

**INITIAL EXPRESS TERMS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
CALIFORNIA BUILDING STANDARDS COMMISSION**

**REGARDING PROPOSED CHANGES TO  
2019 CALIFORNIA EXISTING BUILDING CODE  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 10**

**(BSC 05/18)**

**LEGEND FOR EXPRESS TERMS**

1. Model code language appears upright.
2. Existing California amendments appear in *italics*.
3. Amended model code or new California amendments appear *underlined and in italics*.
4. Repealed model code language appears ~~upright and in strikeout~~.
5. Repealed California amendments appear in ~~*italics and in strikeout*~~.

Note: CEBC refers to California Existing Building Code, and IEBC refers to International Existing Building Code.

**INITIAL EXPRESS TERMS**

**CHAPTER 1 SCOPE AND ADMINISTRATION**

**ITEM 1. DIVISION I -- CALIFORNIA ADMINISTRATION**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 1.1 and 1.2 with the following amendments, for adoption into the 2019 CEBC:

...

**SECTION 1.1 GENERAL**

**1.1.1 Title.** *These regulations shall be known as the California Existing Building Code, may be cited as such and will be referred to herein as “this code.” The California Existing Building Code is Part 10 of thirteen parts of the official compilation and publication of the adoption, amendment and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2015 2018 International Existing Building Code of the International Code Council with necessary California amendments.*

**1.1.2 Purpose...**

**1.1.12 Validity...**

...

## **SECTION 1.2 BUILDING STANDARDS COMMISSION**

**1.2.1 BSC** *Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to...*

- 1. State Buildings for all Occupancies...**
- 2. University of California, California State Universities, and California Community Colleges...**
- 3. Existing State-Owned Buildings, including those owned by the University of California and by the California State University...**
- 4. Unreinforced Masonry Bearing Wall Buildings...**

**1.2.1.1 State building...**

**1.2.1.2 Enforcement...**

**1.2.1.3 Enforcement, Reserved for DGS...**

**1.2.1.4 Adopting agency identification...**

**1.2.2 BSC-CG.** *Specific scope... unless otherwise stated*

**1. Green building Standards for nonresidential occupancies.**

**Application -...**

**Enforcing agency -...**

**Authority cited -...**

**Reference -...**

**2. Graywater systems for nonresidential occupancies.**

**Application** – *The construction, installation, and alteration of graywater systems for indoor and outdoor uses in nonresidential occupancies.*

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

**Authority cited** – *Health & Safety Code Section 18941.8.*

**Reference** – *Health & Safety Code Section 18941.8.*

...

### **Notation**

Authority: Government Code §14617; Health and Safety Code §§16660, 18928, 18930.5, 18934.5, 18938, 18940.5 & 18941.8

Reference(s): Government Code §14617; Health and Safety Code §§18929 & 18941.8

## **CHAPTER 1 SCOPE AND ADMINISTRATION**

### **ITEM 2. DIVISION II – SECTION 101 GENERAL**

## **ITEM 2. DIVISION II – SECTION 101 GENERAL**

BSC proposes to carry forward only the existing 2016 CEBC amendment Section 101.8.

...  
**Section 101.8 Maintenance. [BSC]...**

### **Notation**

Authority: Health and Safety Code §§18928, 18929, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928.1, 18930, 18935, 18938.3

## **ITEM 3. DIVISION II – SECTION 106 CONSTRUCTION DOCUMENTS**

BSC proposes to repeal existing 2016 CEBC amendment Section 106.2.6:

...  
~~**106.2.6 Exterior balconies and elevated walking surfaces. [BSC] Where the scope of work involves a balcony or other elevated walking surfaces exposed to water from direct or blowing rain, snow, or irrigation, and the structural framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.**~~

...  
BSC proposes to adopt only 2018 IEBC Section 106.2.5:

...  
**106.2.5 Exterior balconies and elevated walking surfaces...**

### **Notation**

Authority: Health and Safety Code §§18928, 18929, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928.1, 18930, 18935, 18938.3

## **ITEM 4. DIVISION II – SECTION 109 INSPECTIONS**

BSC proposes to repeal existing 2016 CEBC amendment Section 109.3.7.1.

~~**109.3.7.1 Weather exposed balcony and walking surface waterproofing. [BSC] Where the scope of work involves a balcony or other elevated walking surfaces exposed to water from direct or blowing rain, snow, or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved. Exception: Where special inspections are provided in accordance with Section 1705.1.1, Item 3 of the California Building Code.**~~

...  
BSC proposes to adopt only 2018 IEBC Section 109.3.6:

...

### **109.3.6 Weather-exposed balcony and walking surface waterproofing...**

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18929, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

## **CHAPTER 2 – DEFINITIONS**

### **ITEM 5. CHAPTER 2 – Section 201.3 Terms defined in other codes**

BSC proposes to adopt IEBC Section 201.3, with amendments carried forward from 2016 CEBC.

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 6. CHAPTER 2 – Section 202 GENERAL DEFINITIONS**

This item has been withdrawn by BSC.

## **CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS**

### **ITEM 7. CHAPTER 3 – Section 301.1 - General**

BSC proposes to carry forward existing 2016 CEBC amendment Section 301.1, Exception 2, renumbered as Section 301.1 Exception 1:

...

#### **301.1...**

##### ***Exceptions:***

- 1. ~~2.~~ Existing state-owned structures. [BSC]***

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 8. CHAPTER 3 - Section 302.2.1 Dangerous conditions**

BSC proposes to carry forward existing 2016 CEBC amendment Section 401.4, renumbered as 302.2.1:

...

**302.2.1** (formerly 401.4) **401.4 Dangerous conditions.** [BSC] Regardless of the extent of structural or nonstructural damage, the code official shall have the authority to require the elimination of conditions deemed dangerous.

...

#### Notation

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 9. CHAPTER 3 – SECTION 303 STRUCTURAL DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES**

BSC proposes to adopt 2018 CEBC section 303.1, with amendments:

...

**303.1 Live Loads.** Where an addition or alteration does not result in increased design live load, existing gravity loadcarrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the addition or alteration. If the approved live load is less than that required by Section 1607 of the ~~International~~ California Building Code, the area designated for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the addition or alteration results in increased design live load, the live load required by Section 1607 of the ~~International~~ California Building Code shall be used.

BSC proposes to adopt 2018 IEBC section 303.2:

...

**303.2 Snow loads on adjacent buildings...**

...

#### Notation

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 10. CHAPTER 3 – SECTION 304 IN-SITU LOAD TESTS**

BSC proposes to adopt 2018 IEBC section 304.1, with amendments:

...

**304.1 General.** Where used, in-situ load tests shall be conducted in accordance with Section 1708 of the ~~International~~ California Building Code.

...

#### Notation

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**CHAPTER 3 – SECTION 317 EARTHQUAKE EVALUATION AND DESIGN FOR THE RETROFIT OF EXISTING BUILDINGS**

**ITEM 11. CHAPTER 3 – Sections 317.1 through 317.4**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 317.1 through 317.4.

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 12. CHAPTER 3 – Section 317.5 Minimum Seismic Design Performance Levels for Structural and Nonstructural Components**

BSC proposes to carry forward existing 2016 CEBC amendment Section 317.5 and correspondingly in *Table 317.5*, as amended:

...  
*...Earthquake Hazard Level (BSE-1N, BSE-2N, BSE-1E, BSE-R or BSE-C), a specified structural performance level (S-1 through S-5) and a non-structural performance level (N-A through N-DE). The minimum seismic performance criteria...*  
 ...

**TABLE 317.5  
SEISMIC PERFORMANCE REQUIREMENTS BY BUILDING REGULATORY AUTHORITY AND RISK CATEGORY.**

|                                      |                      | <b>PERFORMANCE CRITERIA</b> |                        |
|--------------------------------------|----------------------|-----------------------------|------------------------|
| <b>Building Regulatory Authority</b> | <b>Risk Category</b> | <b>Level 1</b>              | <b>Level 2</b>         |
| <i>State-owned (BSC)</i>             | <i>I, II, III</i>    | <i>BSE-R, S-3, N-C</i>      | <i>BSE-C, S-5, N-D</i> |
| <i>State-owned (BSC)</i>             | <i>IV</i>            | <i>BSE-R, S-2, N-B</i>      | <i>BSE-C, S-4, N-D</i> |
| <i>(Reserved for DSA-SS)</i>         |                      |                             |                        |
| <i>(Reserved for DSA-SS)</i>         |                      |                             |                        |
| <i>(Reserved for DSA-SS)</i>         |                      |                             |                        |
| <i>(Reserved for DSA-SS/CC)</i>      |                      |                             |                        |
| <i>(Reserved for DSA-SS/CC)</i>      |                      |                             |                        |
| <i>(Reserved for DSA-SS/CC)</i>      |                      |                             |                        |

1. ASCE 41 provides acceptance criteria (e.g. *m*, rotation) for Immediate Occupancy (S1), Life Safety (S3), and Collapse Prevention (S5), and specifies in Sections 2.3.1.2.1 and 2.3.1.4.1 the method to interpolate values for S-2 and S-4, respectively. For nonstructural components, N-A corresponds to the Operational level, N-B to the Position Retention, and N-C to the Life Safety level, N-D to the Hazards Reduced, and N-DE to the Not Considered. When evaluating for the Hazards Reduced Nonstructural

Performance Level, the requirements need not be greater than what would be required by ASCE 7 nonstructural provisions for new construction.

2. Buildings evaluated...

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 13. CHAPTER 3 – Sections 317.6 through 317.11**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 317.6 through 317.11.

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 14. CHAPTER 3 – SECTION 318 DEFINITIONS**

BSC proposes to carry forward existing 2016 CEBC amendment Section 318.1, as amended:

...

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

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**CHAPTER 3 – SECTION 319 SEISMIC CRITERIA SELECTION FOR EXISTING BUILDINGS**

**ITEM 15. CHAPTER 3 – Section 319.1 Basis for evaluation and design.**

BSC proposes to carry forward existing 2016 CEBC amendment Section 319.1, as amended:

...

**Exceptions:**

1. **[BSC]** For buildings constructed to the requirements of California Building Code, 2007 2013 or later edition as adopted by the governing jurisdiction...

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 16. CHAPTER 3 – Section 319.1.1**

BSC proposes to carry forward existing 2016 CEBC amendment Section 319.1.1, and repeal item 2:

...

**319.1.1 Specific procedures. [BSC]** *For state-owned buildings, the following specific procedures located in Appendix A may be used, without peer review, for their respective types of construction to comply with the seismic performance requirements for Risk Category I, II or III buildings:*

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

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 17. CHAPTER 3 – Sections 319.1.2 – 319.8**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 319.1.2 through 319.8.

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 18. CHAPTER 3 – Section 319.9**

BSC proposes to carry forward existing 2016 CEBC amendment Section 319.9, as amended:

...

**319.9 Nonstructural component requirements.** *Where the nonstructural performance levels required by Section 317, Table 317.5 are N-GD or higher, mechanical, electrical and plumbing components...*

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 19. CHAPTER 3 – Sections 319.10 – 319.12.2**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 319.10 through 319.12.2.

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**ITEM 20. CHAPTER 3 – Sections 320 - 322**

BSC proposes to carry forward existing 2016 CEBC amendment Sections 320 through 322.

...

**SECTION 320 METHOD A**

...

**SECTION 321 METHOD B**

...

**SECTION 322 PEER REVIEW REQUIREMENTS**

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3, 18941.6

**CHAPTER 4 – REPAIRS (formerly Chapter 6)**

**ITEM 21. CHAPTER 4 – Section 401.1.1 Scope**

BSC proposes to carry forward existing 2016 CEBC Section 404.1 *Exception*, as amended, renumbered as Section 401.1.1:

...

**401.1.1 404.1 Scope. [BSC] ~~Repairs shall comply with the requirements of this chapter.~~ For state-owned buildings, including those owned by the University of California and the California State University and the Judicial Council, the requirements of Sections 404.2 405.2.1 and 404.4 405.2.3 are replaced by the requirements of Sections 317 through 322.**

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 22. CHAPTER 4 – Sections 401.3 and 405.2.5**

BSC proposes to adopt 2018 IEBC Sections 401.3 and 405.2.5 with amendments:

...

**401.3** (formerly CEBC 404.5) ~~404.5~~ **Flood hazard areas.** In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with Section 1612 of the International California Building Code, or Section R322 of the International California Residential Code, as applicable.

...

**405.2.5** (formerly CEBC 404.5) ~~404.5~~ **Flood hazard areas.** In flood hazard areas, buildings that have sustained substantial damage shall be brought into compliance with Section 1612 of the International California Building Code, or Section R322 of the International California Residential Code, as applicable.

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**CHAPTER 5 – PRESCRIPTIVE COMPLIANCE METHOD (formerly Chapter 4)**

**ITEM 23. CHAPTER 5 – Section 501 GENERAL – Section 501.1 Scope**

BSC proposes to adopt 2018 IEBC Section 501.1, renumber and carry forward existing 2016 CEBC amendments of Section 401.1, as amended:

...

**501.1** (formerly CEBC 401.1) ~~401.1~~ **Scope.** The provisions of this chapter shall control the alteration, addition and change of occupancy of existing buildings and structures, ~~including historic buildings and structures as referenced in Section 301.3.2.~~ **[BSC]** *including state-regulated structures in accordance with Section 401.1.2-501.1.2.*

**Exception:** Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 24. CHAPTER 5 – Section 501 GENERAL – Section 501.1.2 Existing state-owned structures**

BSC proposes to carry forward 2016 CEBC existing amendment, renumbered as Section 501.1.2:

...

**501.1.2** (formerly CEBC 401.1.2) **401.1.2 Existing state-owned structures.**  
**[BSC]** *The provisions of Sections 317 through 322 establish minimum standards for earthquake evaluation and design for retrofit of existing state-owned structures, including buildings owned by the University of California, the California State University and the Judicial Council.*

*The provisions of Sections 317 through 322 may be adopted by a local jurisdiction for earthquake evaluation and design for retrofit of existing buildings.*

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 25. CHAPTER 5 – Section 502 - ADDITIONS**

BSC proposes to adopt 2018 IEBC Section 502.1, renumber and carry forward existing 2016 CEBC Section 402.1 amendments, including *exception*, as amended.

...

**502.1** (formerly 402.1) **402.1 General.** **[BSC]** Additions to any building or structure shall comply with the requirements of the ~~International~~ California Building Code *or California Residential Code, as applicable*, for new construction. Alterations to the existing building or structure shall be made to ensure that the existing building or structure together with the addition are not less complying with the provisions of the ~~International~~ California Building Code than the existing building or structure was prior to the addition. An existing building together with its additions shall comply with the height and area provisions of Chapter 5 of the ~~International~~ California Building Code, *or the height provisions of Chapter 3 of the California Residential Code, as applicable.*

**Exception:** **[BSC]** *For state-owned buildings, including those owned by the University of California and the California State University and the Judicial Council, the requirements of Sections 402.3 502.4 and 402.4 502.5 are replaced by the requirements of Sections 317 through 322.*

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 26. CHAPTER 5 – Section 502 - ADDITIONS**

BSC proposes to adopt 2018 IEBC Section 502.3, renumber and carrying forward

existing amendments from 2016 CEBC Section 402.2.

...

**502.3** (formerly 402.2) ~~402.2~~ **Flood hazard areas.** For buildings and structures in flood hazard areas established in Section 1612.3 of the ~~International~~ California Building Code, or Section R322 of the ~~International~~ California Residential Code, as applicable, any addition that constitutes substantial improvement of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in flood hazard areas established in Section 1612.3 of the ~~International~~ California Building Code, or Section R322 of the ~~International~~ California Residential Code, as applicable, any additions that do not constitute substantial improvement of the existing structure are not required to comply with the flood design requirements for new construction.

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 27. CHAPTER 5 – Section 502 - ADDITIONS**

BSC proposes to adopt 2018 IEBC Section 502.4, renumber and carry forward existing amendments of 2016 CEBC Section 402.3.

...

**502.4** (formerly 402.3) ~~402.3~~ **Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an addition and its related alterations cause an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the ~~International~~ California Building Code for new structures. Any existing gravity load-carrying structural element whose vertical load-carrying capacity is decreased as part of the addition and its related alterations shall be considered to be an altered element subject to the requirements of Section 503.3. Any existing element that will form part of the lateral load path for any part of the addition shall be considered to be an existing lateral load-carrying structural element subject to the requirements of Section 502.5.

**Exception:** Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the existing building and the addition together comply with the conventional lightframe construction methods of the ~~International~~ California Building Code or the provisions of the ~~International~~ California Residential Code.

...

### Notation

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 28. CHAPTER 5 – Section 503 - ALTERATIONS**

BSC proposes to adopt 2018 IEBC Section 503.1, renumber and carry forward existing 2016 CEBC Section 403.1 amendment *Exception 3*, as amended:

...

**503.1** (formerly 403.1) ~~403.1~~ **General.** Except as provided by Section 302.4, 302.5 or this section, alterations to any building or structure shall comply with the requirements of the ~~International~~ California Building Code for new construction. Alterations shall be such that the existing building or structure is not less complying with the provisions of the ~~International~~ California Building Code than the existing building or structure was prior to the alteration.

#### **Exceptions:**

1. An existing stairway shall not be required to comply with the requirements of Section 1011 of the ~~International~~ California Building Code where the existing space and construction does not allow a reduction in pitch or slope.
2. Handrails otherwise required to comply with Section 1011.11 of the ~~International~~ California Building Code shall not be required to comply with the requirements of Section 1014.6 of the ~~International~~ California Building Code regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall have a clear width of less than 32 inches (815 mm).
4. **[BSC]** *For state-owned buildings, including those owned by the University of California and the California State University and the judicial council, the requirements of Sections ~~403.3~~ 503.3 through ~~403.4~~ 503.4 are replaced by the requirements of Sections 317 through 322.*

...

### Notation

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

### **ITEM 29. CHAPTER 5 – Section 503 - ALTERATIONS**

BSC proposes to adopt 2018 IEBC Section 503.2, renumber and carry forward existing 2016 CEBC Section 403.2 amendments.

...

503.2 (formerly 403.2) ~~403.2~~ **Flood hazard areas.**

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 30. CHAPTER 5 – Section 503 - ALTERATIONS**

BSC proposes to adopt 2018 IEBC Section 503.3, renumbered from 2016 CEBC Section 403.3, with amendments:

...

**503.3** (formerly 403.3) ~~403.3~~ **Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an alteration causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the ~~International~~ California Building Code for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design dead, live and snow loads including snow drift effects required by the ~~International~~ California Building Code for new structures.

**Exceptions:**

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the ~~International~~ California Building Code or the provisions of the ~~International~~ California Residential Code.
2. Buildings in which the increased dead load is due entirely to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m<sup>2</sup>) or less over an existing single layer of roof covering.

...

**Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 31. CHAPTER 5 – Section 506 – CHANGE OF OCCUPANCY**

BSC proposes to adopt 2018 IEBC Section 506.1, including 506.1.1, renumbered from 2016 CEBC Section 407.1, with amendments:

...

**506.1** (formerly 407.1) ~~407.1~~ **Compliance.** A change of occupancy shall not be made in any building unless that building is made to comply with the requirements

of the ~~International~~ California Building Code for the use or occupancy. Changes of occupancy in a building or portion thereof shall be such that the existing building is not less complying with the provisions of this code than the existing building or structure was prior to the change. Subject to the approval of the building official, changes of occupancy shall be permitted without complying with all of the requirements of this code for the new occupancy, provided that the new occupancy is less hazardous, based on life and fire risk, than the existing occupancy.

Exception: The building need not be made to comply with Chapter 16 of the ~~International~~ California Building Code unless required by Section 506.4.

**506.1.1** (formerly 407.1.1) ~~**407.1.1**~~ **Change in the character of use.** A change of occupancy with no change of occupancy classification shall not be made to any structure that will subject the structure to any special provisions of the applicable ~~International~~ California Codes, without approval of the code official. Compliance shall be only as necessary to meet the specific provisions and is not intended to require the entire building be brought into compliance.

...

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 32. CHAPTER 5 – Section 506 – CHANGE OF OCCUPANCY**

**506.2** (formerly 407.2) ~~**407.2**~~ **Certificate of occupancy.**

BSC proposes to adopt 2018 IEBC Section 506.2, renumbered from 2016 CEBC Section 407.2.

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 33. CHAPTER 5 – Section 506 – CHANGE OF OCCUPANCY**

**506.3** (formerly 407.3) ~~**407.3**~~ **Stairway**

BSC proposes to adopt 2018 IEBC Section 506.3, renumbering and carrying forward existing 2016 CEBC Section 407.3 amendments.

#### **Notation**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

#### **ITEM 34. CHAPTER 5 – Section 506 – CHANGE OF OCCUPANCY**

**506.4** (formerly 407.4) **Structural**

BSC proposes to carry forward 2016 CEBC only Section 407.4 existing *Exception 3* amendment, renumbering it as Exception to 2018 IEBC Section 506.4, with further amendments:

...

**506.4** (formerly 407.4) ~~407.4~~ **Structural**. Any building undergoing a change of occupancy shall satisfy the requirements of this section.

***Exception: [BSC]*** For state-owned buildings, including those owned by the University of California and the California State University and the Judicial Council, the performance level requirements of Section ~~407.4~~ 506.4 are replaced with the performance level requirements of Section 317.5.

Note that BSC, due to the exception, does not adopt subsequent 2018 IEBC Sections: **506.4.1/Live loads, 506.4.2/Snow and wind loads, 506.4.3/Seismic Loads, and 506.4.4/Access to Risk Category IV.**

...

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 35. CHAPTER 6 – CLASSIFICATION OF WORK. (chapter 5 of 2016 CEBC)**

BSC does not adopt Chapter 6 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5 18935, 18938.3

**ITEM 36. CHAPTERS 7, 8, 9.**

BSC does not adopt Chapters 7, 8, 9 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**CHAPTER 7 - ALTERATIONS-LEVEL 1**

**CHAPTER 8 - ALTERATIONS-LEVEL 2**

**CHAPTER 9 - ALTERATIONS-LEVEL 3**

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 37. CHAPTER 10 – CHANGE OF OCCUPANCY.**

BSC does not adopt Chapter 10 of 2018 IEBC. Carry forward title notes: *Not adopted*

*by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 38. CHAPTER 11 – ADDITIONS.**

BSC does not adopt Chapter 11 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 39. CHAPTER 12 – HISTORIC BUILDINGS.**

BSC does not adopt Chapter 12 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 40. CHAPTER 13 – PERFORMANCE COMPLIANCE METHODS (chapter 14 of 2016 CEBC).**

BSC does not adopt Chapter 13 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 41. CHAPTER 14 – RELOCATED OR MOVED BUILDINGS (chapter 13 of 2016 CEBC).**

BSC does not adopt Chapter 14 of 2018 IEBC. Carry forward title notes: *Not adopted by the State of California (May be available for adoption by local ordinance. See section 1.1.11)*

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 42. CHAPTER 15 – CONSTRUCTION SAFEGUARDS.**

BSC proposes to adopt Chapter 15 of 2018 IEBC, without amendment.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 43. CHAPTER 16 – REFERENCED STANDARDS.**

BSC proposes to adopt Chapter 16 of 2018 IEBC, without amendment.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 44. APPENDIX A, CHAPTER A1 – SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS**

BSC proposes to repeal Appendix Chapter A1 of 2016 CEBC, and adopt Appendix Chapter A1 of 2018 IEBC, carrying forward existing 2016 CEBC amendments, with exception of reprinted UBC Standards.

**Section A100 – APPLICATION.**

**Section A103 – DEFINITIONS – BUILDING CODE.**

Repeal reprint of Uniform Building Code Standards 21-4, 21-6, 21-7, 21-8, and 21-13, as an editorial continuation of 2016 CEBC:

## REFERENCED STANDARDS

### UNIFORM BUILDING CODE STANDARD 21-4 HOLLOW AND SOLID LOAD-BEARING CONCRETE MASONRY UNITS

Based on Standard Specification C 90-95 of the ASTM International.  
Extracted, with permission, from the *Annual Book of ASTM Standards*, copyright  
ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428

*Note: See Appendix Chapter 1, Section A106, California Existing Building Code*

#### Section 21.401 — Scope

This standard covers solid (units with 75 percent or more net area) and hollow load-bearing concrete masonry units made from portland cement, water and mineral aggregates with or without the inclusion of other materials.

#### Section 21.402 — Classification

**21.402.1 Types.** Two types of concrete masonry units in each of two grades are covered as follows:

**21.402.1.1 Type I, moisture-controlled units.** Units designated as Type I shall conform to all requirements of this standard including the moisture content requirements of Table 21-4-A.

**21.402.1.2 Type II, nonmoisture-controlled units.** Units designated as Type II shall conform to all requirements of this standard except the moisture content requirements of Table 21-4-A.

**21.402.2 Grades.** Concrete masonry units manufactured in accordance with this standard shall conform to two grades as follows:

**21.402.2.1 Grade N.** Units having a weight classification of 85 pcf (1360 kg/m<sup>3</sup>) or greater, for general use such as in exterior walls below and above grade that may or may not be exposed to moisture penetration or the weather and for interior walls and backup.

**21.402.2.2 Grade S.** Units having a weight classification of less than 85 pcf (1360 kg/m<sup>3</sup>), for uses limited to above-grade installation in exterior walls with weather-protective coatings and in walls not exposed to the weather.

#### Section 21.403 — Materials

**21.403.1 Cementitious materials.** Materials shall conform to the following applicable standards:

1. Portland Cement—ASTM C 150 modified as follows:

Limitation on insoluble residue—1.5 percent maximum.

Limitation on air content of mortar,

Volume percent—22 percent maximum.

Limitation on loss on ignition—7 percent maximum.

Limestone with a minimum 85 percent calcium carbonate (C<sub>2</sub>CO<sub>3</sub>) content may be added to the cement, pro-

vided the requirements of ASTM C 150 as modified above are met.

2. Blended Cements—ASTM C 595.

3. Hydrated Lime, Type S—UBC Standard 21-13.

**21.403.2 Other constituents and aggregates.** Air-entraining agents, coloring pigments, integral water repellents, finely ground silica, aggregates, and other constituents, shall be previously established as suitable for use in concrete or shall be shown by test or experience to not be detrimental to the durability of the concrete.

#### Section 21.404 — Physical Requirements

At the time of delivery to the work site, the units shall conform to the physical requirements prescribed in Table 21-4-B. The moisture content of Type I concrete masonry units at time of delivery shall conform to the requirements prescribed in Table 21-4-A.

At the time of delivery to the purchaser, the linear shrinkage of Type II units shall not exceed 0.065 percent.

#### Section 21.405 — Minimum Face-shell and Web Thicknesses

Face-shell (FST) and web (WT) thicknesses shall conform to the requirements listed in Table 21-4-C.

#### Section 21.406 — Permissible Variations in Dimensions

**21.406.1 Precision units.** For precision units, no overall dimension (width, height and length) shall differ by more than  $\frac{1}{8}$  inch (3.2 mm) from the specified standard dimensions.

**21.406.2 Particular feature units.** For particular feature units, dimensions shall be in accordance with the following:

1. For molded face units, no overall dimension (width, height and length) shall differ by more than  $\frac{1}{8}$  inch (3.2 mm) from the specified standard dimension. Dimensions of molded features (ribs, scores, hex-shapes, patterns, etc.) shall be within  $\frac{1}{16}$  inch (1.6 mm) of the specified standard dimensions and shall be within  $\frac{1}{16}$  inch (1.6 mm) of the specified placement of the unit.
2. For split-faced units, all non-split overall dimensions (width, height and length) shall differ by no more than  $\frac{1}{8}$

**REFERENCED STANDARDS**

inch (3.2 mm) from the specified standard dimensions. On faces that are split, overall dimensions will vary. Local suppliers should be consulted to determine dimensional tolerances achievable.

- For slumped units, no overall height dimension shall differ by more than 1/8 inch (3.2 mm) from the specified standard dimension. On faces that are slumped, overall dimensions will vary. Local suppliers should be consulted to determine dimension tolerances achievable.

**Note:** Standard dimensions of units are the manufacturer's designated dimensions. Nominal dimensions of modular size units, except slumped units, are equal to the standard dimensions plus 3/8 inch (9.5 mm), the thickness of one standard mortar joint. Slumped units are equal to the standard dimensions plus 1/2 inch (13 mm), the thickness of one standard mortar joint. Nominal dimensions of nonmodular size units usually exceed the standard dimensions by 1/8 inch to 1/4 inch (3.2 mm to 6.4 mm).

**Section 21.407 — Visual Inspection**

All units shall be sound and free of cracks or other defects that would interfere with the proper placing of the unit or impair the strength or permanence of the construction. Units may have minor cracks incidental to the usual method of manufacture, or minor chipping resulting from customary methods of handling in shipment and delivery.

Units that are intended to serve as a base for plaster or stucco shall have a sufficiently rough surface to afford a good bond.

Where units are to be used in exposed wall construction, the face or faces that are to be exposed shall be free of chips, cracks or other imperfections when viewed from 20 feet (6100 mm),

except that not more than 5 percent of a shipment may have slight cracks or small chips not larger than 1 inch (25.4 mm).

**Section 21.408 — Methods of Sampling and Testing**

The purchaser or authorized representative shall be accorded proper facilities to inspect and sample the units at the place of manufacture from the lots ready for delivery.

Sample and test units in accordance with ASTM C 140.

Total linear drying shrinkage shall be based on tests of concrete masonry units made with the same materials, concrete mix design, manufacturing process and curing method, conducted in accordance with ASTM C 426 and not more than 24 months prior to delivery.

**Section 21.409 — Rejection**

If the samples tested from a shipment fail to conform to the specified requirements, the manufacturer may sort it, and new specimens shall be selected by the purchaser from the retained lot and tested at the expense of the manufacturer. If the second set of specimens fails to conform to the specified requirements, the entire lot shall be rejected.

**TABLE 21-4-A  
MOISTURE CONTENT REQUIREMENTS FOR TYPE I UNITS**

| LINEAR SHRINKAGE, PERCENT | MOISTURE CONTENT, MAX. PERCENT OF TOTAL ABSORPTION<br>(Average of 3 Units) |                           |                   |
|---------------------------|--|---------------------------|-------------------|
|                           | Humidity Conditions at Job site or Point of Use                            |                           |                   |
|                           | Humid <sup>1</sup>   | Intermediate <sup>2</sup> | Arid <sup>3</sup> |
| 0.03 or less              | 45   | 40                        | 35                |
| From 0.03 to 0.045        | 40   | 35                        | 30                |
| 0.045 to 0.065, max.      | 35   | 30                        | 25                |

<sup>1</sup>Average annual relative humidity above 75 percent.

<sup>2</sup>Average annual relative humidity 50 to 75 percent.

<sup>3</sup>Average annual relative humidity less than 50 percent.

**TABLE 21-4-B  
STRENGTH AND ABSORPTION REQUIREMENTS**

| COMPRESSIVE STRENGTH, MIN, psi (MPa) |                 | WATER ABSORPTION, MAX, lb./ft. (kg/m) (Average of 3 Units)        |   |                                      |
|--------------------------------------|-----------------|---|---|--------------------------------------|
| Average Net Area                     |                 | Weight Classification—Oven-dry Weight of Concrete, lb./ft. (kg/m) |   |                                      |
| Average of 3 Units                   | Individual Unit | Lightweight,<br>Less than 105 (1680)                              | Medium Weight,<br>105 to less than 125<br>(1680-2000) | Normal Weight,<br>125 (2000) or more |
| 1900 (13.1)                          | 1700 (11.7)     | 18 (288)  | 15 (240)  | 13 (208)                             |

TABLE 21-4-C  
MINIMUM THICKNESS OF FACE-SHELLS AND WEBS

| NOMINAL WIDTH (W) OF UNIT<br>(inches) | FACE-SHELL THICKNESS<br>(FST) MIN., (inches) <sup>1, 4</sup> | WEB THICKNESS (WT)               |  |
|---------------------------------------|--|----------------------------------|--|
|                                       |  | Webs <sup>1</sup> Min., (inches) | Equivalent Web Thickness,<br>Min., in./Lin. Ft. <sup>2</sup> |
| × 25.4 for mm                         |  | × 83 for mm/in. m                |  |
| 3 and 4                               | 3/4  | 3/4                              | 1 5/8  |
| 6                                     | 1  | 1                                | 2 1/4  |
| 8                                     | 1 1/4  | 1                                | 2 1/4  |
| 10                                    | 1 3/8  | 1 1/8                            | 2 1/2  |
| 12                                    | 1 1/4 <sup>3</sup>   | 1 1/8                            | 2 1/2  |
|                                       | 1 1/2  |                                  |  |
|                                       | 1 1/4 <sup>3</sup>   |                                  |  |

<sup>1</sup>Average of measurements on three units taken at the thinnest point.

<sup>2</sup>Sum of the measured thickness of all webs in the unit, multiplied by 12 (305 when using metric), and divided by the length of the unit. In the case of open-ended units where the open-ended portion is solid grouted, the length of that open-ended portion shall be deducted from the overall length of the unit.

<sup>3</sup>This face-shell thickness (FST) is applicable where allowable design load is reduced in proportion to the reduction in thicknesses shown, except that allowable design load on solid-grouted units shall not be reduced.

<sup>4</sup>For split-faced units, a maximum of 10 percent of a shipment may have face-shell thicknesses less than those shown, but in no case less than 3/4 inch (19 mm).

**REFERENCED STANDARDS**

**UNIFORM BUILDING CODE STANDARD 21-6  
IN-PLACE MASONRY SHEAR TESTS**

See Appendix Chapter 1, Sections A1 06.3.3 and A1 07.2, *Uniform Code for Building Conservation*  
Note: See Appendix Chapter A1, Section A104, *California Existing Building Code*.

**SECTION 21.601 — SCOPE**

This standard applies when the *Uniform Code for Building Conservation (California Existing Building Code)* requires in-place testing of the quality of masonry mortar.

**SECTION 21.602 — PREPARATION OF SAMPLE**

The bed joints of the outer wythe of the masonry shall be tested in shear by laterally displacing a single brick relative to the adjacent bricks in the same wythe. The head joint opposite the loaded end of the test brick shall be carefully excavated and cleared. The brick adjacent to the loaded end of the test brick shall be carefully removed by sawing or drilling and excavating to provide space for a hydraulic ram and steel loading blocks.

**SECTION 21.603 — APPLICATION OF LOAD AND DETERMINATION OF RESULTS**

Steel blocks, the size of the end of the brick, shall be used on each end of the ram to distribute the load to the brick. The blocks shall not contact the mortar joints. The load shall be applied horizontally, in the plane of the wythe, until either a crack can be seen or slip occurs. The strength of the mortar shall be calculated by dividing the load at the first cracking or movement of the test brick by the nominal gross area of the sum of the two bed joints.

**UNIFORM BUILDING CODE STANDARD 21-7  
TESTS OF ANCHORS IN UNREINFORCED MASONRY WALLS**

See Appendix Chapter 1, Section A1 07.3 and A1 07.4, *Uniform Code for Building Conservation*  
Note: See Appendix Chapter A1, Section A105, A107.3, A107.4 and Table A1-E, *California Existing Building Code*.

**SECTION 21.701 — SCOPE**

Shear and tension anchors in existing masonry construction shall be tested in accordance with this standard when required by the *Uniform Code for Building Conservation (California Existing Building Code)*.

**SECTION 21.702 — DIRECT TENSION TESTING OF EXISTING ANCHORS AND NEW BOLTS**

The test apparatus shall be supported by the masonry wall. The distance between the anchor and the test apparatus support shall not be less than one half the wall thickness for existing anchors and 75 percent of the embedment for new embedded bolts. Existing wall anchors shall be given a preload of 300 pounds (1335 N) prior to establishing a datum for recording elongation. The tension test load reported shall be recorded at  $\frac{1}{8}$  inch (3.2 mm) relative movement of the existing anchor and the adjacent masonry surface. New embedded tension bolts shall be subject to a direct tension load of not less than 2.5 times the design load but not less than 1,500 pounds (6672 N) for five minutes (10 percent deviation).

**SECTION 21.703 — TORQUE TESTING OF NEW BOLTS**

Bolts embedded in unreinforced masonry walls shall be tested using a torque-calibrated wrench to the following minimum torques:  
 $\frac{1}{2}$ -inch-diameter (13 mm) bolts—40 foot pounds (54.2 N · m)  $\frac{3}{8}$ -inch-diameter (16 mm) bolts—50 foot pounds (67.8 N · m)  $\frac{3}{4}$ -inch-diameter (19 mm) bolts—60 foot pounds (81.3 N · m)

**SECTION 21.704 — PREQUALIFICATION TEST FOR BOLTS AND OTHER TYPES OF ANCHORS**

This section is applicable when it is desired to use tension or shear values for anchors greater than those permitted by Table A-1-E of the *Uniform Code for Building Conservation (California Existing Building Code)*. The direct-tension test procedure set forth in Section 21.702 for existing anchors may be used to determine the allowable tension values for new embedded or through bolts, except that no preload is required. Bolts shall be installed in the same manner and using the same materials as will be used in the actual construction. A minimum of five tests for each bolt size and type shall be performed for each class of masonry in which they are proposed to be used. The allowable tension values for such anchors shall be the lesser of the average ultimate load divided by a factor of safety of 5.0 or the average load of which  $\frac{1}{8}$  inch (3.2 mm) elongation occurs for each size and type of bolt and class of masonry.

Shear bolts may be similarly prequalified. The test procedure shall comply with ASTM E 488-90 or another approved procedure.

The allowable values determined in this manner may exceed those set forth in Table A-1-E of the *Uniform Code for Building Conservation (California Existing Building Code)*.

**SECTION 21.705 — REPORTS**

Results of all tests shall be reported. The report shall include the test results as related to anchor size and type, orientation of loading, details of the anchor installation and embedment, wall thickness, and joist orientation.

REFERENCED STANDARDS

**UNIFORM BUILDING CODE STANDARD 21-8  
POINTING OF UNREINFORCED MASONRY WALLS**

See Appendix Chapter 1, Section A1 06.3.3.2, *Uniform Code for Building Conservation*  
*Note: See Appendix Chapter A1, Section A103 and A106.3.3.9, California Existing Building Code.*

**SECTION 21.801 — SCOPE**

Pointing of deteriorated mortar joints when required by the *Uniform Code for Building Conservation (California Existing Building Code)* shall be in accordance with this standard.

**SECTION 21.802 — JOINT PREPARATION**

The old or deteriorated mortar joint shall be cut out, by means of a toothing chisel or nonimpact power tool, to a uniform depth of  $\frac{3}{4}$  inch (19 mm) until sound mortar is reached. Care shall be taken not to damage the brick edges. After cutting is complete, all loose material shall be removed with a brush, air or water stream.

**SECTION 21.803 — MORTAR PREPARATION**

The mortar mix shall be Type N or Type S proportioned as required by the construction specifications. The pointing mortar shall be pre-hydrated by first thoroughly mixing all ingredients dry and then mixing again, adding only enough water to produce a damp unworkable mix which will retain its form when pressed into a ball. The mortar shall be kept in a damp condition for one and one-half hours; then sufficient water shall be added to bring it to a consistency that is somewhat drier than conventional masonry mortar.

**SECTION 21.804 — PACKING**

The joint into which the mortar is to be packed shall be damp but without freestanding water. The mortar shall be tightly packed into the joint in layers not exceeding  $\frac{1}{4}$  inch (6.4 mm) in depth until it is filled; then it shall be tooled to a smooth surface to match the original profile.

REFERENCED STANDARDS

**UNIFORM BUILDING CODE STANDARD 21-13  
HYDRATED LIME FOR MASONRY PURPOSES**

Based on Standard Specification C 207-91 (Reapproved 1992) of the ASTM International.  
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See Section 2102.2, Item 3, *Uniform Building Code*  
Note: See Referenced Standard UBC 21-4

**Section 21.1301 — Scope**

This standard covers four types of hydrated lime. Types N and S are suitable for use in mortar, in the scratch and brown coats of cement plaster, for stucco, and for addition to portland-cement concrete. Types NA and SA are air-entrained hydrated limes that are suitable for use in any of the above uses where the inherent properties of lime and air entrainment are desired. The four types of lime sold under this specification shall be designated as follows:

**Type N**—Normal hydrated lime for masonry purposes.

**Type S**—Special hydrated lime for masonry purposes.

**Type NA**—Normal air-entraining hydrated lime for masonry purposes.

**Type SA**—Special air-entraining hydrated lime for masonry purposes.

**Note:** Type S, special hydrated lime, and Type SA, special air-entraining hydrated lime, are differentiated from Type N, normal hydrated lime, and Type NA, normal air-entraining hydrated lime, principally by their ability to develop high, early plasticity and higher water retentivity and by a limitation on their unhydrated oxide content.

**Section 21.1302 — Definition**

**HYDRATED LIME.** The hydrated lime covered by Type N or S in this standard shall contain no additives for the purpose of entraining air. The air content of cement-lime mortars made with Type N or S shall not exceed 7 percent. Types NA and SA shall contain an air-entraining additive as specified by Section 21.1305. The air content of cement-lime mortars made with Type NA or SA shall have a minimum of 7 percent and a maximum of 14 percent.

**Section 21.1303 — Additions**

Types NA and SA hydrated lime covered by this standard shall contain additives for the purpose of entraining air.

**Section 21.1304 — Manufacturer's Statement**

Where required, the nature, amount and identity of the air-entraining agent used and of any processing addition that may have been used shall be provided, as well as test data showing compliance of such air-entraining addition.

**Section 21.1305 — Chemical Requirements  
Composition**

Hydrated lime for masonry purposes shall conform to the requirements as to chemical composition set forth in Table 21-13-A.

**Section 21.1306 — Residue, Popping and Pitting**

The four types of hydrated lime for masonry purposes shall conform to one of the following requirements:

1. The residue retained on a No. 30 (600  $\mu$ m) sieve shall not be more than 0.5 percent, or
2. If the residue retained on a No. 30 (600  $\mu$ m) sieve is over 0.5 percent, the lime shall show no pops and pits when tested.

**Section 21.1307 — Plasticity**

The putty made from Type S, special hydrate, or Type SA, special air-entraining hydrate, shall have a plasticity figure of not less than 200 within 30 minutes after mixing with water, when tested.

**Section 21.1308 — Water Retention**

Hydrated lime mortar made with Type N, normal hydrated lime, or Type NA, normal air-entraining hydrated lime, after suction for 60 seconds, shall have a water-retention value of not less than 75 percent when tested in a standard mortar made from the dry hydrate or from putty made from the hydrate which has been soaked for a period of 16 to 24 hours.

Hydrated lime mortar made with Type S, special hydrated lime, or Type SA, special air-entraining hydrated lime, after suction for 60 seconds, shall have a water-retention value of not less than 85 percent when tested in a standard mortar made from the dry hydrate.

**Section 21.1309 — Special Marking**

When Type NA or SA air-entraining hydrated lime is delivered in packages, the type under this standard and the words "air-entraining" shall be plainly indicated thereon or, in case of bulk shipments, so indicated on shipping notices.

**Section 21.1310 — Quality Control**

Every 90 days, each lime producer shall retain an approved agency to obtain a random sample from a local point of supply in the market area served by the producer.

The agency shall test the lime for compliance with the physical requirements of Sections 21.1306, 21.1307 and 21.1308.

Upon request of the building official, the producer shall furnish (at no cost) test results to the building official, architect, structural engineer, general contractor and masonry contractor.

**ASTM 653/A & 653M-08 [HCD]**

Standard specifications for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated (galvannealed) by the hot-dip process

**TABLE 21-13-A—CHEMICAL REQUIREMENTS**

|  | HYDRATE TYPES |    |    |    |
|--|---------------|----|----|----|
|  | N             | NA | S  | SA |
| Calcium and magnesium oxides (nonvolatile basis), min. percent | 95            | 95 | 95 | 95 |
| Carbon dioxide (as-received basis), max. percent               |               |    |    |    |
| If sample is taken at place of manufacture                     | 5             | 5  | 5  | 5  |
| If sample is taken at any other place                          | 7             | 7  | 7  | 7  |
| Unhydrated oxides (as-received basis), max. percent            | —             | —  | 8  | 8  |

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 45. APPENDIX A, CHAPTER A2 – EARTHQUAKE HAZARD REDUCTION IN EXISTING REINFORCED CONCRETE AND REINFORCED MASONRY WALL BUILDINGS WITH FLEXIBLE DIAPHRAGMS**

BSC proposes to adopt Appendix Chapter A2 of 2018 IEBC, as amended:

...

**SECTION A202 - SCOPE**

**A202.1 Scope.** The provisions of this chapter shall apply to wall anchorage systems that resist out-of-plane forces and to collectors in existing reinforced concrete or reinforced masonry buildings with flexible diaphragms. Wall anchorage systems that were designed and constructed in accordance with the 1997 *Uniform Building Code*, ~~1999 *BOCA National Building Code*, 1999 *Standard Building Code*~~ or the 2000 and subsequent editions of the *International Building Code* shall be deemed to comply with these provisions.

...

**SECTION A203 - DEFINITIONS**

**A203.1 Definitions.** For the purpose of this chapter, the applicable definitions listed in Chapters 16, 19, 21, 22 and 23 of the *International California Building Code* and the following...

...

**SECTION A204 - SYMBOLS AND NOTATIONS**

**A204.1 General.** For the purpose of this chapter, the applicable symbols and notations in the *International California Building Code* shall apply.

...

**SECTION A205 - GENERAL REQUIREMENTS**

**A205.1 General.** The seismic-resisting elements specified in this chapter shall comply with provisions of Section 1613 of the *International California Building Code*, except...

...

**A205.4 Structural observation, testing and inspection.** Structural observation, in accordance with Section 1709 of the *International California Building Code*, shall be required for all...

...

**SECTION A206 - ANALYSIS AND DESIGN**

**A206.1 Reinforced concrete and reinforced masonry wall anchorage.** The anchorage shall provide a positive direct connection between the wall and floor or roof construction capable of resisting 75 percent of the horizontal forces specified in Section 1613 of the *International California Building Code*.

...  
**A206.2 Special requirements for wall anchorage systems.** The steel elements of the wall anchorage system shall be designed in accordance with the *International California Building Code* without the use...

...  
**A206.3 Development of anchor loads into the diaphragm.** Development of anchor loads into roof and floor diaphragms shall comply with Section 1613 of the *International California Building Code* using horizontal forces...  
...cross-grain tension. The continuous ties required in Section 1613 of the *International California Building Code* shall be...

...  
**A206.8 Collectors.** ... based on 75 percent of the horizontal forces specified in Chapter 16 of the *International California Building Code*.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 46. APPENDIX A – GUIDELINES FOR THE RETROFIT OF EXISTING BUILDINGS; CHAPTERS A3 and A4**

BSC does not adopt APPENDIX A: Chapter A3 – Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-frame Residential Buildings, of 2018 IEBC.

BSC does not adopt APPENDIX A: Chapter A4 - Earthquake Risk Reduction In Wood-frame Residential Buildings With Soft, Weak Or Open Front Walls, of 2018 IEBC.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 47. APPENDIX A – REFERENCED STANDARDS; CHAPTER A5**

BSC proposes to adopt APPENDIX A: Chapter A5 – Referenced Standards, of 2018 IEBC, without amendment.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,  
Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 48. APPENDIX B – SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS FOR EXISTING BUILDINGS AND FACILITIES**

BSC does not adopt APPENDIX B, of 2018 IEBC.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 49. APPENDIX C – GUIDELINES FOR THE WIND RETROFIT OF EXISTING BUILDINGS; CHAPTERS C1 AND C2**

BSC does not adopt APPENDIX C: Chapter C1-Gable End Retrofit For High Wind Areas; Chapter C2-Roof Deck Fastening For High Wind Areas, both of 2018 IEBC.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3

**ITEM 50. RESOURCE A – GUIDELINES ON FIRE RATINGS OF ARCHAIC MATERIALS AND ASSEMBLIES**

BSC does not adopt RESOURCE A, of 2018 IEBC.

**Notation:**

Authority: Health and Safety Code §§18928, 18934.5, 18934.7,

Reference(s): Health and Safety Code §§18928, 18928.1, 18930, 18934.5, 18935, 18938.3