mold to develop in the walls around the pipes, and ultimately require re-plumbing of the home. This, of course, would be very expensive.

In fact, these are not hypothetical situations. In Washington state right now, there are a number of lawsuits against PEX, PEX manufacturers, because of premature failure of the pipe. One of those is being -- is up for class certification now. There have been similar reports from Canada of catastrophic failures of PEX plastic pipe.

Third issue. Bio-film formation. If you've ever looked inside of a pipe that's been used for a while, you'll know that there can be a, a film build-up inside the pipe. That's called a bio-film. Inside of a, say, a copper pipe, the bio- film doesn't create a great problem because copper is a biocide. It kills bacteria. However, PEX is not a biocide. And, in fact, there are very recent studies from the, the equivalent of the EPA in The Netherlands, and other peer review studies that have found very high concentrations of legionella (phonetic) bacteria in that PEX bio-film, as well as high concentrations of pseudomona (phonetic). Legionella, of course, is the bacteria that causes Legionnaire's Disease. Pseudomona, pseudomona causes a, a variety of infections including urinary tract infections, respiratory infections, dermatitis, soft tissue infections, bone and joint infections, gastro-intestinal infections, just to name a few. It's a very problematic bacteria.

This is a recent problem that's been identified, but it's a serious problem with PEX plastic pipe. It should be studied under CEQA.

Next, solid waste disposal. Only a few months ago the San Francisco Department of Environmental Health released a study concluding that PEX is one of the most problematic types of pipe materials because it is virtually impossible to recycle. Because of the cross-leaking process, it's almost impossible to break down PEX and to recycle it. Therefore, using PEX will result ultimately in a significant solid waste disposal problem, and for that reason the San Francisco Department of the Environment, at least, is recommending against its use. By contrast, many other pipe materials, especially copper, are eminently recyclable. Steel is recyclable. Many other plastic materials, even, are recyclable.

Finally, the California Professional Firefighters Association has been concerned about fire hazards. When plastics, such as PEX, burn in fires, it creates toxic smoke. That's a hazard to firefighters. Also, when the pipes rupture, it creates gaps in the, in the studs and in the walls that can allow a fire to spread very rapidly through a structure.

All of these issues are serious environmental and public health issues that must be studied under the California Environmental Quality Act. That would allow a reasonable orderly process to analyze each of these risks to determine if there are reasonable mitigation measures that could be implemented to reduce these risks, and also to study alternatives to the PEX and CPVC so that the state can identify the most environmentally preferable alternative
pipe material to safeguard the health of the environment and the, the health of Californians.

Those are the facts. The facts haven't changed in the six months since the publication of the PPFA versus Building Standards Commission case. We urge this body to reject these proposals, to at least table them until thorough environmental

review can happen under the California Environmental Quality Act. To do otherwise would be arbitrary and capricious, which would violate both the APA as, as well as the Health and Safety Code provisions that this agency works under.

It is, as a matter of law, arbitrary and capricious to take action that would violate the law, that would violate a direct order of the California Court of Appeal, that would violate the principles of collateral estoppel, and it would certainly be against the public interest. The public interest has been well served by the application of the California Environmental Quality Act to a wide variety of pipe materials to save the health and safety of the residents of the state of California and the environment has been well-served by the application of CEQA, and we urge this body to apply CEQA and to comply with the law in this instance.

Thank you.

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

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SUB-ITEM 16-5

COMMENT #4
Robert Friedlander
Construction Code Consultants
Representing Vanguard Piping Systems and WIRSBO for north, North America

(8-1-05 Public Hearing Comment)

Wow. Where do I start. Well, let's start with the misconceptions. First of all, the Court of Appeals did not order an EIR on PEX. One just needs to read the decision of the court, and what it said was with the record that was before the commission in 2001, the commission was within its discretion not to approve PEX at that time. Simple. And ordering an EIR, and quite frankly they couldn't order an EIR because we're living in a world here of taking things out of context.

To comply with CEQA, the first thing an agency has to do is a preliminary review. After they've done the preliminary review, then they know whether or not they need to do an initial study. After doing an initial study, then the decision is whether to do a negative declaration or to go ahead and do a full-blown EIR. The opponents of plastic pipe want to just gloss over the procedural requirements of CEQA and go directly to an EIR. No need to have a grand jury, no need to have an indictment, no need to have a trial, let's just execute him.

The manufacturers of PEX have seen what happens when plastic pipe voluntarily participates in an environmental impact report. It started in the early eighties, went on for nine years. Report never got certified. CPVC, through HCD, went through a

separate environmental impact report on CPVC only. HCD certified it, the opponents took them to court, an out of court settlement was had. That's unfortunate, because it would've been nice if this issue had gotten settled.

Our position is really very very simple. If the commission and the agencies are going to do an environmental review, and that's the key, we're not even at the EIR stage, an environmental review of PEX only, that just doesn't work, because from a reading of the appellate court decision, one can easily say that the appellate courts have (inaudible) codes as a project. And if something is a project, then the agencies and the commission have to do an environmental review. And we went over the steps of an environmental review.

It took eight years for PEX to get into the Uniform Plumbing Code. Four years and nine days ago, in this very room, the whole issue of PEX and so-called environmental concerns and mechanical property concerns and areas of the pipe, and God only knows what else a product may do to the world, were brought up. They were brought up in a report that was filed by an expert witness who the opposition likes to point out has been the only expert witness on plastic pipe in two different lawsuits. That may be true. But the times have changed.

We have done and have commissioned studies to independently review PEX. Not to say what we want them to say, but to independently review PEX. And we are submitting those studies. Some of the things in it we don't like.

That's life in the big city. But what it does do is it puts into context all the lists of things that were taken out of context. Talking about MTBE, that issue is settled. Talking about legionella (phonetic), that issue is settled. It is very very important for the commission and the agencies to look at the total documents and not accept what is being taken out of, out of context by the proponents -- or the opponents, of plastic pipe.

There was one thing that was suggested at the end of Mr. Drury's comments that I thought was just beyond laughable. Table these proposals. Let's move forward with the code, let's get it printed, so what if the citizens of California don't get to use these products in a proper manner because they say that there's health and safety effects. The only reason they want to table these proposals is because they also happen to represent (inaudible). And there's nothing wrong in that. They're good attorneys, probably some of the best attorneys I've seen in a long time.

They're representing two clients. One doesn't want plastic pipe, the other reviewed plastic pipe, lists plastic pipe, says that it is good for its intended purpose, has a listing agency which is recognized by the state as an acceptable listing agency, lists NSF, ANSI NSF 61, which is the only standard out there that addresses plasticity leaching and permeation, but also needs to (inaudible).

So here we have counsel with a conflict of interest, and way they work through their conflicts of interest is they say stick it to plastic pipe, but my other client, they need to sell code books. That's great. That's their prerogative. They ask for an environmental review so you can come up with mitigating measures and try to figure out is there anything else that can be used besides plastic pipe, to overcome the proven problems that copper pipe has in California.

Copper, copper pipe is a good product. PEX is a good product. CPVC is a good product. Should every good product be used in every single application? No. There's a thing called choice in this country. Plumbers don't put their businesses on the line unless they feel confident in their product, and that is (inaudible). There were just so many bizarre things that were said there is no way to cover them all.

The firefighters. They're concerned that when there's a fire PEX will melt, and it'll pose a void in the wall. Well, first of all, (inaudible) is not a requirement per the building code and per the plumbing code. Last time, in 2002, the plumbing code had an appendix addressing fire stopping only on DWD pipe. In the 2003 edition of the plumbing code it has chapter 15, which addresses fire stopping for all materials, be it metallic or non-metallic, (inaudible) and for probable water applications.

I have absolutely no idea what the San Francisco study is that they're talking about. Legionella, they're going to show you one report that was done. They are not going to show a follow-up report that was done with 300 additional days, which showed there was absolutely no difference in the growth of legionella in copper and in plastic pipe. We happen to have that. There is no evidence in the record that PEX can cause harm. The manufacturers are saying PEX is safe. Yes, we are. IAPMO is saying that PEX is safe through their listing service. NSF is saying PEX is safe through their listing service. So it's not just the manufacturers.

Which then brings us to where we are today. As I said before, four years ago this all started. In the last four years, no state agency except HCD has done the review on PEX that they said they needed to do. They said the last time around we didn't

have enough time. I won't use any initials to, to classify what was. But the Building Standards Commission hasn't done a review on PEX in the last four years. Understandable. The commission has a very limited staff, they don't have facilities to do it. OSHPD didn't do a study. DSA didn't do a study. The only agency that did a study, did a review, which was the preliminary review in accordance with CEQA, was HCD.

It would be to the benefit and the advantage of the citizens of California for HCD to be considered the lead agency on this situation, because they did their job. They have the facilities to do their job, and they did do their job. The other agencies obviously weren't in a position to do their job. So if you want a standard of due diligence, the standard of due diligence was done by HCD.

There is a letter that came from members of the legislature, again jumping to the conclusion that the court ordered an EIR, which it didn't, and they said they want a review to be done of PEX. HCD did a review of PEX. You don't have to study under CEQA, because HCD has taken care of that. The court decision doesn't say anything anywhere near what the appellant said, and legal counsel for the departments will verify that.

The court of appeals, according to Mr. Drury, said what Mr. Reed said. They did. They quoted what Mr. Reed said. And again, that's all in context of what there was in the record in 2001. The record in 2004 is very different. We were lulled in 2001 into thinking there was no problem. PEX was going to be approved in the code. We were even assured it by one of the commission members who's no longer a member of the commission. So we didn't submit anything in support of a product that had been approved by the (inaudible) code.

That was a mistake, and we're not making that mistake this time. The appellants keep on talking about problems and lawsuits which don't exist, have no specificity to them. They talk about the fact that we cannot litigate again because we litigated once before. Watch us. But probably the most offensive thing, aside from all the flagrant twisting and turning of what the study said and what the court said was this personal attack on the director of HCD. There's no room in these discussions for something like that. It just doesn't happen. We've been concerned with the conduct of people in previous administrations. We didn't personally attack them. It's just not right.

I think the thing that the opponent likes to do is take PEX and CPVC, talk about things with one and imply that it has to do with the other. Make it crystal clear. PEX does not get joined with solvent cements. So all these air quality issues, all these solvent cement issues that they like to lump in and talk about at the same time with PEX, have absolutely nothing to do with PEX whatsoever.

They talked about a lawsuit in Arizona with permeation. Well, the lawsuit involved one house, and it has been resolved. But it was implied that it involved a whole entire development. That's not true. The record shows that it's not true. So now we get back to one of our old-time favorites, plastic toys. You put them out in the yard and they degrade. You put them in a swimming pool and they degrade. There's a big difference between plastic toys and PEX. There's a big difference between plastic toys and an artificial heart that gets put into someone made out of plastic pipe, or plastic materials. There's a big difference between plastic toys and the tubing on a dialysis machine which is made out of plastic. And the dialysis industry prefers the use of PEX because of its properties, and it will withstand the temperature and the water conditions (inaudible).

The opponents of plastic pipe say you know what, okay. (Inaudible), you can use plastic pipe, because you've got to use something otherwise there's no land, no home growth going on in those areas. That's such a bizarre position. I have no dog in the fight over CPVC. But it was bizarre that there be a condition in there that before CPVC could be installed the building official had to make a determination that copper pipe was failing. So in the worst case scenario, you could use plastic pipe. That's crazy. That's absolutely crazy. It makes no sense.

Now, excuse me while I (inaudible). I am sure that the Coalition for Safe Building Materials, which is made up of the traditional opponents of plastic pipe, are really very concerned about drinking water out of PEX, because it's going to leach all these bad things, and it's going to get permeated. Well, I'll put them on notice today, you'd better stop drinking water out of a plastic water bottle, because science has proven that this plastic water bottle will leach and is more subject to permeation than PEX pipe. So if you're concerned about PEX, stop drinking out of water bottles.

I want to just point out a couple of things in the (inaudible). Item 16-5, from the Building Standards Commission. Until resolution of legal actions and appeal processes currently occurs related to the use of PEX, BSC staff must maintain the existing amendment in chapter 6 of the 2003 California Plumbing Code. I have no earthly idea what that means. Does it mean if there's a

lawsuit going on you can't do the right thing? You can't do the research, you can't do the evaluation, you can't rely on a sister agency with the facilities? The lawsuit's over. That's well established. We didn't file to go to the Supreme Court.

OSHPD. Good old OSHPD. They say they don't want PEX to be used because of the extreme temperature conditions in the facilities where temperatures could exceed 180 degrees. Well, the code with the OSHPD amendment doesn't allow the temperatures to exceed 180 degrees. Everything in OSHPD's rationale for not approving PEX is not true, and we challenge it.

We go to 19-5, DSA. I've been known to get angry, and I've been known to lose my temper, and I've been known to get really, really furious. This is one of those times. 19.5, I'm going to read into the record what the monograph says. DSA concurred with the CAC, which is the Code Advisory Council, recommendations supported by the public comments to withdraw the proposed new amendment for Section 1604-13, 13-1, 13-2. The CAC also recommended DSA remove their existing amendment not adopting PEX for applications under the authority of DSA as, as 601.1 -- 604.1, and 604.11. Okay.

Further comment was made prior to the Code Advisory Committee. CSA reviewed it -- I mean, DSA reviewed it, and they said you know what, they're right. So they went to CAC and they said we'd like to amend the proposal to allow the use of PEX. Now, here's the fun part out of the monograph. However, the motion made at the CAC meeting was later considered out of order. The committee has a motion. They vote on something. And somehow or another, mysteriously, later it's considered out of order. That's amazing. That is just absolutely amazing.

I'm almost done so we all can go have lunch. We get to the Department of Housing and Community Development. Again, the only agency to do its job and to do a review over the past four years. Now, I realize I represent manufacturers, and a lot of people think that the only thing a manufacturer cares about is making money. That's part of it. But we also care about being treated fairly and having a level playing field. There is no reason why in the last four years other agencies besides HCD could not have done their review.

But the important thing for everybody to remember out of the monograph, for HCD, it says, since the adoption of the 2001 California Plumbing Code by the California Building Standards Commission, the department finalized the review of this product and has determined that there was no basis in the record to exclude this IAPMO approved material. The non-adoption of this amendment will remove the conflict between 604.1 and 604.11 regarding the use of PEX as an approved material.

So, you've got one agency that did its job. We ask that you utilize the work that they have done. You've got PEX that is in the California Plumbing Code being installed all over the state in accordance with the California Plumbing Code, because the code allows PEX to be used in high-rise buildings, daycare centers, private schools, movie theaters, there's a long list.

My question to the opponents of plastic pipe is if it's okay for their children to drink water from PEX, why isn't it okay for them? This is just absolutely ridiculous. If CEQA was meant to be used for products instead of projects, everything would've changed a long time ago, because if CEQA was meant for products, for the last 33 years the state agencies would be doing their preliminary review and enforcing the requirements of the code. There is a tremendous volume of information in the record about other piping materials and what effects they may or may not have on the health and safety and on the environment.

We ask the Building Standards Commission and petition all the state agencies for any information that they have on any product used in the plumbing code, and how any product used in any code to provide them with the information that they have so the commission can make its determination. Because rest assured, one thing that the appellate court did say is that you can't expand your review. The state agencies all filed petitions to the appellate court, well, the state supreme court, asking for the opinion to be de-published. And the reason for asking for the opinion to be de-published is a concern that it would be twisted and turned and misquoted and abused the way it has been here today.

Thank you.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 16-5 – Commission Action

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(END OF ITEM)

ITEM 16
BSC 03-04
Part 5
Chapter 6

SUB-ITEM 16-5

COMMENT #5
Robert Friedlander
Construction Code Consultants
Representing Vanguard Piping Systems and WIRSBO for north, North America

(Commenter "Reference Material" is located inside the front cover, after the Preface of this monograph)

(July 31, 2005 letter)

Re: Adoption of the 2003 UPC as the California Plumbing Code

Dear Mr. Morrison:

Construction Code Consultants represents Vanguard Piping Systems and Uponor Wirsbo. We challenge the proposed changes to the 2003 Uniform Plumbing Code ("UPC") by the Commission and agencies with the exception of the Department of Housing and Community Development, insofar as they propose removal of PEX and PEX-AL-PEX from the 2004 California Plumbing Code ("CPC").

Once again politics' has reared its ugly head in adoption of the UPC as the CPC. The Commission has received a letter from the Chairs of the policy committees covering the areas of Environmental Quality, stating "You will notice that on page 1415, the court finds that PEX may have significant impacts, thus triggering the requirements to prepare an Environmental Impact Report pursuant to CEQA". Unfortunately this statement misconstrues the Courts ruling. In fact, the Court stated, "Regardless of whether we construe the Commission's decision as a decision to conduct a preliminary review to determine whether an initial study was warranted or a decision to conduct an initial study, the abuse of discretion standard applies and our conclusion is the same." It is of utmost importance for the Commission to remember that the ruling of the Court dealt only with the record that was before them for the 2001 adoption cycle and that the ruling of the Court did not require an EIR. The Commission now has a new record for the 2004 cycle that resolves the unanswered questions they and agencies may have had during that previous adoption cycle.

Additionally, in their letter the Chairs state, "Given the history of controversy regarding the approval of PEX and PEX-AI-PEX potable water piping, and given the numerous potential health, safety, and environmental concerns raised about the piping, we urge the Commission not to approve its use until and EIR has been prepared." The only controversy that I am able to see is the continued use of CEQA as a weapon of delay in holding back the use of plastic pipe in California. And there are no (0)

health, safety, etc. concerns backed by anything other the broad brushed speculative and non scientific statements of those who have opposed the use of any plastic pipe no matter whether it uses solvent cement or mechanical joints for its connection system.

Recently a press release was issued by those who oppose plastic pipe titled "Schwarzenegger Administration Defies Court Order. This again is a far fetched reach as to what the Court found, Other submissions addressed to the Commission lay out exactly what the Court found, and, the only thing that the Court ordered was reversal of the lower Court decision that the Commission abused its discretion.

The press release also stated, ". . . the administration is likely to illegally give the plastic pipes a green light without the required testing". Again, the use of the word "illegally" is reaching for something that is beyond anything found or ordered by the Court. Since the 2001 adoption cycle HCD has studied PEX and has found, "Since the adoption of the 2001 CPC by the California Building Standards Commission, the Department finalized the review of this product [PEX] and has determined that there was no basis in the record to exclude this IAPMO approved material." The review which the Chairs and the opponents of plastic pipe are asking for has been done by HCD. The major problem with the review from their stand point is they do not like the results after HCD reviewed the unfounded allegations about the supposed health and safety effects of the use of PEX.

In a report submitted concurrently by Dr. Michael Hoffmann, Reid's conclusions in the 2001 record are completely refuted. Dr. Hoffmann's study "Analysis of PEX and Drinking Water Supplies relative to the UPC of California", standing alone, is inherently reliable, credible, and is substantial evidence that PEX is safe and fully qualifies for inclusion in the 2004 CPC. Dr. Hoffmann's qualifications are impeccable and are attached hereto and to his extensive Report. Dr. Hoffmann is the Dean of Graduate Studies and is a Professor of Engineering Science and Environmental Chemistry at California Institute of Technology. Dr. Hoffmann is a full professor and not a professional witness. He has done his own independent analysis of Reid's conclusions and of writings in the scientific community . His professional standing, quantity of data, solid evidence, and tried conclusions, render Reid's arguments moot.

Dr. Hoffmann shows that Reid's conclusions in his 2001 letter are wrong and in fact not supported by any reasonable data. Dr. Hoffmann shows that PEX has been heavily studied and is shown to be very safe. Any components that may be released from PEX are minimal and below established maximum contaminant levels or MCL's, and PEX is therefore safe to use. This confirms the point that has been hammered home during the past four years as to the critical importance of ANSI/NSF 61 listings as required by the UPC for all potable water piping materials. Plastic drinking bottles, to which the public has much greater exposure, release the same components, and also at minimal and below any established risk levels, and have been determined to be very safe.

Dr. Hoffmann shows that PEX's uses of anti-oxidants in the manufacturing process, increases its durability, and that it would take hundreds of years for the chemicals in termiticides, to permeate through the walls of PEX pipe.

During the 2001 cycle, it was argued that CEQA review of only PEX was an abuse of discretion. We did not sue the Commission on that basis, and the court therefore did not directly address the issue in the Case. The Court, however, stated:

PPFA contends the Commission and the Agencies improperly split the project by deciding to apply CEQA only with respect to the proposed adoption by the Agencies of building standards allowing the use of PEX and not with respect to other agencies' adoption of building standards allowing the use of PEX or with respect to other plumbing materials. ***This is not a valid argument to forego environmental* review. *Rather, this is an argument to broaden the scope of the review.*** PPFA did not timely petition for a writ of mandate challenging the Commission's decision to approve other agencies' adoption of building standards allowing the use of PEX or the Commission's approval of building standards allowing the use of other plumbing materials, and therefore cannot challenge the absence of environmental review of those decisions. (Pub. Resources Code. *§§* 21167. subd. a .) In any event, ***the decision to conduct CEQA review does not foreclose the possibility of expanding the scope of any ensuing environmental analysis to encompass a larger project,*** if appropriate. *(Id.* at 1415.) (Emphasis added.)

The clear import of the Court's language is an invitation to the Commission to expand CEQA review to include all building standards in the proposed codes. It is highly probable that had we sued the Commission on this basis, the Court would have required CEQA review of all building standards in the proposed codes..

Thus, the discretionary decision now before the Commission is the approval of all building standards in all the proposed codes, the continuance of the so-called status quo, and not just the approval of PEX in the CPC. The Commission must do a preliminary review under CEQA of all the standards in all the proposed codes. The Commission and agencies are making a discretionary decision to continue the approval of the status quo which is also subject to a preliminary review under CEQA. As

quoted above, the Case held that an agency must conduct a preliminary review under CEQA to determine whether CEQA applies to a proposed activity. If the agency determines that the activity is a discretionary project that may result in a direct or reasonably foreseeable indirect physical change in the environment, the agency must either prepare an initial study or proceed directly to the preparation of an EIR. *(Id.* at 1414.)

The Case held that approval of regulations by the Commission is a discretionary project under CEQA. (Id. at 1412.)

It is undisputed that the "proposed activity" now before the Commission is the adoption of regulations approving all the proposed codes. The only question remaining for the Commission is whether there is substantial evidence in the record that any product, PEX, copper pipes, or any other product, may have a potential effect on the environment. The Case could not be clearer that the Commission cannot limit its CEQA preliminary review to only PEX.

The situation here is no different than a city's periodic adoption of a new general plan, for which CEQA review of the entire new general plan is required, regardless of similarities to the previous plan. (See e.g. *Environmental Planning & Info. Council v. County of El Dorado* (1982) 131 Cal.App.3d 350 [EIR analyzing new general plan must compare proposed plan to existing environmental conditions, not just the existing plan.] see also Kostka and Zischke, *Practice Under the California Environmental Quality Act, §§* 11.22, 20.3.)

Simply stated, the argument that certain products in previous codes are "already part of the status quo," does not, as a matter of law and common sense, bar environmental review of products prior to their continued use where there is substantial evidence of potential environmental effects.

I ask the Commission to request, and review from all State Agencies involved in the adoption of the California Plumbing Code, any scientific information that they may have in their possession pertaining to health and safety effects of all products being considered for inclusion and the continued status quo in the CPC. With this information the Commission will be in a position to do its preliminary review and determine what effect the "project as a whole" may or may not have on the environment. The Commission can not do an environmental review only when an objection to certain product is voiced.

The public, building community, and manufacturers who are involved in interstate commerce are entitled to full disclosure and a level playing field. Anything short of a preliminary review for all codes and products would be a gross abuse of discretion by the Commission.

Sincerely,

Robert Friedlander

Attachments:
Letter from Construction Code Consultants to Commission dated 11/27/01
Letter from Dr. Bestervelt to Commission dated 11/29/01
Letter from PPFA to Commission dated 11/29/01
Excerpts from HCD 4/22/02 Final Statement of Reasons prepared by Robert Friedlander dated 5/2/02
Literature Search Concerning on the use of PEX done by HCD dated 11/03
HCD Literature Search Concerning the use of PEX dated 2/04
Summary of Literature Search on Copper Leaching done by HCD dating unavailable
Letter from Paul Koch Penn State University Erie dating unavailable
Analysis of PEX and Drinking Water Supplies relative to the UPC California, Dr. Michael Hoffmann
Dr. Hoffmann's CV
Letter from John Messick to Commission dated 11/27/05
KWD – Global Pipe – Re: Legionella dated 5/20/05

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 16-5 – Commission Action

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(END OF ITEM)

ITEM 16
BSC 03-04
Part 5
Chapter 6

SUB-ITEM 16-5

COMMENT #6
Thomas Enslow
Adams Broadwell Joseph & Cardozo
Attorneys at Law

Re: Opposition to Proposed Amendment of CPC sections 604.1. 604.1.1. 604.11. 604.11.1. 604.11.2. 604.13. 604.13.1 and 604.13.2 to allow the Statewide Approval of PEX and PEX-AL-PEX

Dear Mr. Morrison:

The following comments opposing the proposed adoption of California building standards approving the use of PEX and PEX-AL-PEX for potable water piping are respectfully submitted on behalf of the Coalition for Safe Building Materials ("Coalition"). The Coalition members include the Sierra Club, the Planning and Conservation League, Communities for a Better Environment, the Consumer Federation of California, the Center for Environmental Health, the California Professional Firefighters and the California Pipe Trades Council. The environmental, consumer, public health and labor organizations that make up the Coalition represent literally .millions of Californians concerned about the safety of new building materials.

The Coalition's comments include and incorporate by reference the expert comments of Thomas Reid Associates and Dr. Robert Clark, attached as Exhibits A through G to this letter. These comments also reference a number of supporting technical documents that are submitted as separately bound appendices. The supporting Appendix is also incorporated by reference and hereby made a part of the comments of the Coalition.

We thank you and the Commission for this opportunity to comment.

Sincerely,
Thomas A. Enslow.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 16-5 – Commission Action

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(END OF ITEM)

ITEM 17
OSHPD 05-04
Part 5
Chapter 4 Plumbing Fixtures and Fixture Fittings

Section 413.1 Fixture Count

SUB-ITEM 17-3

COMMENT #1
Sheila Lee, Committee Chair
CALBO STATE CODE COMMITTEE
2215 21st Street
Sacramento, CA 95818

SEE PUBLIC COMMENT #1 FROM **SHEILA LEE FOR SUB-ITEM 16-3** REGARDING THE BSC's PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

SUB-ITEM 17-3 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 17
OSHPD 05-04
Part 5
Chapter 6

SUB-ITEM 17-5

COMMENT #1

Robert Friedlander
Construction Code Consultants
Representing Vanguard Piping Systems and WIRSBO for north, North America
(8-1-05 Public Hearing Comment)

SEE PUBLIC COMMENT #4 & 5 FROM **ROBERT FRIEDLANDER FOR SUB-ITEM 16-5** REGARDING THE OSHPD PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

SUB-ITEM 17-5 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 19
DSA-SS 03-04
Part 5
Chapter 6

SUB-ITEM 19-5

COMMENT #1
Robert Friedlander
Construction Code Consultants
Re
presenting Vanguard Piping Systems and WIRSBO for north, North America
(8-1-05 Public Hearing Comment)

SEE PUBLIC COMMENT #4 & 5 FROM **ROBERT FRIEDLANDER FOR SUB-ITEM 16-5** REGARDING THE DSA-SS PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

SUBITEM 19-5 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 19
DSA-SS 03-04
Part 5
Chapter 6

SUB-ITEM 19-5

COMMENT #2
Thomas Enslow
Adams Broadwell Joseph & Cardozo
Attorneys at Law

SEE PUBLIC COMMENT #6 FROM **THOMAS ENSLOW FOR SUB-ITEM 16-5** REGARDING THE OSHPD PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

SUBITEM 19-5 – Commission Action

A AA D FS

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(END OF ITEM)

ITEM 20
HCD 01-04
Part 5
Chapter 6

SUB-ITEM 20-21

COMMENT #1
Bob Raymer
CBIA
(8-1-05 Public Hearing Comment)

Request that this item or reference provision be recommended: **Approve as Amended**

Reason:
Table 4-1 needs to be addressed as it relates to the plumbing fixture count. Should be corrected to be more like Table A-29A of the California Building Code.

With regards to the adoption of Table 4-1, minimum plumbing facilities, I don't mean to, to give too much here, but I, I would like to share with you a story that occurred back in the year 2000. That's pretty much when we put into play the new adopted Table 4-1 for the Plumbing Code without the corresponding table from the corresponding table from the appendix of the Uniform Building Code. The Uniform Building Code allowed the local building department the ability to look at the minimum plumbing facility calculations and to decide when the upper limit may have reached a proper point, and they basically terminated that.

A case in specific, we had a large warehouse that was constructed in southern California. I believe this was in 2000, 2001, and it was used for the storage of software equipment. You never had more than six employees working at any one time. You had six during the morning shift and you had six during the evening shift. There was no midnight shift. So you had a total of 12, plus one foreman, that worked there in an entire day. Because of the calculations of Table 4-1, you ended up building a bank of 18 stalls to equip this warehouse.

As it turns out, each one of the employees put a little gold star on one door with their name on the start, just like they would in Hollywood, indicating that that is their own personal stall, and there were still six stalls that were blank, that no one ever used at all. This is absurd, and it needs to get addressed.

I do know that a great many building officials across the state do, indeed, still apply some level of cut-off at a certain point, particularly with these huge warehouses. But it would be nice if somehow it was made clear in the adoption of Table 4-1, minimum plumbing facility that, indeed, the local building official has that ability.

And that concludes my comments.

Based on 9-Point Criteria: **Not Specified**

ITEM 20-21 – Commission Action

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(END OF ITEM)

ITEM 20
HCD 01-04
Part 5
Chapter 6

SUB-ITEM 20-23

COMMENT #1
Lloyd Dinkelspiel
104 Oak Street
Brentwood, CA 94561

I do not agree with the Agency proposed modifications As Submitted on: **ITEM 20-23**

AS SUBMITTED - CHAPTER 6 - Water Supply and Distribution, Sections 601. 0 - 614.0 Note: Adopt *entire Chapter 6 as amended*

Request that this item or reference provision be recommended: **Disapproved**

Reason:
Inclusion of UPC Section 611.4 represents a potential problem when installing water softeners and presents problems and conflicts with code required water pipe sizing.
Conflicts arise between the standards listed in Table 14-1 (NSF 44), Section 608.1 and Section 610.2.

The listed standard, NSF 44, provides a rated service flow value as a condition of the listing. This flow is required to be included in the performance label attached to the installed appliance.
The NSP 44 "rated service flow" represents the flow, in gallons per minute, where a condition of hard water bypass will not occur and the pressure drop across the unit will not exceed 15 psi.
Allowing the sizing of water softeners with piping of U" or 1" inlets/outlets will permit service flow rates of 8 gallons or 9 gallons per minute for 4 bathroom houses. A typical 3 bath house with a laundry will have approximately 30 fixture units. Utilizing chart A-3 from Appendix A shows a required design flow of slightly less than 20 gpm (19.6 gpm). A 20 gpm flow rate corresponds to the maximum continual flow rate through a 5/8" water meter.
Utilizing Appendix L Table L-1, 3 baths, a laundry and kitchen would have 16 WSFU which would represent either a flow requirement of 16 gpm if fixture concurrency is included in L-1 or approximately 12 gpm is Chart A-3 is allowed to be utilized.

It is my opinion that L-1 is a stand alone calculation and the figures calculated therein should not be further reduced by the use of Table A-3.

If the curb pressure is 30 psi and the flow rate exceeds the rated service flow then there is no guarantee that the residual pressure will remain above the code required 15 psi.
By adopting UPC Section 611.4 we risk the possibility of providing an inadequate flow or substandard residual pressure at or to plumbing fixtures in our dwelling units.

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

ITEM 20
HCD 01-04
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SUB-ITEM 20-24

COMMENT #1
Brant H. Dveirin
Of Brown Winfield & Canzoneri

SEE PUBLIC COMMENT #2 FROM **BRANT H. DVEIRIN FOR SUB-ITEM 16-5** REGARDING THE HCD PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

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(END OF ITEM)

ITEM 20
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SUB-ITEM 20-24

COMMENT #2
Richard Drury
(8-1-05 Public Hearing Comment)

SEE PUBLIC COMMENT #3 FROM **RICHARD DRURY FOR SUB-ITEM 16-5** REGARDING THE HCD PROPOSED ADOPTION OF THE 2003 UNIFORM PLUMBING CODE.

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(END OF ITEM)

ITEM 20
HCD 01-04
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SUB-ITEM 20-24

COMMENT #3
Dennis J. Herrera, City Attorney
Kate Hermann Stacy, Deputy City Attorney
Office of the City Attorney
City Hall Room 234

City and County of San Francisco
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102
Re: Proposed Amendments to California Plumbing Code;

Approval of PEX. PEX-AL-PEX and CPVC

The California Building Standards Commission (the "Commission") is currently reviewing the proposed regulatory amendments included in the *Monograph of Code Change Submittals.* The Department of Housing and Community Development ("HCD") has proposed regulations that would amend the current California Plumbing Code ("Plumbing Code") to permit the use of PEX and PEX-AL-PEX for potable water piping in all residential occupancies. In addition, the Commission and the Division of the State Architect ("DSA") have proposed the adoption of regulations that would permit the use of PEX-AL-PEX (but not PEX) for potable water piping in occupancies under their jurisdiction. The specific proposals that would approve the use of PEX and PEX-AL-PEX are contained in the proposed amendments to Plumbing Code sections 604.1, 604.1.1, 604.11, 604.11.1, 604.11.2, 604.13, 604.13.1 and 604.13.2.

HCD has also proposed that the Commission approve chlorinated polyvinyl chloride (CPVC) drinking water pipe for statewide use in all residential buildings. HCD proposes removing the current restrictions on the use of CPVC piping in residential homes. The specific HCD proposals that would approve the statewide use of CPVC are contained in the proposed amendments to California Plumbing Code sections 604.1, 604.1.1, and 604.1.2.

Following adoption of any or all of these amendments, San Francisco would have limited authority to review PEX, PEX-AL-PEX or CPVC on a case-by-case basis or to deny approval based on environmental or public health risks. Local agencies have a strong interest in ensuring that proper review of construction materials is conducted at the state level.

We urge the Commission to conduct thorough environmental review of PEX, PEX-AL-PEX and CPVC prior to proceeding with any approval of these materials for drinking water pipe. The Commission should analyze the potential environmental impacts of using these materials, consider alternative pipe materials, and consider feasible mitigation measures. HCD, DSA and this Commission have not fully considered the potential environmental impacts of PEX, PEX-AL-PEX or CPVC.

As you know, the California Court of Appeal recently held that environmental review under the California Environmental Quality Act ("CEQA") was required before the Commission approved the use of PEX. *(Plastic Pipe and Fittings Assoc. v. Calif. Building Standards Comm.* (2004) 124 Cal. App. 4th 1390). San Francisco filed an amicus brief in that case supporting the Commission's determination that full environmental review of PEX was required prior to the Commission's approval of the material. The same is no less true now.

Despite the clear direction by the Court in the *Plastic Pipe* case that the approval of PEX requires environmental review, HCD now proposes to approve PEX and PEX-AL-PEX without any compliance with CEQA. (PEX-AL-PEX is a version of PEX that consists of an aluminum sheath covered by a layer of PEX on both its exterior and interior.) Furthermore, DSA and the Commission also propose the approval of PEX-AL-PEX without any compliance with CEQA. No initial study has been conducted and no environmental impact report ("EIR") or negative declaration has been certified concerning these proposed actions. The failure to analyze the potential impacts of PEX and PEX-AL-PEX prior to approval violates both CEQA and the Court's clear directive in the *Plastic Pipe* decision.

The Commission has already received extensive evidence outlining the potential impacts of PEX and PEX-AL-PEX. Experts have already testified that PEX could have direct and indirect impacts on the environment and on the health and safety of the California public. In particular, experts testified that PEX was potentially susceptible to chemical attack from oxidizers such as chlorine and sunlight, causing polymer chain breakage and resulting in loss of strength, brittleness, and ultimately premature mechanical failure. PEX also has the potential for serious problems with chemical leaching from the pipe itself as well as permeation of the pipe by outside contaminants. These problems have been confirmed by independent laboratory tests as well as by warnings and other disclosures by PEX manufacturers. Experts have also testified that when PEX is exposed to heat in a fire, it will rapidly rupture, draining

or de-pressurizing the system and creating openings in wall studs, which may encourage fire spread. There is no evidence in the record before the Commission that PEX-AL-PEX would not have similar problems.

The San Francisco Department of the Environment ("SFE") has long been concerned about the potential human and environmental impacts of plastics in general and plastic pipes specifically. SFE is gathering information on the impacts of various plastic pipe materials. The study is comparing different pipe materials in terms of chemical hazards, recyclability and performance, with an emphasis on pollution prevention. SFE is concerned about highly toxic chemicals, during the manufacture of plastic material and its subsequent disposal. The study also will address plastic materials that may be very difficult to recycle and therefore add to burdens on landfills. The Commission should also fully analyze these potential impacts before approving PEX, PEX-AL-PEX or CPVC for residential use.

The proposed Plumbing Code amendments would allow the use of CPVC in any home or other residential building in the state. We believe that before the Building Standards Commission takes such a major step, the agency should thoroughly study CPVC. An addendum to a 2000 Mitigated Negative Declaration for a much narrower CPVC approval, allowing CPVC only in limited areas of the state with water or soil so corrosive that it would corrode metallic pipe, is simply not an adequate substitute for full environmental review of the potential significant environmental impacts.

We strongly urge the Commission to comply with CEQA and the specific directive of the Court in the *Plastic Pipe* decision. CEQA review is required to analyze the environmental and human health impacts of the use of any kind of plastic pipe, including PEX, PEX-AL-PEX and CPVC pipes. Any decision to approve these materials without CEQA review violates the law.

Thank you for considering our comments.

Very truly yours,

DENNIS J. HERRERA
City Attorney

Kate H. Stacy
Deputy City Attorney

Based on 9-Point Criteria: **Not Specified**

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SUB-ITEM 20-24

COMMENT #4
Tim Frank
Sierra Club Representative
(8-1-05 Public Hearing Comment)

I'm Tim Frank, with the Sierra Club. Pleased to be here. It's a proud tradition. The Sierra Club has actually been involved in tracking the introduction of new plastic compounds in California for more than two decades, and I think it's actually a quite (inaudible), because we have maintained a consistent position over this period that, that new compounds need to actually be studied, the, the environmental impacts, studied if there are potential serious environmental impacts, and, in fact, look at the history with PVC and CPVC and polybutylene, and other products. You'll find that actually there are examples, a number of examples of products that the manufacturers very much liked in the case of (inaudible) as asserted with the safety concern.

And the Sierra Club and a number of other parties actually requested that the projects undergo the, the standard due diligence that we apply in California to projects that have (inaudible). And the result of that, the study, was to discover that, in fact, there were serious products, and in some cases the product, the, the problems were mitigated, and in other cases the, the (inaudible) were not admitted to be used in California, and California consumers were actually spared significant problems.

The first of these cases was back in 1981, when PVC and CV -- CPVC were proposed, very much like -- the, the manufacturers at that point said these products were safe. Well, we discovered that the chloroform used as the stabilizer was actually a problem, and, and (inaudible) posed a, a threat to consumers. And, and that was discovered through the CEQA process. And the manufacturers subsequently agreed to actually remove the chloroform from the product, thereby sparing the public from the public health (inaudible). We also discovered that CPVC was a, a potential source of tetrahydrite (inaudible) which is another cancer causing chemical, which is not easy to remove from the product.

So the result of that was basically that CPVC has been limited to its use in areas with highly growths of soils, because we know that there are significant environmental problems associated with this. And we think that expanding the application to the rest of the state, actually, would clearly provide significant environmental impacts.

Polybutylene is a, is an example of a product that was actually withheld from the (inaudible) altogether, and the manufacturers in that instance insisted that it was a safe product. Like many of the other products, it was approved in many other states and had already begun being used in, in many other states. But the Sierra Club and other parties asked that the product be reviewed under CEQA. It was reviewed, discovered to have significant problems, and as a consequence it was kept out of the California market.

We now know that there's, there's a -- the product has caused huge problems in other states, and, and they are now the subject of a billion dollar class action suit. But California's consumers were spared that, because California insisted that the product be removed, and the problems were discovered before it was actually introduced to California.

So we are actually here today to ask that PEX and PEX-AL-PEX and CPVC undergo the -- what we consider basically to be due diligence, the application of CEQA, to examine all the potential environmental impacts associated with, with these products. We know that there is evidence that these products can cause harm, and we want to see that evidence reviewed and given its proper analysis. We think that that's a -- it's clear that, that historic practice of, of conducting such review has served Californians extraordinarily well, and we think that if California continues to exercise due diligence in looking at new building materials that pose potential serious problems, that it would serve the state well.

Thank you very much.

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

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SUB-ITEM 20-24

COMMENT #5
Tom Lent
2464 West St.
Berkeley CA 94702
(8-1-05 Public Hearing Comment)

RE: Concerns regarding approval of CPVC, PEX, and PEX-AL-PEX pipe for installation in residences in California

I am unable to attend the hearing Monday on the Department of Housing and Community Development proposal to approve CPVC, PEX, and PEX-AL-PEX pipe for installation in residences in California. I am therefore sending this letter to communicate the concerns of the Healthy Building Network that a full EIR be prepared and reviewed prior to any decision on expansion of use of these pipe materials

We have previously contributed to comments outlining the scientific basis for our deep concerns about the health and environmental impact of CPVC usage in pipes. We also view with concern reports about the potential leaching, permeation and biofilm problems of PEX, along with our own findings that the material is unrecyclable. In the face of this growing scientific concern, a precautionary approach including full assessment of the potential impacts and evaluation of alternatives is called for. For these reasons, we feel it is critical that a full EIR be undertaken to review and assess these issues before a decision is made that could lead to the installation of these products in many thousands of residential buildings in the state. We urge the Commission to respect the Court's decision in the PPFA v. CBSC case by undertaking this evaluation and finding the most healthy and environmentally sound piping alternatives for California households.

Sincerely,

Tom Lent
Technical Policy Coordinator

Based on 9-Point Criteria: **Not Specified**

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SUB-ITEM 20-24

COMMENT #6
Mike Lozeau
Bay Keepers
(8-1-05 Public Hearing Comment)

I'm here on behalf of a number of Bay Keepers organizations. They're bay keepers up and down the state, the Delta keeper, from the Sacramento/Stockton area. And worried about another pipe issue before this Commission today, which is the proposal to allow chlorinated polyvinyl chloride pipes, CPVC pipes to be used much more broadly than previously, to allow them for any new residential construction and re-plumbing jobs in the state.

And we're very worried about the impacts of this proposal on water quality, which has been entirely overlooked by the Department of Housing and Community Development in it's been put (inaudible) its proposal. These types of pipes, PVC pipes leach a substance known as organotens (phonetic), which is what we're focused on in our comments. And this includes the most toxic organoten, which is tributylten (phonetic). In the past you've heard it used to apply to boats, for example, to kill aquatic life and things from building up on your, on your hull. You haven't included (inaudible), it's designed to, to kill aquatic life, and tributylten is one of the organotens that are leached from the CPVC pipes, and that are sent on.

In fact, the proposal actually incorporates mitigation that requires folks to flush the pipes to actually make sure that the organoten goes downstream to the local sewage plant, and often to whatever water body happens to be receiving that waste. So this is a very, a very large concern for the keepers, whose agenda is to stay focused on trying to improve water quality, not to provide for new sources of toxic contaminants.

The leaching occurs not only as soon as the pipe is installed, but it actually increases as the pipes age. So this is going to be a, a long-term perpetual concern. These pipes will go in, and then over the decades we're going to have this new source of TDT burdening the local sewage plants and getting into the local environment, and potentially affecting aquatic life.

Now, all of this is being done based on an addendum, the same kind of CEQA concerns that Mr. Drury was just mentioning, which means that the industry is often (inaudible) to any kind of analysis of these water quality effects. They're trying to piggyback on a previous mitigated negative declaration for a, a very small project that was approved a few years back, where CPVC pipes were allowed for a very small number of areas in the state where the groundwater was of such poor quality that they couldn't use metal pipes, so they could only use CPVC pipes.

And rather than going back and, and looking seriously at what kind of impacts the use of CPVC statewide would have on not only water quality, but other issues, as well, but for my purposes, water quality in particular, rather than do that analysis, they decided just to say we can do an addendum because that analysis of this very limited scope is, of CPVC, is enough. The

whole reason the negative dec was deemed appropriate for that project was because it was such a small project. Very limited number of households, a few percent of the houses built each year in California.

So now a project that proposes to expand that to every house, every new house or a re-plumbed house, is clearly a whole new project. And under CEQA law, you cannot use an addendum for a new project. Addendums are designed to actually apply where it's the same project, there's a slight change to your EIR, you know, very small, modest technical change, perhaps, but not for an entirely new project, which is what this would qualify as.

Now, because it's a, a new project that's being considered because of this new scope, it's not allowed by the statute itself, and also the guidelines that were developed with CEQA also preclude the use of an addendum for this type of project. In addition to these, this, this entirely new scope of size of the project, there's also significant new information which we go over in our comments, where, for example, the EPA and the state, in particular the state, have developed water quality criteria for tributylten in the last few years, subsequent to this, this other smaller CPVC project.

So that new information needs to be looked at and evaluated to determine whether it's, the tributylten has leached from these pipes, (inaudible) it into the environment at levels that exceed those water quality criteria. None of that was considered by the department in developing its paperwork.

This, the department's failure to gather and analyze information about the potential adverse impacts to water quality overlooks what I think is the most significant part, which is that this flushing mitigation that's proposed means organotens, including tributylten, are going to be sent to the local sewage plants, many of which are already having trouble complying with the tributylten levels in their permits. There's many plants, a lot more around the state, where the boards have already determined the – these are the regional water quality control boards – have already determined that their discharges of tributylten either cause or may contribute to violations of standards.

So, for example, one of note is the Hyperion plant in Los Angeles, one of the largest, if not the largest, sewage plant in the state, where they're discharge permit has a level, a limit for tributylten because the regional board found that the, that their discharge may contribute to or cause an exceedence of a violation for that pollutant. And here we have a proposal to flush CPVC pipes from all new construction where it's used and send more TBT to that sewage plant. Obviously, that can only make that potential contribution even greater. And then also, you have a few sewage plants around the state that are actually already violating their limits.

So this, this proposal doesn't limit which communities are going to have CPVC pipes and which aren't, so wherever you have a sewage plant that's already violating its permit, obviously any additional sources to that plant are going to just simply exacerbate the problem.

So for that reason alone, I think the proposal has taken much too lightly, in fact, ignored the potential impacts not only to the environment, but also the effects on our local sewage plants who want, we hope are doing their best, and to rebuild limits and to make sure that they're providing their service to the community, which is to clean up any wastewater coming from that area.

So, in conclusion, I think that that would be my main focus of the comments today. The rest is in our written material. And tributyltens are very dangerous to the environment. They have very caustic effects on aquatic life, and any proposal that would increase the amount of tributyltens going into our sewage plants, (inaudible) traditional liability and passing it through to the environment are -- should be carefully analyzed, and we think a full EIR, for that reason alone, should be done, and that we would request that the Commission reject the proposal as written, and any future proposals be subject to a full environmental impact report.

So, thank you very much.

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

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SUB-ITEM 20-24

COMMENT #7
Bob Raymer
CBIA
(8-1-05 Public Hearing Comment)

I'm Bob Raymer, Technical Director for the California Building Industry Association. And today I'll be speaking on the adoption of the 2003 Uniform Plumbing Code. We support the adoption and we, in particular, support HCD's proposals to adopt PEX without limitation and CPVC as modified.

I first came to work for CBIA in 1981. My very first assignment in July of 1981 was to monitor the emerging plastic pipe issue. That has been an ongoing problem -- project for me now for 24 years, and there doesn't seem to be much end in sight.

Speaking to HCD's adoption, in particular, they're not proposing to change the mitigation provisions. The, the gloves, the fan, and the flushing provisions would stay intact. But with regards to CPVC, HCD is proposing to remove the report that is required showing that there are harsh conditions either from a water or soil perspective, or both, that would prompt the premature failure of metal pipes, thus paving the way for the use of CPVC.

In my view, and in many others in the industry, that is somewhat of an absurd code provision. If a product provides -- if the product works acceptably under harsh -- (End Tape, Side A. Start Side B.)

So we support the department's adoption as modified.

With regards to PEX, same issue. We have been using the product without incident for many years. In my travels across the country, in talking with those particularly on the East Coast, there's extensive of both PEX and CPVC, particularly in the retrofit market in multi-family. We've seen where the labor costs of these types of retrofit projects of three and four story apartment buildings that are 40 and 50 years old in some cases, because of the labor cost reduction of 40 to 65 percent, the plastic pipe project, be it CPVC or PEX, is able to go forward. If the project was to be done using metal pipes it simply wouldn't be done. And the owners, the managers would continue to fix the pipe on an as needed basis, which may be a very poor economic situation and solution, but it's one that is occurring here in California.

Like I said, in those jurisdictions that are allowing the use of PEX and/or CPVC, we're not seeing any problem at all. We haven't seen any problem. And that's pretty much our testimony on that.

Based on 9-Point Criteria: **Not Specified**

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(END OF ITEM)

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SUB-ITEM 20-24

COMMENT #8
Thomas Enslow
Adams Broadwell Joseph & Cardozo
Attorneys at Law

Re: Monograph of Code Change Submittals - Opposition to Proposed Amendment of CPC §§ 604.1, 604.1.1 and 604.1.2 to allow the Statewide Approval of CPVC

The following comments are respectfully. submitted on behalf of the Coalition for Safe Building Materials ("Coalition") in opposition to the proposed California Plumbing Code ("CPC") amendment that would authorize the statewide approval of Chlorinated Poly-Vinyl Chloride ("CPVC") drinking water pipe for all residential construction. The Coalition members include the California Pipe Trades Council, the California Professional Firefighters, the Sierra Club, the Planning and. Conservation League, Communities for a Better Environment, the Consumer Federation of California, and Center for Environmental Health. The environmental, consumer, public health and labor organizations that make up the Coalition represent literally millions of Californians concerned about the safety of new building materials.

I. HCD PROPOSES TO AMEND CPC SECTIONS 604.1, 604.1.1, AND 604.1.2 TO ALLOW THE STATEWIDE APPROVAL OF CPVC

The Department of Housing and Community Development ("HCD") has proposed adoption of building standards that would amend the CPC to remove the restriction limiting the use of CPVC drinking water pipe to the few areas of the state where metallic pipe is proven to corrode prematurely due to water or soil conditions. (California Building Standards Commission, *Monograph of Code Change Submittals for 2004 Annual Code Adoption Cycle, Suggested Revisions to the California Building Standards Code Title 24* (May 2004) *("Monograph* of *Code Change Submittals") pp.* 3-207, 3-208, 3-242, 3-243.) The specific HCD proposals are contained in the proposed amendment to CPC sections 604.1, 604.1.1, and 604.1.2. These proposed regulations have been subm~tQS1 to the California Building Standards Commission (“the Commission") for review and public comment as required under the California Building Standards Law and the Administrative Procedure Act ("APA").

Currently, CPC section 604.1.2 strictly limits the use of CPVC to where a finding has been made that metallic pipe has or "will" prematurely fail due to existing water or soil conditions. Furthermore, even where such a finding is

made, the approval of CPVC by local building officials is discretionary, not mandatory. CPC section 604.1.2 and CPC Appendix I, sections 301.0.1.1 and 301.0.2.1 also impose flushing, ventilation, glove-use and inspection requirements where such limited approval is granted.

Under HCD's proposed amendment, local building officials would be required to permit the use of CPVC in any residential building throughout the State of California. This represents a massive expansion in the approved use of CPVC and in potential CPVC installations. Industry estimates obtained from HCD demonstrate that the current limited approval has resulted in installation of CPVC in only *one to four percent (4%)* of the annual residential plumbing installations in California.[1]

[1] HCD's "Addendum to Adopted Mitigated Negative Declaration State Clearinghouse No. 2000091089" states that 310,980 residential units were piped in 2004. (HCD, Addendum to Adopted Mitigated Negative Declaration State Clearinghouse No. 2000091089 (March 3, 2005) at p. 19.) A December 3, 2004 e-mail to HCD from a representative of Noveon, Inc., the company that holds the patents on CPVC, shows that an average of only 2,275 homes a year were piped with CPVC in California from 2000 to 2003 and that only 12,000 homes were piped with CPVC in California in 2004. (See Comments of Coalition for Safe Building Materials on the Addendum to Adopted Mitigated Negative Declaration State Clearinghouse No. 2000091089 (April 22, 2005), Appendix 20.) According to these numbers, the limited approval of CPVC examined in the 2000]AND applied to only one to four percent (4%) of residential units statewide.

II. THE COMMISSION SHOULD DISAPPROVE OR REQUIRE FURTHER STUDY OF THE PROPOSED CPVC AMENDMENT

The Coalition respectfully requests .that the Commission disapprove the proposed CPVC amendment or, in the alternative, table the proposal pending further study. Because the environmental and health and safety impacts of the proposed regulatory change have never been sufficiently disclosed and evaluated, the Commission may not adopt the CPVC amendment without first preparing an environmental impact report ("EIR") as required by the California Environmental Quality Act ("CEQA"). HCD, however, has proposed to use an "Addendum" to an earlier mitigated negative declaration in lieu of an EIR. HCD's reliance on this "Addendum" fails to meet the requirements of CEQA, fails to fully mitigate potential impacts and is contrary to law. Furthermore, the proposed adoption of the CPVC amendment must be denied because the Monograph of Code Change Submittals fails to meet the notice and justification requirements of Health and Safety Code sections 18929.1 and 18930.

III. AN EIR MUST BE PREPARED PRIOR THE STATEWIDE APPROVAL OF CPVC

As fully briefed in the accompanying comments, an EIR must be prepared and completed before the Commission may adopt the proposed amendment to allow the statewide approval of CPVC.

Every court that has considered the issue has held that approval of building standards that may result in environmental impacts require compliance with CEQA. For example, the court in the case *Building Code Action v. Energy Resources Conservation and Development Commission,* (1980) 102 Cal.App.3d 577, held that adoption of energy conservation regulations establishing double-glazing standards for new residential construction was subject to CEQA since it could result in a significant impact on air quality as a result of increased glass production.

Moreover, the courts have specifically required compliance with CEQA prior to approval of potentially hazardous plumbing systems and materials, including CPVC pipe itself. In 1997; the San Francisco Superior Court overturned a decision of HCD and the Commission to propose and adopt the exact same statewide approval of CPVC that is at issue in this case due to a failure to comply with CEQA. *(Cuffe v. California Building Standards Commission* (1997) San Francisco Superior Court No. 977657 (Wm. Cahill, J.).) More recently in *Plastic Pipe and Fitting Association v. California Building Standards Commission (PPFA* v. *CBSC)*, the Court of Appeal held that environmental review under CEQA must be conducted prior to the approval of building code amendments that may have a significant impact on the environment. (PPFA v. CBSC (2004) 24 Ca1.App.4th *1390.)* The material at issue in that case was cross-linked polyethylene ("PEX"), another plastic drinking water pipe.

While HCD concedes in the *Monograph of Code Change Submittals* that . CEQA applies to the proposed CPVC amendment, HCD has failed to comply with CEQA's requirements. (See *Monograph of Code Change Submittals* at p.

3-242.) Rather than preparing an EIR, as required by CEQA, HCD has instead improperly relied upon a threadbare "Addendum to Adopted Mitigated Negative Declaration State Clearinghouse No. *2000091089"* (the "CPVC Addendum").

Mitigated Negative Declaration State Clearinghouse No. *2000091089* ("2000 MND") is the environmental document that was prepared and approved in 2000 for the limited approval of CPVC that is currently in force. The 2000 MND expressly and repeatedly stated that its findings were based upon the limited nature of the approval, which restricted CPVC to areas where metallic pipe is proven to corrode prematurely. Because the 2000 MND was limited in scope, it may not be relied upon to comply with the required environmental review of the *statewide approval of CPVC.*

Prior to approval of the 2000 MND on the limited approval of CPVC, HCD had twice determined in Initial Studies that the *statewide approval* of CPVC may result in numerous significant effects on the environment and would require the preparation of an EIR. Furthermore, HCD twice initiated an EIR process on the statewide approval of CPVC, only to abandon the process prior to completion.

HCD's reliance on the CPVC Addendum fails to meet the requirements of CEQA because it improperly attempts to bootstrap a large new project into the review conducted on a smaller and more limited prior project. Such bootstrapping violates CEQA's prohibition against piecemealing and fails to meet the legal prerequisites for utilizing the addendum exception to CEQA. Because substantial evidence exists that the proposed statewide approval of CPVC may result in significant environmental and health and safety impacts, an EIR must be prepared and certified prior to the adoption of the proposed regulatory change.

In a letter to the Honorable Alan Lowenthal, Chair of the California State Senate Committee on Environmental Quality, dated April 20, 2005, HCD asserts that the use of the Addendum is appropriate because "(there is no proposal to reduce or eliminate any mitigation measure" imposed pursuant to the 2000 MND.2 This statement is simply untrue. HCD ignores the fact that the restriction limiting the use of CPVC drinking water pipe to the few areas of the state where metallic pipe is proven to corrode prematurely was, itself, a "mitigation measure" designed to reduce the potential impacts of CPVC use. The 2000 MND expressly, and repeatedly, relied upon this restriction to support its finding of no significant impacts. By proposing to eliminate this mitigation measure, HCD is proposing the exact same project that its staff had previously determined requires an EIR.

In the same letter, HCD claims that "all health, safety and environmental concerns -have been fully mitigated" and that "it is simply unfair to California consumers" to continue the strict limitations on where CPVC may be used. Given that this letter was sent prior to the close of HCD's public comment on the CPVC Addendum, this statement reveals that HCD has once again prejudged its decision on this issue. HCD's assessment of this issue is premature, lacks objectivity and gives short shrift to the serious public health and environmental issues associated with the manufacture, installation, use, and disposal of CPVC drinking water pipe.

HCD's response to Senator Lowenthal reveals that the CPVC Addendum is little more than a post hoc rationalization of its decision to dismiss the environmental and public health issues associated with the proposed statewide approval of CPVC without any meaningful review. The courts will not countenance such a "grudging and pro forma compliance" with environmental review requirements. *(San Joaquin Raptor l Wildlife Rescue Center v. County of Stanislaus* (1994) *27* Ca1.App.4th 713, 742.) A *"post hoc* rationalization of a decision already made" defeats the fundamental informational and public disclosure objectives of CEQA. *(Laurel Heights Improvement Association v. Regents* of *the University* of *California* (1988) 47 Ca1.3d 376, 395.) "Only by requiring the [lead agency] to fully comply with the letter of the law can a subversion of the important public purposes of CEQA be avoided . . . ." (*People v. County of Kern* (1974) 39 Cal..App.3d 830, 842.)

[2] A copy of this letter was obtained from HCD via a public records request for documents relating to the CPVC Addendum.

IV. THE *MONOGRAPH OF CODE CHANGE SUBMITTALS* IS PROCEDURALLY DEFECTIVE BECAUSE IT FAILS TO INCLUDE HCD'S JUSTIFICATION UNDER THE NINE-POINT CRITERIA OF SECTION 18930

The California Building Standards Law requires all building standards submitted to the Commission for approval to be accompanied by an analysis written by the proposing agency, which shall justify the approval in terms

of the nine-point criteria listed in Health and Safety Code section 18930. The nine-point criteria required under Section *18930* to justify proposed building standards are as follows:

"(1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.

(2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.

(3) The public interest requires the adoption of the building standards.

(4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.

(5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.

(6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.

(7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.

(A) If a national specification, published standard, or model agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.

(B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.

(8) The format of the proposed building standards is consistent with that adopted by the commission.

(9) The proposed building standard, if it promotes fire and panic safety, as determined by the State Fire Marshal, has the written approval of the State Fire Marshal."

Health and Safety Code section 18929.1 requires that written notice of this nine-point justification be provided to the public for review and comment prior to its submittal to the Commission. Section 18929.1 requires that the proposing agencies provide for "[a]dequate public participation in the development of building standards prior to the submittal to the commission for adoption and approval." Section 18929.1 further requires "[a]dequate notice, in written form, to the public of the compiled building standards *and their justification."* (Emphasis provided.) Finally, Section 18929.1 requires the procedures for public review to "meet the intent of the Administrative Procedure Act (Chapter 5 (commencing with Section 11500) of Division 3 of Title 2 of the Government Code) *and Section 18930."* (Emphasis provided.)

Section 18929.1's requirement to provide the public written notice of the "justification" for the proposed building standards clearly refers to justification under the nine-point criteria of Section 18930. First, Section 18930's requirement that building standards be justified under the nine-point criteria is the only "justification" provided for in the California Building Standards Law,. Second, Section 18929.1 requires the procedures for public review to meet the intent of Section 18930, thus underscoring that this section must be consulted when justifying proposed standards to the public.

The *Monograph of Code-Change Submittals,* however, fails to provide to the public written notice of HCD's justification for the proposed standards under the nine-point criteria analysis. Accordingly, the public has not been provided the notice and opportunity for public comment required by Section 18929.1.

This procedural defect represents a substantial failure to comply with the notice requirements of Section 18929.1 because it prevents the public from having an opportunity to review and comment on HCD's analysis of the nine-point criteria "prior to submittal to the commission for adoption and approval." Regulations that substantially fail to comply With notice requirements may be declared invalid. (See Gov. Code § 11350.) Under the Commission's

regulations, no new issues may be raised before the Commission that were not raised during the public comment period on the *Monograph.* (Cal. Code Regs.,. tit. 24, part 1, §1-901(d)(4).) Accordingly, the failure to include the nine-point criteria justification in the *Monograph* effectively precludes the public from critically analyzing the HCD's justification for its proposed building standards.

The *Monograph of Code Change Submittals* does include an Initial Statement of Reasons ("ISOR") by HCD as required by the APA under Government Code section 11346.2. The ISOR, however, is not equivalent to the justification under the nine-point criteria analysis required by Section 18930. The required elements of the ISOR substantially differ from the nine-point criteria listed in Section 18930. For example, unlike Section 18930, the APA does not require the ISOR to make written determinations that adoption of a proposed regulation is required by "the public interest," that adoption of a proposed regulation "is not unreasonable, arbitrary, unfair, or capricious, in whole or in part," or "that the applicable national specifications, published standards, and model codes have been incorporated . . . where appropriate." (Gov. Code § 11346.2; see also Health & Sa£ Code § 18930.)

The APA does not limit the ISOR to the elements listed in Government Code section 11346.2, so there is no bar to including the nine-point criteria analysis in the Statement. (Gov. Code § 11346.2, subd. (b) (“statement of reasons shall include, but not be limited to, all of the following . . . :”).) In other words, the ISOR contained in the *Monograph of Code Change Submittals* could have been constructed to meet the intent of both the APA and Health and Safety Code section 18930, as required under Section 18929.1. The HCD ISOR contained in the *Monograph,* however, is limited to the bare elements required .under Government Code section 11346:2 and fails to include it’s justification in terms of the Section 18930 criteria. This failure violates the notice requirements of Section 18929.1. The *Monograph of Code Change Submittals* must be revised and re-circulated with a copy of the HCD's nine-point; analysis to correct this error.

V. THE PROPOSED STATEWIDE APPROVAL OF CPVC FAILS TO MEET AT LEAST TWO OF THE NINE-POINT CRITERIA

Before the Commission may adopt a proposed building standard, it must be satisfied that HCD has adequately justified adoption under the nine-point criteria analysis of Health and Safety Code section 18930. The proposed statewide approval of CPVC, however, fails to meet at least two of the nine-point, criteria. Accordingly, the Commission may not find that the proposed CPVC amendment is justified under the Section 18930 criteria.

Section 18930 requires findings under the nine-point criteria to be supported by substantial evidence. If the Commission determines that a factual finding is arbitrary or capricious or lacks substantial evidence, it shall return the standard back to the proposing agency for reexamination. (Health & Saf. Code § 18930, subd. (d) (1).)

In the case at hand, there is substantial evidence that adopting the proposed statewide approval of CPVC, without first preparing an EIR, would be contrary to the public interest and would be unreasonable, arbitrary and unfair. Furthermore, the record lacks substantial evidence to support a contrary finding. Accordingly, the proposed statewide approval of CPVC lacks justification under at least two elements of the nine-point criteria.

A. Approval of CPVC Without First Preparing an EIR Would Not Be In the Public Interest

Adoption of the proposed CPVC amendment without first preparing an EIR would not meet the "public interest" element of the nine-point criteria. Health and Safety Code section.18930, subdivision (3), requires agencies to determine if the "public interest requires the adoption of the building standards." In the case at hand, adopting the proposed statewide approval of CPVC, without first preparing an SIR, would violate the requirements of CEQA. Such deliberate violation of the law would, in itself, be contrary to the public interest. The statewide approval of CPVC would also be contrary to the public interest due to the numerous significant environmental and public health and safety impacts associated with these products.

It is well settled that compliance with CEQA is in the public interest. (See *Kane v. Redevelopment Agency of City of Hidden Hills* (1986) 179 Cal.App.3d 899, 905; *People By and Through Dept. of* Public *Works v. Bosio* (1975) 47 Ca1.App.3d 495, 526; see also Pub. Resources Code § 21000.) CEQA "protects not only the environment but also informed self-government." *(Communities for a Better Environment v. Calif. Resources Agency, supra,* 103 Cal. App. 4th at p. 108.) CEQA informs the public and its responsible officials of the environmental consequences of their

decisions before they are made, ensuring consideration of alternatives and requiring imposition of reasonable mitigation measures. (*Id*.; Pub. Resources Code §§ 21063 & 21100.)

As discussed in detail in the attached comments, reliance on the proposed CPVC Addendum in lieu of preparing an EIR violates CEQA. The proposed CPVC Addendum fails to meet the requirements of CEQA, fails to fully disclose, evaluate or mitigate potential impacts, and is contrary to law. As a result, the failure to prepare an EIR prior to the statewide approval of CPVC would be contrary to the public's interest in ensuring informed self government and in protecting public health and safety and the environment.

The evidence in the record, including the expert comments and studies attached to this letter, overwhelmingly demonstrates that that the proposed statewide approval of CPVC may have a significant effect on the environment, even with the continuation of the ventilation, glove-use and flushing requirements currently required by the CPC. As discussed in greater detail in the attached comments and exhibits, these impacts include:

- Worker Health & Safety Impacts

    - o A 1989 Department of Health Services Study concluded that workers installing CPVC pipe are regularly exposed to toxic chemicals such as tetrahydrofuran (“THF”) and methyl ethyl ketone ("MEK") at levels exceeding established workplace standards.

    - o The proposed ventilation and glove-use requirements will not reduce these risks below a level of significance.

    - o Most gloves offer no protection against dermal absorption of THF. The Nitrile gloves currently required by the CPC only protect against THF for 20 minutes.

    - o Recent studies have determined that where CPVC has been approved on a limited basis, enforcement and implementation of ventilation and glove-use requirements has been virtually non-existent.

- Contamination of drinking water

    - o CPVC pipe leaches chemicals such as THF, MEK, acetone and organotins (including tributyltin) into drinking water.

    - o The proposed flushing mitigation is inadequate and unenforceable.

    - o Public is exposed both through consumption and through inhalation and skin exposure during bathing.

    - o Aquatic toxicity concerns - organotins (and particularly tributyltin) are toxic to many aquatic animals. Most water treatment plants leave significant amounts of organotins in the effluent discharged into receiving waters.

- Air Quality Impacts

    - o Widespread use of CPVC solvents and cements will result in VOC emissions in exceedance of statutory and regulatory standards of significance.

- Manufacturing Impacts

    - o CPVC pipe, fittings, cements and solvents are manufactured in California.

    - o Increased manufacturing of these products will result in significant air quality and worker health and safety impacts.

- The manufacture of CPVC pipe and fittings results in the release of dioxins.

- Solid Waste Impacts

  - CPVC pipe is not a recyclable plastic and is considered a "contaminant" in the waste stream.

- Fire Hazard Impacts

  - CPVC pipe releases dioxins and toxic smoke when burned.

  - CPVC pipe makes residential fires, plastic incinerators and landfill fires significantly more dangerous.

Approval of. CPVC without full disclosure, evaluation and mitigation of these impacts would not be in the public interest and thus may not be justified under the nine-point criteria.

B. Statewide Approval of CPVC Without First Preparing an EIR Would Be Unreasonable, Arbitrary and Unfair

Health and Safety Code section 18930, subdivision (4), requires agencies to justify their proposed building standards on the grounds that the proposed standard "is not unreasonable, arbitrary, unfair, or capricious, in whole or in part." In the case at hand, it is manifestly unreasonable, arbitrary and unfair to propose the adoption of building standards in manner contrary to law. As discussed in detail in the attached comments, allowing the statewide approval of CPVC without first preparing an EIR is a clear violation of CEQA. Such approval may not be justified under the nine-point criteria.

Furthermore, the proposed statewide approval of CPVC is unfair and unreasonable due to the substantial evidence of potential significant impacts associated with this expanded approval. Approval of a building material without first requiring full disclosure, evaluation and mitigation of its potential impacts is unfair to the public. Moreover, a proposal by an agency to have a potentially hazardous building material approved without such disclosure, evaluation and mitigation is unreasonable.

VI. THE COALITION SUBMITS AND INCORPORATES BY REFERENCE THE COMMENTS RECEIVED BY HCD OPPOSING THE CPVC ADDENDUM

HCD held a public comment period on the proposed CPVC Addendum from March 14, 2005 to April 25, 2005. The Coalition hereby requests that the comments submitted by the Coalition and other parties during this period be incorporated into the administrative record in opposition to the HCD's proposed amendment to CPC sections 604.1, 604.1.1, and 604.1.2.

These comments include the Coalition's April 22, 2005 comment letter opposing the proposed CPVC Addendum. The Coalition's April 22, 2005 comment letter includes and incorporates expert comments by Dr. Phyllis Fox, Thomas Reid Associates and Dr. Jim Bellows. The April 22, 2005 comment letter also includes numerous supporting technical documents, studies, surveys, and reports that are submitted as appendices. A copy of these comments and appendices is enclosed with this letter and submitted in opposition to the proposed statewide approval of CPVC.

In addition to the comments submitted by the Coalition, comments opposing the approval of CPVC were submitted by numerous other organizations and individuals. These comments include:

• April 22, 2005 letter from the Los Angeles City Attorney's Office;

• April 13, 2005 letter from the Natural Resources Defense Council;

• April 12, 2005 letter from Alan Lowenthal, Chair of Senate Committee on Environmental Quality, Gene Mullin, Chair of

Assembly Committee on Housing and Community Development,
Fran Pavley, Chair of Assembly Select Committee on Air and Water
Quality, Ira Ruskin Chair of Assembly Committee on Environmental

Safety and Toxic Materials, and Loni Hancock, Chair of Assembly Committee on Natural Resources;

- April 13, 2005 letter from the Los Angeles Chapter of Physicians for Social Responsibility;
- April 18, 2005 letter from the San Francisco-Bay Area Chapter of Physicians for Social Responsibility;
- April 25, 2005 letter from San Diego Baykeeper, Santa Monica Baykeeper, San Francisco Baykeeper, Deltakeeper, Russian Riverkeeper, and Orange County Coastkeeper;
- April 25, 2005 expert comment letter from Dr. Phyllis Fox prepared for San Diego Baykeeper, Santa Monica Baykeeper, San Francisco Baykeeper, Deltakeeper, Russian Riverkeeper, and Orange County Coastkeeper;.
- April 25, 2005 letter from the Healthy Building Network; and
- March 6, 2005 e-mail from Robert Herman of the Herman & Coliver Architecture firm.

Copies of these comment letters, along with a copy of the April 20, 2005 HCD response letter to Senator Lowenthal, are also enclosed and are hereby incorporated into our opposition to the proposed statewide approval of CPVC.

VII. CONCLUSION

Having twice determined that an EIR must be prepared to study the potential impacts of statewide CPVC approval, HCD cannot now "unring the bell" and claim that the statewide approval of CPVC does not require the preparation of an EIR. The preparation of an EIR is required by both statute and case law and is supported by substantial evidence.

The comments, expert reports, studies and other evidence submitted to HCD and resubmitted herein to the Commission demonstrate that approval of the proposed CPC amendment allowing the statewide use of CPVC may result in numerous significant impacts on public health and the environment. Such impacts include contamination of drinking water, worker exposure to toxic solvents, increased air emissions, manufacturing impacts, solid waste impacts and increased fire hazards.

The evidence submitted further-demonstrates that the few mitigation measures relied upon in the CPVC Addendum will not fully mitigate these potential impacts. Rather, HCD's reliance on the proposed CPVC Addendum
would leave these impacts unexamined and unmitigated. Such a result violates CEQA and would not be in the public interest. Environmental review of CPVC is necessary to fully disclose the extent of these potential impacts and to consider alternative pipe materials and mitigation measures.

The Commission must also correct the procedural errors of the *Monograph* of *Code Change Submittals* to meet the notice and justification requirements of Health and Safety Code section 18929.1.

The Coalition respectfully requests that the Commission deny HCD's proposal to amend the CPC to massively expand the approved use of CPVC to all residential units in the state. Thank you for your consideration of this letter and the enclosed comments.

Sincerely,
Thomas A. Enslow

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 20-24 – Commission Action

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(END OF ITEM)

ITEM 20
HCD 01-04
Part 5
Chapter 6 Water Supply and Distribution

SUB-ITEM 20-24

Section 606.1.3 Mechanically Formed Tee Fittings

COMMENT #1
Richard D. Nelson, Committee Chairman
T-DRILL Industries, Inc.
1740 Corporate Drive
Norcross, GA 30093

Request that this item or reference provision be recommended: **Approved**

Requested is the adoption of the 2003 Uniform Plumbing Code Section 606.1.3 Mechanically Formed Tee Fittings and the 2003 Mechanical Code, Section 1201.2.1.4.2.1 Mechanically Formed Tee Fittings.

Based on 9-Point Criteria: **1**

Reason:

Although researched, there has been no reason given for the lack of adoption of the above-mentioned method of installation into the 2001 and 2003 California Plumbing and Mechanical Codes.

This comment/Challenge is based on this method of installation (known as T-DRILL in some code listings) having been approved for use by the Sate of California since 1983 and every major municipality in the state since 1985(City of Los Angeles General Approval dates back to 1981). IAPMO Certificate of Listing, file No. 1935 was first issued in 1979. IAPMO Material and Property Standard - PS 85 - 95 were awarded in 1995. The ASTM designation for this method is F 2014-00. ASME/ANSI B31.9 - Building Services Piping also lists this method. Two hundred fifty California contractors currently own over eight hundred systems that mechanically form tee fittings. During the last twenty-four years these contractors have paid significant sums for systems that benefit building owners with fast track, structurally sound, lower cost copper tube installations.

Based on 9-Point Criteria: **3**

SUB-ITEM 20-24 – Commission Action

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(END OF ITEM)

ITEM 21
DSA-AC 03-04
Part 5
Chapter 2 Definitions & Chapter 4, Tables 4-1 through 4-4

SUB-ITEM 21-2 & 21-4

COMMENT #1
David Thorman, State Architect
Division of the State Architect - Access Compliance
1102 Q Street, Suite 5100
Sacramento, CA 95814

ITEM 21-2 & 21-4, Part 5, Chapter 2 Definitions & Chapter 4, Tables 4-1 through 4-4

Request that this item or reference provision be recommended: **Approved as Amended**

CHANGE WITHOUT REGULATORY EFFECT

ITEM 21-2 207.0
Enforcing Agency, definition of (Related Change Only)
DSA/AC proposes to adopt the definition of `Enforcing Agency' for consistency. This is also a related change to Item 21-4, Footnote No. 2 under Table 4-1. Enforcing agency is the agency established and authorized by law to administer and enforce the provisions of the plumbing code as adopted or amended. DSA requested this language be included in the Express Terms and Initial Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this amendment.

Reason:
Currently DSA/AC does not adopt a definition for `enforcing agency'. It was suggested by the California Building Standards Commission, Code Advisory Committee for Plumbing, Electrical, Mechanical and Energy, DSA/AC adopt the same definition in the plumbing code as adopted by the Department of Housing and Community Development in section 207.0. DSA/AC concurs with the committee's recommendation. See the double underline below for the related change to 207.0 which DSA feels meet criterion **# 1, 4, 6 & 8**.

207.0
Enforcing *Agency **[For DSA/AC]*** The designated department or agency as specified in statutes and regulations to enforce the specific building standards promulgated or adopted by the specified state agency.

Related Change: See Item 21-4 Footnote No. 2 under Table 4-1.

ITEM 21-4

Tables 4-1 through 4-4 (Statement of Reasons Only & Related Change) DSA requested this language be included in the Initial Statement of Statement of Reasons of the 45-day Monograph but BSC was unsuccessful in printing this amendment. See underline below which DSA feels meets criteria # **1, 4, 6 & 8.**

There is no cross-reference in Table 4-1 directing the user of the code to existing nlumbingj1rovisions for accessibility published in the California Building Code CBC) Chanter B: in public building accommodations, commercial buildings and publicly funded housing. DSA/AC is proposing to adopt a new Note #1 in Table 4-1 directing the user of the code to the CCR. Chapter 11 B.

There is no cross-reference in Tables 4-1 through 4-4 directing the user of the code to existing administrative plumbing provisions published in Chanter 1 of the California Plumbing Code regarding DSA/AC statutory responsibilities for plumbing accessibility which is limited to publicly funded buildings structures, sidewalks, curbs and related facilities: and all privately funded public accommodations and commercial facilities. DSA/AC is proposing to adopt a new Note #2 in Tables 4-1 through 4-4 to assist the user of the code to better focus on DSA/AC specific plumbing code application and enforcement administrative responsibility in section 101.11.9.

In Table 4-1 under `Type of Building or Occupancy (Board of Corrections- Local Detention Facilities - Locked Sleeping Rooms ")' the reference to Footnote #11 is incorrect. DSA/AC is correcting the footnote to read #15.

In Table 4-1 (Footnote #2) cross-reference to Administrative Authority is not applicable to DSA/AC. DSA/AC proposes to clarify jurisdictional authority by adding a California amendment `*[For DSAIAC] enforcing agency*'. This adoption is a related change to item 21-1, section 207.0, (definition of Enforcing Agency). It was suggested by the California Building Standards Commission , Code Advisory Commission for Plumbing, Electrical, Mechanical and Energy, DSA/AC adopt the same definition in the plumbing code as the Department of Housing and Community Development in section 207.0. DSA/AC concurs with the committee's recommendation. DSA/AC proposes to amend Footnote #2 to be consistent with the definition in 207.0 for Enforcing Agency.

In Table 4-1 (Footnote #14) there is an unrelated number fifteen (15) shown at the end of the sentence. DSA/AC is proposing to delete the number fifteen (15).

Related Change: see Item 21-2

207.0
Enforcing Agency [For DSAIAC] *The designated department or agency as specified in statutes and regulations to enforce the specific building standards promulgated or adopted by the specified state agency.*

In Table 4-4 under 'Bathtubs or Showers Fixtures per Person (Organized Camps)' the ratio of 1 fixture for each 1-156 is incorrect. The number 6 should be a footnote #6. DSA/AC is proposing to correct the ratio to read: "1 1-15[6]".

Based on 9-Point Criteria: **1, 4, 6, and 8**

SUB-ITEM 21-2 & 21-4 – Commission Action

A AA D FS

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(END OF ITEM)

Part 12
California Referenced Standards Code

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ITEM 24
SFM 03-04
Part 12
Chapter 12-10-202 (f)

SUB-ITEM 24-2

COMMENT #1
Harold (Hal) Kelton
Sierra Pacific Sales and Consulting, Inc.
26478 Honor Lane
Salinas, CA 93908

I do not agree with the agency proposed modifications as submitted on Item 24-2, Title 24, Part 12, 12-10-202 (f) Levers and request that this item or reference provision be recommended: **Disapproved**

Reason:

1) The ambiguity of this reference causes inconsistent enforcement of the code based on location.
This is the only place within the California Building Code that this reference exists. This entire section 12-10-202 is out of date; i.e., it references knobs and "T" handles both of which are no longer used in the means of egress.

2) Public safety may be in jeopardy on every door in every commercial building. The likelihood that the ½" return really prevents catching of clothing during egress is quite fallible. If by some factor it is harder to catch your clothes in this scenario, then, in return, it would also be harder to free yourself if your clothes did get caught. I believe the likelihood of either scenario is very low.

3) Deletion of this and any other references to the ½" return of the lever to the door face will end many years of confusion. Every day of every year locks are being installed in California that do not have the ½" return on them because local building and fire inspectors do not know where this reference is, or they have decided that it is outdated or invalid as well.

4) Short of completely eliminating this and all references to the ½" return at least place it in a more prominent part of the building code like Chapter 10 (MEANS OF EGRESS) in the California Building Code.

5) I would be more than happy to bring plenty of mounted lock samples for everyone to review and make their own judgment.

Based on 9-Point Criteria: **Not Specified**

SUB-ITEM 24-2 – Commission Action

A AA D FS

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