

# REVISION RECORD FOR THE STATE OF CALIFORNIA

## ERRATA

January 1, 2020

### 2019 Title 24, Part 10, California Existing Building Code

#### General Information:

1. The date of this erratum is for identification purposes only. See the History Note Appendix on the back side or accompanying page.
2. This erratum is issued by the California Building Standards Commission in order to correct nonsubstantive printing errors or omissions in California Code of Regulations, Title 24, Part 10, of the 2019 *California Existing Building Code*. Instructions are provided below.
3. Health and Safety Code Section 18938.5 establishes that only building standards in effect at the time of the application for a building permit may be applied to the project plans and construction. This rule applies to both adoptions of building standards for Title 24 by the California Building Standards Commission, and local adoptions and ordinances imposing building standards. An erratum to Title 24 is a nonregulatory correction because of a printing error or omission that does not differ substantively from the official adoption by the California Building Standards Commission. Accordingly, the corrected code text provided by this erratum may be applied on and after the stated effective date.
4. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

#### Title 24, Part 10

##### Remove Existing Pages

1 and 2  
5 and 6  
11 and 12  
27 through 30  
33 through 40  
43 and 44  
55 and 56  
79 through 84  
91 and 92  
99 and 100  
131 and 132  
137 and 138  
371 and 372

##### Insert Buff-Colored Pages

1 and 2  
5 and 6  
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131 and 132  
137 and 138  
371 and 372

Item No. 5512S191



# CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

## CHAPTER 1 – SCOPE AND ADMINISTRATION

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.

See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below	X		X	X	X		X	X	X	X	X	X	X	X	X								
Chapter / Section																							
<i>Division I – California Administration</i>																							
1.1	X		X	X	X		X	X	X														
1.2	X																						
1.3																							
1.4																							
1.5 (Reserved)																							
1.6																							
1.7																							
1.8				X	X																		
1.9.1							X																
1.9.1.1							X																
1.9.2								X	X														
1.9.2.1								X															
1.9.2.2									X														
1.10.1										X	X												
1.10.2												X											
1.10.3													X										
1.10.4														X									
1.10.5															X								
1.11			X																				
<i>Division II – Scope and Administration</i>																							
101.2				X	X																		
101.8	X			X	X																		
101.8.1								X	X														
101.8.1																							
102.1 – 102.5										X	X			X	X								
104.9 – 104.11										X	X			X	X								
105.1			X																				
105.2 Building: 1-6				X	X																		
105.2.1 – 105.2.2			X																				
105.3 – 105.3.1			X																				
105.4			X																				
105.6 – 105.7			X																				
106.1				X	X																		
106.1 – 106.4			X																				
106.2.1				X	X																		

(continued)

# CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

## CHAPTER 1 – SCOPE AND ADMINISTRATION—continued

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHDPD						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below	X		X	X	X		X	X	X														
Chapter / Section																							
106.2.3				X	X																		
106.2.4				X	X																		
106.2.5	X			X	X			X	X														
106.2.6				X	X																		
106.4			X																				
106.5			X																				
107.1 – 107.4			X																				
109.1 – 109.6			X																				
109.3.6	X							X	X														
110			X																				
111			X																				
113.1 – 113.2			X																				
114			X																				
115			X																				

The state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

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

**1.1.8 City, county, or city and county amendments, additions or deletions.** The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 1.1.8.1. The effective date of amendments, additions or deletions to this code by a city, county, or city and county filed pursuant to Section 1.1.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

#### **1.1.8.1 Findings and filings.**

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

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

2. The city, county, or city and county shall file the amendments, additions or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 278180, Sacramento, CA 95827-8180 or 9342 Tech Center Drive, Suite 500, Sacramento, CA 95826.

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

In addition to the provisions of Section 1.1.8.1 of this Part, the provisions of this section shall apply to a city, county, and city and county adopting local energy stan-

dards applicable to buildings and structures subject to the California Energy Code, Part 6.

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

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

**Exception: [HCD 1 & HCD 2]** Plans approved by the Department of Housing and Community Development or a Department-approved design approval agency for factory-built housing as defined by Health and Safety Code Section 19971. Approved plans, pursuant to the California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, Article 3, Section 3048 remain valid for a period of 36 months from the date of plan approval.

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

**1.1.11 Format.** This part fundamentally adopts the International Existing Building Code by reference on a chapter-by-chapter basis. When a specific chapter of the International Existing Building Code is not printed in the code and is marked “Reserved”, such chapter of the International Existing Building Code is not adopted as a portion of this code. When a specific chapter of the International Existing Building Code is marked “Not adopted by the State of California” but appears in the code, it may be available for adoption by local ordinance.

Those provisions of the model code used as the basis for this part of the California Building Standards Code in Title 24, California Code of Regulations, that are not printed herein and are marked “Not adopted by the State of California,” may be available for adoption by local ordinance, provided such ordinance and related model code provisions do not conflict with Title 24 provisions applicable to the subject occupancy or building feature. Such a local ordinance is not subject to the Express Finding and document filing requirements of Health and Safety Code Sections 13869.7, 17958, and 18941.5.

**Note:** Matrix Adoption Tables at the front of each chapter may aid the code user in determining which chapter or sections within a chapter are applicable to buildings under the authority of a specific state agency, but they are not to be considered regulatory.

**1.1.12 Validity.** If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

## **SECTION 1.2 BUILDING STANDARDS COMMISSION**

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

### **1. State buildings for all occupancies.**

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

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

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

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

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

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

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

**Authority cited**—Government Code Section 14617.

**Reference**—Government Code Section 14617.

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

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

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

**Authority cited**—Health and Safety Code Section 16600.

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

### **4. Unreinforced masonry-bearing wall buildings.**

**Application**—Minimum seismic strengthening standards for buildings specified in Appendix Chapter A1

of the California Existing Building Code, except for buildings subject to building standards pursuant to Health and Safety Code (commencing) with Section 17910.

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

**Authority cited**—Health and Safety Code Section 18934.7.

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

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

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

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

**1.2.1.3 Enforcement.** Reserved for DGS.

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

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

### **1. Green building standards for nonresidential occupancies.**

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

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

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

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

### **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.

**1.8.7.2.1 Approval of alternates.** The consideration and approval of alternates by a local building department shall comply with the following procedures and limitations:

1. The approval shall be granted on a case-by-case basis.
2. Evidence shall be submitted to substantiate claims that the proposed alternate, in performance, safety and protection of life and health, conforms to, or is at least equivalent to, the standards contained in this code and other rules and regulations promulgated by the Department of Housing and Community Development.
3. The local building department may require tests performed by an approved testing agency at the expense of the owner or owner's agent as proof of compliance.
4. If the proposed alternate is related to accessibility in covered multifamily dwellings or in facilities serving covered multifamily dwellings as defined in Chapter 2 of the California Building Code, the proposed alternate must also meet the threshold set for equivalent facilitation as defined in Chapter 2 of the California Building Code.

For additional information regarding approval of alternates by a building department pursuant to the State Housing Law, see California Health and Safety Code Section 17951(e) and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

**1.8.7.3 Department of Housing and Community Development.** The Department of Housing and Community Development may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal or demolition of apartments, condominiums, hotels, motels, lodging houses, dwellings or accessory structures thereto and permanent buildings in mobilehome parks and special occupancy parks. The consideration and approval of alternates shall comply with the following:

1. The department may require tests at the expense of the owner or owner's agent to substantiate compliance with the California Building Standards Code.
2. The approved alternate shall, for its intended purpose, be at least equivalent in performance and safety to the materials, designs, tests or methods of construction prescribed by this code.

## SECTION 1.8.8 APPEALS BOARD

**1.8.8.1 General.** Every city, county, or city and county shall establish a process to hear and decide appeals of orders, decisions and determinations made by the enforcing agency relative to the application and interpretation of this code and other regulations governing construction, use, maintenance and change of occupancy. The governing body of any city, county, or city and county may establish a local appeals

board and a housing appeals board to serve this purpose. Members of the appeals board(s) shall not be employees of the enforcing agency and shall be knowledgeable in the applicable building codes, regulations and ordinances as determined by the governing body of the city, county, or city and county.

Where no such appeals boards or agencies have been established, the governing body of the city, county, or city and county shall serve as the local appeals board or housing appeals board as specified in California Health and Safety Code Sections 17920.5 and 17920.6.

**1.8.8.2 Definitions.** The following terms shall for the purposes of this section have the meaning shown.

**HOUSING APPEALS BOARD.** The board or agency of a city, county, or city and county which is authorized by the governing body of the city, county, or city and county to hear appeals regarding the requirements of the city, county, or city and county relating to the use, maintenance and change of occupancy of buildings and structures, including requirements governing alteration, additions, repair, demolition and moving. In any area in which there is no such board or agency, "Housing appeals board" means the local appeals board having jurisdiction over the area.

**LOCAL APPEALS BOARD.** The board or agency of a city, county, or city and county which is authorized by the governing body of the city, county, or city and county to hear appeals regarding the building requirements of the city, county, or city and county. In any area in which there is no such board or agency, "Local appeals board" means the governing body of the city, county, or city and county having jurisdiction over the area.

**1.8.8.3 Appeals.** Except as otherwise provided in law, any person, firm or corporation adversely affected by a decision, order or determination by a city, county, or city and county relating to the application of building standards published in the California Building Standards Code, or any other applicable rule or regulation adopted by the Department of Housing and Community Development, or any lawfully enacted ordinance by a city, county, or city and county, may appeal the issue for resolution to the local appeals board or housing appeals board as appropriate.

The local appeals board shall hear appeals relating to new building construction and the housing appeals board shall hear appeals relating to existing buildings.

## SECTION 1.8.9 UNSAFE BUILDINGS OR STRUCTURES

**1.8.9.1 Authority to enforce.** Subject to other provisions of law, the administration, enforcement, actions, proceedings, abatement, violations and penalties for unsafe buildings and structures are contained in the following statutes and regulations:

1. For applications subject to the State Housing Law as referenced in Section 1.8.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of

*Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.*

2. *For applications subject to the Mobilehome Parks Act as referenced in Section 1.8.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.*
3. *For applications subject to the Special Occupancy Parks Act as referenced in Section 1.8.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.*
4. *For applications subject to the Employee Housing Act as referenced in Section 1.8.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.*
5. *For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.*

**1.8.9.2 Actions and proceedings.** *Subject to other provisions of law, punishments, penalties and fines for violations of building standards are contained in the following statutes and regulations:*

1. *For applications subject to the State Housing Law as referenced in Section 1.8.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.*
2. *For applications subject to the Mobilehome Parks Act as referenced in Section 1.8.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.*
3. *For applications subject to the Special Occupancy Parks Act as referenced in Section 1.8.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.*
4. *For applications subject to the Employee Housing Act as referenced in Section 1.8.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.*
5. *For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6,*

*commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.*

## **SECTION 1.8.10 OTHER BUILDING REGULATIONS**

**1.8.10.1 Existing structures.** *Notwithstanding other provisions of law, the replacement, retention, and extension of original materials and the use of original methods of construction for any existing building or accessory structure, or portions thereof, shall be permitted in accordance with the provisions of this code as adopted by the Department of Housing and Community Development. For additional information, see California Health and Safety Code, Sections 17912, 17920.3, 17922 and 17958.8.*

**1.8.10.2 Moved structures.** *Subject to the requirements of California Health and Safety Code Sections 17922, 17922.3 and 17958.9, local ordinances or regulations relating to a moved residential building or accessory structure thereto, shall permit the replacement, retention, and extension of original materials and the use of original methods of construction so long as the structure does not become or continue to be a substandard building.*

## **SECTION 1.9 DIVISION OF THE STATE ARCHITECT**

### **1.9.1 Division of the State Architect—Access Compliance - Reserved.**

*Buildings or facilities where accessibility is required for applications listed in California Code of Regulations, Title 24, Part 2 (California Building Code), Chapter 1, Section 1.9.1 regulated by the Division of the State Architect—Access Compliance shall comply with Title 24, Part 2, Chapter 11A or 11B, as applicable under authority cited by CA Government Code Section 4450 and in reference cited by CA Government Code Sections 4450 through 4461, 12955.1(c), and CA Health and Safety Code Sections 18949.1, 19952 through 19959.*

**1.9.1.1 Adopting agency identification.** *Division of the State Architect-Access Compliance amendments in this code appear preceded with the acronym [DSA-AC].*

### **1.9.2 Division of the State Architect-Structural Safety.**

#### **1.9.2.1 DSA-SS Division of the State Architect-Structural Safety.**

**Application—***Public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.*

**Enforcing agency—***The Division of the State Architect—Structural Safety [DSA-SS] has been delegated the responsibility and authority by the Department of General Services to review and approve the design and observe the construction of public elementary and secondary schools, community colleges and state-owned or state-leased essential services buildings.*



documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

**[A] 106.5 Retention of construction documents.** One set of approved construction documents shall be retained by the code official for a period of not less than the period required for retention of public records.

**[A] 106.6 Design professional in responsible charge.** Where it is required that documents be prepared by a registered design professional, the code official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The code official shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where structural observation is required, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur.

## SECTION 107 TEMPORARY STRUCTURES AND USES

**[A] 107.1 General.** The code official is authorized to issue a permit for temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

**[A] 107.2 Conformance.** Temporary uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

**[A] 107.3 Temporary power.** The code official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in *the California Electrical Code*.

**[A] 107.4 Termination of approval.** The code official is authorized to terminate such permit for a temporary use and to order the temporary use to be discontinued.

## SECTION 108 FEES

**[A] 108.1 Payment of fees.** A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

**[A] 108.2 Schedule of permit fees.** On buildings, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required in accordance with the schedule as established by the applicable governing authority.

**[A] 108.3 Building permit valuations.** The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work including materials and labor for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment, and permanent systems. If, in the opinion of the code official, the valuation is underestimated on the application, the permit shall be denied unless the applicant can show detailed estimates to meet the approval of the code official. Final building permit valuation shall be set by the code official.

**[A] 108.4 Work commencing before permit issuance.** Any person who commences any work before obtaining the necessary permits shall be subject to an additional fee established by the code official that shall be in addition to the required permit fees.

**[A] 108.5 Related fees.** The payment of the fee for the construction, alteration, removal, or demolition of work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

**[A] 108.6 Refunds.** The code official is authorized to establish a refund policy.

## SECTION 109 INSPECTIONS

**[A] 109.1 General.** Construction or work for which a permit is required shall be subject to inspection by the code official, and such construction or work shall remain visible and able to be accessed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

**[A] 109.2 Preliminary inspection.** Before issuing a permit, the code official is authorized to examine or cause to be examined buildings and sites for which an application has been filed.

[A] **109.3 Required inspections.** The code official, on notification, shall make the inspections set forth in Sections 109.3.1 through 109.3.10.

[A] **109.3.1 Footing or foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready-mixed in accordance with ASTM C94, the concrete need not be on the job.

[A] **109.3.2 Concrete slab or under-floor inspection.** Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories, and other ancillary equipment items are in place but before any concrete is placed or floor sheathing installed, including the subfloor.

[A] **109.3.3 Lowest floor elevation.** For additions and substantial improvements to existing buildings in flood hazard areas, on placement of the lowest floor, including basement, and prior to further vertical construction, the elevation documentation required in the *California Building Code* shall be submitted to the code official.

[A] **109.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, framing, fire blocking, and bracing are in place and pipes, chimneys, and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes, and ducts are approved.

*109.3.4.1 Moisture content verification. [HCD] Moisture content of framing members shall be verified in accordance with the California Green Building Standards Code (CALGreen), Chapter 4, Division 4.5.*

[A] **109.3.5 Lath or gypsum board inspection.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

**Exception:** Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

[A] **109.3.6 Weather-exposed balcony and walking surface waterproofing.** Where the scope of work involves balconies 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: [DSA-SS, DSA-SS/CC, HCD1, HCD2] Where special inspections are provided in accordance with Section 1705.1.1, Item 3 of the California Building Code.*

[A] **109.3.7 Fire and smoke-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated

assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

[A] **109.3.8 Other inspections. [HCD, SFM]** In addition to the inspections specified in Sections 109.2 through 109.3.7, the code official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the *Department of Building Safety*.

*Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.*

[A] **109.3.9 Special inspections.** Special inspections shall be required in accordance with Chapter 17 of the *California Building Code*.

[A] **109.3.10 Final inspection.** The final inspection shall be made after work required by the building permit is completed.

[A] **109.4 Inspection agencies.** The code official is authorized to accept reports of approved inspection agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.

[A] **109.5 Inspection requests.** It shall be the duty of the holder of the building permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for any inspections of such work that are required by this code.

[A] **109.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

## SECTION 110 CERTIFICATE OF OCCUPANCY

[A] **110.1 Change of occupancy.** Altered areas of a building and relocated buildings shall not be used or occupied, and change of occupancy of a building or portion thereof shall not be made until the code official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

**[A] 110.2 Certificate issued.** After the code official inspects the building and does not find violations of the provisions of this code or other laws that are enforced by the Department of Building Safety, the code official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the code official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy in accordance with the provisions of the *California Building Code*.
9. The type of construction as defined in the *California Building Code*.
10. The design occupant load and any impact the alteration has on the design occupant load of the area not within the scope of the work.
11. If fire protection systems are provided, whether the fire protection systems are required.
12. Any special stipulations and conditions of the building permit.

**[A] 110.3 Temporary occupancy.** The code official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The code official shall set a time period during which the temporary certificate of occupancy is valid.

**[A] 110.4 Revocation.** The code official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

## SECTION 111 SERVICE UTILITIES

**[A] 111.1 Connection of service utilities.** A person shall not make connections from a utility, source of energy, fuel, or power to any building or system that is regulated by this code for which a permit is required, until approved by the code official.

**[A] 111.2 Temporary connection.** The code official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel, or power.

**[A] 111.3 Authority to disconnect service utilities.** The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 111.1 or 111.2. The code official shall notify the serving utility and, wherever possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

## SECTION 112 BOARD OF APPEALS

**[A] 112.1 General.** In order to hear and decide appeals of orders, decisions, or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.

**[A] 112.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

**[A] 112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

## SECTION 113 VIOLATIONS

**[A] 113.1 Unlawful acts.** It shall be unlawful for any person, firm, or corporation to repair, alter, extend, add, move, remove, demolish, or change the occupancy of any building or equipment regulated by this code or cause same to be done in conflict with or in violation of any of the provisions of this code.

**[A] 113.2 Notice of violation.** The code official is authorized to serve a notice of violation or order on the person responsible for the repair, alteration, extension, addition, moving, removal, demolition, or change in the occupancy of a building in violation of the provisions of this code or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

**[A] 113.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the code official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct,

or abate such violation or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

**[A] 113.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who repairs or alters or changes the occupancy of a building or structure in violation of the approved construction documents or directive of the code official or of a permit or certificate issued under the provisions of this code shall be subject to penalties as prescribed by law.

## SECTION 114 STOP WORK ORDER

**[A] 114.1 Authority.** Where the code official finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the code official is authorized to issue a stop work order.

**[A] 114.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume.

**[A] 114.3 Unlawful continuance.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

## SECTION 115 UNSAFE BUILDINGS AND EQUIPMENT

**[A] 115.1 Conditions.** Buildings, structures or equipment that are or hereafter become unsafe, shall be taken down, removed or made safe as the code official deems necessary and as provided for in this code.

**[A] 115.2 Record.** The code official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

**[A] 115.3 Notice.** If an unsafe condition is found, the code official shall serve on the owner, the owner's authorized agent or person in control of the structure a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe building to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the code official acceptance or rejection of the terms of the order.

**[A] 115.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is delivered to the owner or the owner's authorized agent personally; sent by certified or registered mail addressed to the owner or the owner's authorized agent at the last known address with the return receipt

requested; or delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner on the owner's authorized agent or on the person responsible for the structure shall constitute service of notice on the owner.

**[A] 115.5 Restoration.** The building or equipment determined to be unsafe by the code official is permitted to be restored to a safe condition. To the extent that repairs, alterations, or additions are made or a change of occupancy occurs during the restoration of the building, such repairs, alterations, additions, or change of occupancy shall comply with the requirements of this code.

## SECTION 116 EMERGENCY MEASURES

**[A] 116.1 Imminent danger.** Where, in the opinion of the code official, there is imminent danger of failure or collapse of a building that endangers life, or where any building or part of a building has fallen and life is endangered by the occupation of the building, or where there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors, or the presence of toxic fumes, gases, or materials, or operation of defective or dangerous equipment, the code official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. The code official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the Code Official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition, or of demolishing the same.

**[A] 116.2 Temporary safeguards.** Notwithstanding other provisions of this code, whenever, in the opinion of the code official, there is imminent danger due to an unsafe condition, the code official shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been instituted; and shall cause such other action to be taken as the code official deems necessary to meet such emergency.

**[A] 116.3 Closing streets.** Where necessary for public safety, the code official shall temporarily close structures and close or order the authority having jurisdiction to close sidewalks, streets, public ways, and places adjacent to unsafe structures, and prohibit the same from being utilized.

**[A] 116.4 Emergency repairs.** For the purposes of this section, the code official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

**[A] 116.5 Costs of emergency repairs.** Costs incurred in the performance of emergency work shall be paid by the jurisdiction. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises or the owner's

## CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

### CHAPTER 2 – DEFINITIONS

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.

See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHDP						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X					X	X	X		X	X								
Adopt only those sections that are listed below			X																				
Chapter / Section																							
201.1										X	X	X		X	X								
201.3	X																						
ADDITION			X																				
ALTERATION			X																				
APPROVED			X	X	X																		
BUILDING				X	X	X																	
<i>BUILDING OFFICIAL</i>				X	X																		
CHANGE OF OCCUPANCY			X																				
CODE OFFICIAL			X	X	X																		
<i>CHANGE IN FUNCTION</i>										X	X	X		X	X								
<i>CRITICAL CARE AREA</i>										X													
DANGEROUS			X																				
EQUIPMENT OR FIXTURE			X																				
EXISTING BUILDING			X																				
EXISTING STRUCTURE			X																				
<i>EXISTING STRUCTURE</i>										X	X	X		X	X								
FACILITY			X																				
<i>GENERAL ACUTE CARE HOSPITAL</i>										X													
<i>INCIDENTAL STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS</i>										X				X									
<i>MAJOR STRUCTURAL ALTERATIONS</i>										X				X									
<i>MINOR STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS</i>										X				X									
NONCOMBUSTIBLE MATERIAL			X																				
<i>NONSTRUCTURAL ALTERATION</i>										X				X									
PRIMARY FUNCTION			X																				

(continued)

# CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

## CHAPTER 2 – DEFINITIONS—continued

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD					BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5							
Adopt Entire Chapter																						
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X					X	X	X		X	X							
Adopt only those sections that are listed below			X																			
Chapter / Section																						
REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE			X																			
REHABILITATION			X																			
REPAIR			X																			
REPAIR										X												
REROOFING			X																			
ROOF COATING			X																			
ROOF RECOVER			X																			
ROOF REPAIR			X																			
ROOF REPLACEMENT			X																			
SPC SEISMIC SEPARATION										X	X											
SUBSTANDARD BUILDING				X	X																	
SUBSTANTIAL STRUCTURAL DAMAGE										X				X								
UNREINFORCED CONCRETE										X	X	X		X	X							
UNREINFORCED MASONRY										X				X								
UNSAFE			X	X	X																	
VOLUNTARY STRUCTURAL IMPROVEMENTS										X												
WORK AREA			X																			

The state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

## CHAPTER 2

# DEFINITIONS

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### User note:

**About this chapter:** Codes, by their very nature, are technical documents. Every word, term and punctuation mark can add to or change the meaning of a technical requirement. It is necessary to maintain a consensus on the specific meaning of each term contained in the code. Chapter 2 performs this function by stating clearly what specific terms mean for the purpose of the code.

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### SECTION 201 GENERAL

**201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter. *[OSHPD 1, 1R, 2, 4 & 5]* For terms not defined in this chapter, refer to Chapter 2 of the California Building Code.

**201.2 Interchangeability.** Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

**201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in the other California Codes, such terms shall have the meanings ascribed to them in those codes.

**201.4 Terms not defined.** Where terms are not defined through the methods authorized by this chapter, such terms shall have ordinarily accepted meanings such as the context implies.

### SECTION 202 GENERAL DEFINITIONS

**[A] ADDITION.** An extension or increase in floor area, number of stories, or height of a building or structure.

**[A] ALTERATION.** Any construction or renovation to an existing structure other than a repair or addition.

**[A] APPROVED.** Acceptable to the code official.

**Exception:** *[HCD 1 & HCD 2]* “Approved” means meeting the approval of the Enforcing Agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities, or technical, health, or scientific organizations or agencies.

#### Notes:

1. See Health and Safety Code Section 17920 for “Approved” as applied to residential construction and buildings or structures accessory thereto as referenced in Section 1.8.2.

2. See Health and Safety Code Section 17921.1 for “Approved” as applied to the use of hotplates in residential construction as referenced in Section 1.8.2.

3. See Health and Safety Code Section 19966 for “Approved” as applied to Factory-Built Housing as referenced in Section 1.8.3.2.5.

4. See Health and Safety Code Section 18201 for “Approved” as applied to Mobilehome Parks as referenced in Section 1.8.2.

5. See Health and Safety Code Section 18862.1 for “Approved” as applied to Special Occupancy Parks as referenced in Section 1.8.2.

**[A] BUILDING.** Any structure utilized or intended for supporting or sheltering any use or occupancy.

**Exception:** *[HCD 1, HCD 2 & HCD 1-AC]* For applications listed in Section 1.8.2 regulated by the Department of Housing and Community Development, “Building” shall not include the following:

1. Any mobilehome as defined in Health and Safety Code Section 18008.
2. Any manufactured home as defined in Health and Safety Code Section 18007.
3. Any commercial modular as defined in Health and Safety Code Section 18001.8 or any special purpose commercial modular as defined in Section 18012.5.
4. Any recreational vehicle as defined in Health and Safety Code, Section 18010.
5. Any multifamily manufactured home as defined in Health and Safety Code Section 18008.7.

For additional information, see Health and Safety Code Section 18908.

**Note:** Building shall have the same meaning as defined in Health and Safety Code Sections 17920 and 18908 for the applications specified in Section 1.11.

**BUILDING OFFICIAL.** *[HCD 1, HCD 2]* The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

**CHANGE IN FUNCTION.** *[OSHPD 1, 1R, 2, 4 & 5]* See California Building Code Section 1224.3.

## DEFINITIONS

**[A] CHANGE OF OCCUPANCY.** A change in the use of a building or a portion of a building that results in any of the following:

1. A change of occupancy classification.
2. A change from one group to another group within an occupancy classification.
3. Any change in use within a group for which there is a change in application of the requirements of this code.

**[A] CODE OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code.

**[HCD 1 & HCD 2]** “Code Official” shall mean “Building Official” as defined in this code.

**CRITICAL CARE AREA.** [OSHPD 1] See California Administrative Code Chapter 6.

**[BS] DANGEROUS.** Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation, or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

**[A] DEFERRED SUBMITTAL.** Those portions of the design that are not submitted at the time of the application and that are to be submitted to the code official within a specified period.

**[BS] DISPROPORTIONATE EARTHQUAKE DAMAGE.** A condition of earthquake-related damage where both of the following occur:

1. The 0.3-second spectral acceleration at the building site as estimated by the United States Geological Survey for the earthquake in question is less than 40 percent of the mapped acceleration parameter SS.
2. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 10 percent from its predamage condition.

**EQUIPMENT OR FIXTURE.** Any plumbing, heating, electrical, ventilating, air conditioning, refrigerating, and fire protection equipment, and elevators, dumbwaiters, escalators, boilers, pressure vessels and other mechanical facilities or installations that are related to building services. Equipment or fixture shall not include manufacturing, production, or process equipment, but shall include connections from building service to process equipment.

**[A] EXISTING BUILDING.** A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

**[A] EXISTING STRUCTURE.** A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

**EXISTING STRUCTURE.** [OSHPD 1, 1R, 2, 4 & 5] A structure that has a valid certificate of occupancy issued by the building official.

**[A] FACILITY.** All or any portion of buildings, structures, site improvements, elements and pedestrian or vehicular routes located on a site.

**[BS] FLOOD HAZARD AREA.** The greater of the following two areas:

1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any year.
2. The area designated as a flood hazard area on a community’s flood hazard map, or otherwise legally designated.

**GENERAL ACUTE CARE HOSPITAL.** [OSHPD 1] See California Building Code Section 1224.3.

**[A] HISTORIC BUILDING.** Any building or structure that is one or more of the following:

1. Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register, state designated or locally designated historic district.

**INCIDENTAL STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS.** [OSHPD 1 & 4] Alterations, additions or repairs which would not reduce the story lateral shear force-resisting capacity by more than 5 percent or increase the story shear by more than 5 percent in any existing story or a combination thereof with equivalent effect (not exceeding 5 percent total). The calculation of lateral shear force-resisting capacity and story shear shall account for the cumulative effects of additions and alterations since original construction.

**MAJOR STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS.** [OSHPD 1 & 4] Alterations, additions or repairs of greater extent than minor structural alterations, additions, or repairs.

**MINOR STRUCTURAL ALTERATIONS, ADDITIONS, OR REPAIRS.** [OSHPD 1 & 4] Alterations, additions or repairs of greater extent than incidental structural alterations or alterations which would not reduce the story shear lateral force-resisting capacity by more than 10 percent or increase the story shear by more than 10 percent in any existing story or a combination thereof with equivalent effect (not exceeding 10 percent total). The calculation of lateral shear force-resisting capacity and story shear shall account for the cumulative effects of additions and alterations since original construction.

**[B] NONCOMBUSTIBLE MATERIAL.** A material that, under the conditions anticipated, will not ignite or burn when subjected to fire or heat. Materials that pass ASTM E136 are considered noncombustible materials.

**NONSTRUCTURAL ALTERATION.** [OSHPD 1 & 4] Non-structural alteration is any alteration which neither affects



*existing structural elements nor requires new structural elements for vertical or lateral support and which does not increase the lateral shear force in any story by more than 5 percent.*

**PRIMARY FUNCTION.** A primary function is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors and restrooms are not areas containing a primary function.

**[A] REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.** A registered design professional engaged by the owner or the owner's authorized agent to review and coordinate certain aspects of the project, as determined by the code official, for compatibility with the design of the building or structure, including submittal documents prepared by others, deferred submittal documents and phased submittal documents.

**REHABILITATION.** Any work, as described by the categories of work defined herein, undertaken in an existing building.

**RELOCATABLE BUILDING.** A partially or completely assembled building constructed and designed to be reused multiple times and transported to different building sites.

**[A] REPAIR.** The reconstruction, replacement or renewal of any part of an existing building for the purpose of its maintenance or to correct damage.

**REPAIR.** *[OSHPD 1] as used in this Code means all the design and construction work affecting existing or requiring new structural elements undertaken to restore or enhance the structural and nonstructural load-resisting system participating in vertical or lateral response of a structure primarily intended to correct the effects of deterioration or impending or actual failure, regardless of cause.*

**[BS] REROOFING.** The process of recovering or replacing an existing roof covering. See "Roof recover" and "Roof replacement."

**[BS] RISK CATEGORY.** A categorization of buildings and other structures for determination of flood, wind, snow, ice and earthquake loads based on the risk associated with unacceptable performance, as provided in Section 1604.5 of the *California Building Code*.

**[BS] ROOF COATING.** A fluid-applied adhered coating used for roof maintenance, roof repair, or as a component of a roof covering system or roof assembly.

**[BS] ROOF RECOVER.** The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.

**[BS] ROOF REPAIR.** Reconstruction or renewal of any part of an existing roof for the purpose of correcting damage or restoring the predamage condition.

**[BS] ROOF REPLACEMENT.** The process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering.

**[BS] SEISMIC FORCES.** The loads, forces and requirements prescribed herein, related to the response of the building to earthquake motions, to be used in the analysis and design of the structure and its components. Seismic forces are considered either full or reduced, as provided in Chapter 3.

**SPC SEISMIC SEPARATION.** *[OSHPD 1 & 1R] Means a building separation in accordance with the California Administrative Code, Chapter 6 Section 3.4.*

**SUBSTANDARD BUILDING.** *[HCD 1, HCD 2] See Health and Safety Code Section 17920.3.*

**[BS] SUBSTANTIAL DAMAGE.** For the purpose of determining compliance with the flood provisions of this code, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**[BS] SUBSTANTIAL IMPROVEMENT.** For the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure, before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either of the following:

1. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the code official and that is the minimum necessary to ensure safe living conditions.
2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

**[BS] SUBSTANTIAL STRUCTURAL ALTERATION.** An alteration in which the gravity load-carrying structural elements altered within a 5-year period support more than 30 percent of the total floor and roof area of the building or structure. The areas to be counted toward the 30 percent shall include mezzanines, penthouses, and in-filled courts and shafts tributary to the altered structural elements.

**[BS] SUBSTANTIAL STRUCTURAL DAMAGE.** *[OSHPD 1 & 4] A condition where any of the following apply:*

1. The vertical elements of the lateral force-resisting system have suffered damage such that the lateral load-carrying capacity of any story in any horizontal direction has been reduced by more than 10 percent from its predamage condition.
2. The capacity of any vertical component carrying gravity load, or any group of such components, has a tributary area more than 15 percent of the total area of the structure's floor(s) and roof(s), has been reduced more than 10 percent from its predamage condition, and the remaining capacity of such affected elements, with

## DEFINITIONS

respect to all dead and live loads, is less than 75 percent of that required by the *California Building Code* for new buildings of similar structure, purpose and location.

3. The capacity of any structural component carrying snow load, or any group of such components, that supports more than 15 percent of the roof area of similar construction, has been reduced more than 10 percent from its predamage condition, and the remaining capacity with respect to dead, live and snow loads is less than 75 percent of that required by the *California Building Code* for new buildings of similar structure, purpose and location.

**TECHNICALLY INFEASIBLE.** An alteration of a facility that has little likelihood of being accomplished because the existing structural conditions require the removal or alteration of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

**UNREINFORCED CONCRETE.** *[OSHDP 1, 1R, 2, 4 & 5] Unreinforced concrete as used in this chapter means plain concrete as defined in ACI 318 Section 2.3.*

**UNREINFORCED MASONRY.** *[OSHDP 1 & 4] Unreinforced masonry as used in this chapter means masonry construction where reinforcements in any direction is less than minimum reinforcement specified in TMS 402 Section 7.3.2.6.*

**UNSAFE.** Buildings, structures or equipment that are unsanitary, or that are deficient due to inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or in which the structure or individual structural members meet the definition of “*Dangerous*,” or that are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance shall be deemed unsafe. A vacant structure that is not secured against entry shall be deemed unsafe.

*[HCD 1 & HCD 2] An unsafe building, as defined in this chapter, shall be considered substandard.*

**VOLUNTARY STRUCTURAL IMPROVEMENTS (VSIs).** *[OSHDP 1] Voluntary structural improvements are any alterations of existing structural element(s) or addition of new structural elements which are not necessary for vertical or lateral support of other work and is initiated by the applicant primarily for the purpose of increasing the vertical or lateral load-carrying strength or stiffness of an existing building.*

**WORK AREA.** That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.

## CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

### CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.  
See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHDP					BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5							
Adopt Entire Chapter																						
Adopt Entire Chapter as amended (amended sections listed below)				X	X	X																
Adopt only those sections that are listed below	X		X					X	X		X	X		X	X							
Chapter / Section																						
301.1 - 301.3.1			X								X	X		X	X							
301.1				X																		
301.1 <i>Exception 1</i>	X				X																	
301.1 <i>Exception 2</i>								X														
301.1 <i>Exception 3</i>									X													
301.1 <i>Exception 4</i>				X	X						X	X		X	X							
301.1 <i>Exception 5</i>											X	X		X	X							
301.3											X	X		X	X							
301.3 <i>Note</i>				X	X																	
301.3.1 <i>Exception</i>											X	X		X	X							
301.3.2 <i>Note</i>				X	X																	
301.3.3 <i>Note</i>				X	X																	
301.4				X	X																	
301.5						X																
302 - 304											X	X		X	X							
302			X																			
302.2.1	X																					
302.5				X																		
302.5.1				†	†	†																
303.1	X							X	X													
303.2	X							X	X													
304.1	X							X	X													
305				†	†	†																
305.1 <i>Note</i>						X																
305.8.2			X																			
307											X	X			X							
308											X	X			X							
313			X																			
314			X																			

(continued)

# CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

## CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS—continued

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)				X	X	X																	
Adopt only those sections that are listed below	X		X					X	X		X	X		X	X								
Chapter / Section																							
315			X																				
316			X																				
317	X							X	X														
318	X							X	X														
319	X							X	X														
320	X							X	X														
321	X							X	X														
322	X							X	X														
323								X	X														

The state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

### SECTION 303 STRUCTURAL DESIGN LOADS AND EVALUATION AND DESIGN PROCEDURES

**[BS] 303.1 Live loads.** Where an addition or alteration does not result in increased design live load, existing gravity load-carrying 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 *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 *California Building Code* shall be used.

**[BS] 303.2 Snow loads on adjacent buildings.** Where an alteration or addition changes the potential snow drift effects on an adjacent building, the code official is authorized to enforce Section 7.12 of ASCE 7.

**[BS] 303.3 Seismic evaluation and design procedures.** Where required, seismic evaluation or design shall be based on the procedures and criteria in this section, regardless of which compliance method is used.

**[BS] 303.3.1 Compliance with full seismic forces.** Where compliance requires the use of full seismic forces, the criteria shall be in accordance with one of the following:

1. One-hundred percent of the values in the *California Building Code*. Where the existing seismic force-resisting system is a type that can be designated as “Ordinary,” values of  $R$ ,  $\Omega_0$  and  $C_d$  used for analysis in accordance with Chapter 16 of the *California Building Code* shall be those specified for structural systems classified as “Ordinary” in accordance with

Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a “Detailed,” “Intermediate” or “Special” system.

2. ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 303.3.1 for the applicable risk category.

**[BS] 303.3.2 Compliance with reduced seismic forces.** Where seismic evaluation and design is permitted to use reduced seismic forces, the criteria used shall be in accordance with one of the following:

1. The *California Building Code* using 75 percent of the prescribed forces. Values of  $R$ ,  $\Omega_0$  and  $C_d$  used for analysis shall be as specified in Section 303.3.1 of this code.
2. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A as specified in Items 2.1 through 2.4 and subject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.
  - 2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1.
  - 2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in Chapter A2.

**[BS] TABLE 303.3.1  
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH FULL SEISMIC FORCES**

RISK CATEGORY (Based on CBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1N EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2N EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3)	Collapse Prevention (S-5)
II	Life Safety (S-3)	Collapse Prevention (S-5)
III	Damage Control (S-2)	Limited Safety (S-4)
IV	Immediate Occupancy (S-1)	Life Safety (S-3)

**[BS] TABLE 303.3.2  
PERFORMANCE OBJECTIVES FOR USE IN ASCE 41 FOR COMPLIANCE WITH REDUCED SEISMIC FORCES**

RISK CATEGORY (Based on CBC Table 1604.5)	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-1E EARTHQUAKE HAZARD LEVEL	STRUCTURAL PERFORMANCE LEVEL FOR USE WITH BSE-2E EARTHQUAKE HAZARD LEVEL
I	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
II	Life Safety (S-3). See Note a	Collapse Prevention (S-5)
III	Damage Control (S-2). See Note a	Limited Safety (S-4). See Note b
IV	Immediate Occupancy (S-1)	Life Safety (S-3). See Note c

- a. For Risk Categories I, II and III, the Tier 1 and Tier 2 procedures need not be considered for the BSE-1E earthquake hazard level.
- b. For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on  $MS$ -factors that are the average of the values for Collapse Prevention and Life Safety.
- c. For Risk Category IV, the Tier 1 screening checklists shall be based on Collapse Prevention, except that checklist statements using the Quick Check provisions shall be based on  $MS$ -factors for Life Safety.

- 2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A3.
- 2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in multiple-unit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A4.
3. ASCE 41, using the performance objective in Table 303.3.2 for the applicable risk category.

### SECTION 304 IN-SITU LOAD TESTS

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

### SECTION 305 ACCESSIBILITY FOR EXISTING BUILDINGS (Not adopted by HCD)

*[DSA-AC] Buildings or facilities where accessibility is required for applications listed in Title 24, Part 2, California Building Code, Chapter 1, Section 1.9.1 regulated by the Division of the State Architect-Access Compliance shall comply with Title 24, Part 2, California Building Code, Chapter 11A or Chapter 11B, as applicable.*

**305.1 Scope.** The provisions of Sections 305.1 through 305.9 apply to maintenance, change of occupancy, additions and alterations to existing buildings, including those identified as historic buildings.

**Note:** *[HCD 1-AC] Accessibility requirements for covered multifamily dwellings, as defined in Chapter 2 of the California Building Code, are promulgated under HCD authority and are located in Chapter 11A of the California Building Code.*

**305.2 Maintenance of facilities.** A facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.

**305.3 Extent of application.** An alteration of an existing facility shall not impose a requirement for greater accessibility than that which would be required for new construction. Alterations shall not reduce or have the effect of reducing accessibility of a facility or portion of a facility.

**305.4 Change of occupancy.** Existing buildings that undergo a change of group or occupancy shall comply with this section.

**Exception:** Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a change of occupancy in conjunction with alterations where the work area is 50 percent or less of the aggregate area of the building.

**305.4.1 Partial change of occupancy.** Where a portion of the building is changed to a new occupancy classification, any alterations shall comply with Sections 305.6, 305.7 and 305.8.

**305.4.2 Complete change of occupancy.** Where an entire building undergoes a change of occupancy, it shall comply with Section 305.4.1 and shall have all of the following accessible features:

1. Not fewer than one accessible building entrance.
2. Not fewer than one accessible route from an accessible building entrance to primary function areas.
3. Signage complying with Section 1111 of the *International Building Code*.
4. Accessible parking, where parking is being provided.
5. Not fewer than one accessible passenger loading zone, where loading zones are provided.
6. Not fewer than one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, Items 1 through 6 shall conform to the requirements to the maximum extent technically feasible.

**Exception:** The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.

**305.5 Additions.** Provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 305.7.

**305.6 Alterations.** A facility that is altered shall comply with the applicable provisions in Chapter 11 of the *International Building Code*, unless technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

#### Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 305.7.
2. Accessible means of egress required by Chapter 10 of the *International Building Code* are not required to be provided in existing facilities.
3. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.
4. Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing alterations where the work area is 50 percent or less of the aggregate area of the building.

**305.7 Alterations affecting an area containing a primary function.** Where an alteration affects the accessibility to, or contains an area of primary function, the route to the primary function area shall be accessible. The accessible route to the

The building shall be evaluated in accordance with a Tier 3 Systematic Evaluation and Retrofit per ASCE 41 Chapter 6 for both the Level 1 and Level 2 performance levels, and the more restrictive requirements shall apply.

**Exception:** If the floor area of an addition is greater than the larger of 50 percent of the floor area of the original building or 1,000 square feet (93 m<sup>2</sup>), then the Table 317.5 entries for BSE-R (or BSE-1E) and BSE-C are replaced by BSE-1N and BSE-2N, respectively.

**317.6 Retrofit required.** Where the evaluation indicates the building does not meet the required performance objectives of this section, the owner shall take appropriate steps to ensure that the building's structural system is retrofitted in accordance with the provisions of Section 317. Appropriate steps are either: 1) undertake the seismic retrofit as part of the additions, modifications and/or repairs of the structure; or 2) provide a plan, acceptable to the building official, to complete the seismic retrofit in a timely manner. The relocation or moving of an existing building is considered to be an alteration requiring filing of the plans and specifications approved by the building official.

**317.7** The additions, modification or repair to any existing building are permitted to be prepared in accordance with the requirements for a new building, Chapter 16 of the California Building Code, applied to the entire building.

**317.8** The requirements of ASCE 41 Chapter 14 are to apply to the use of seismic isolation or passive energy systems for the repair, modification or retrofit of an existing structure. When seismic isolation or passive energy dissipation is used, the project must have project peer review as prescribed in Section 322.

**317.9** Any construction required by this chapter shall include structural observation by the registered design professional who is responsible for the structural design in accordance with Section 319.10.

**317.10** Where Method B of Section 321 is used or is required by Section 319.7, the proposed method of building evaluation and design procedures must be accepted by the building official prior to the commencement of the work.

**317.11 Voluntary lateral-force-resisting system modifications.** Where the exception of Section 317.2 applies, modifications of existing structural components and additions of new structural components that are initiated for the purpose of improving the seismic performance of an existing structure and that are not required by other portions of this chapter are permitted under the requirements of Section 319.12.

## SECTION 318 DEFINITIONS

**318.1** In addition to the definitions given in Section 202, for the purposes of Sections 317 through 323, certain terms are defined as follows:

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

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

**BSE-C RESPONSE ACCELERATION PARAMETERS [BSC]** are the parameters ( $S_{XS}$  and  $S_{XI}$ ) taken from 5-percent/50-year maximum direction spectral response acceleration curves or by a Site Specific Response Spectrum developed in accordance with ASCE 41, Section 2.4.2.1.

**BSE-R RESPONSE ACCELERATION PARAMETERS [BSC]** are the parameters ( $S_{XS}$  and  $S_{XI}$ ) taken from 20-percent/50-year maximum direction spectral response acceleration curves or by a Site Specific Response Spectrum developed in accordance with ASCE 41, Section 2.4.2.1.

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

Building Regulatory Authority	Risk Category	PERFORMANCE CRITERIA	
		Level 1	Level 2
State-Owned [BSC]	I, II, III	BSE-R, S-3, N-C	BSE-C, S-5, N-D
State-Owned [BSC]	IV	BSE-R, S-2, N-B	BSE-C, S-4, N-D
Division of the State Architect - [DSA-SS]	I	BSE-1N, S-3, N-B	BSE-2N, S-5, N-D
Division of the State Architect - [DSA-SS]	II, III	BSE-1N, S-2, N-B	BSE-2N, S-4, N-D
Division of the State Architect - [DSA-SS]	IV	BSE-1N, S-2, N-A	BSE-2N, S-4, N-D
Division of the State Architect - [DSA-SS/CC]	I, II	BSE-1E, S-3, N-C	BSE-2N, S-5, N-D
Division of the State Architect - [DSA-SS/CC]	III	BSE-1E, S-3, N-B	BSE-2N, S-5, N-D
Division of the State Architect - [DSA-SS/CC]	IV	BSE-1E, S-2, N-B	BSE-2N, S-4, N-D

- 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, N-C to the Life Safety level, N-D to the Hazards Reduced, and N-E 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.
- Buildings evaluated and retrofitted to meet the requirements for a new building, Chapter 16 of the California Building Code, in accordance with the exception in Section 319.1, are deemed to meet the seismic performance requirements of this section.

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

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

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

**METHOD A** refers to the procedures prescribed in Section 320.

**METHOD B** refers to the procedures allowed in Section 321.

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

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

**PEER REVIEW** refers to the procedures contained in Section 322.

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

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

**SPECIFIC PROCEDURES** are the procedures listed in Section 319.1.1.

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

## SECTION 319 SEISMIC CRITERIA SELECTION FOR EXISTING BUILDINGS

**319.1 Basis for evaluation and design.** This section determines what technical approach is to be used for the seismic evaluation and design for existing buildings. For those buildings or portions of buildings for which Section 317 requires action, the procedures and limitations for the evaluation of existing buildings and design of retrofit systems and/or repair thereof shall be implemented in accordance with this section.

One of the following approaches must be used:

1. Method A of Section 320;
2. Method B of Section 321, with independent review of a peer reviewer as required in Section 322; or

3. For state-owned buildings only, the use of one of the specific procedures listed in Section 319.1.1.

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

### Exceptions:

1. **[BSC]** For buildings constructed to the requirements of California Building Code, 2013 or later edition, as adopted by the governing jurisdiction, that code is permitted to be used in place of those specified in Section 319.1.
2. **[DSA-SS & DSA-SS/CC]** For public schools and community colleges constructed to the requirements of California Building Code, 2013 or later edition, that code is permitted to be used in place of those specified in Section 319.1 provided the building complies with Seismic Design Category D or higher.

**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. Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms (Chapter A2).

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

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

**319.1.4 Public schools.** **[DSA-SS]** For public schools, unreinforced masonry shall not be used to resist in-plane or out-of-plane seismic forces or superimposed gravity loads.

**319.1.5 Public schools.** **[DSA-SS]** For public schools of light-frame construction, horizontal diaphragms and vertical shear walls shall consist of either diagonal lumber sheathing or structural panel sheathing. Braced horizontal diaphragms may be acceptable when approved by DSA. Straight lumber sheathing may be used in combination with diagonal or structural panel sheath-



## CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

### CHAPTER 4 – REPAIRS

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.  
See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHDP					BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5							
Adopt Entire Chapter																						
Adopt Entire Chapter as amended (amended sections listed below)				X	X						X	X		X	X							
Adopt only those sections that are listed below	X		X																			
Chapter / Section																						
401.1			X								X	X		X	X							
401.1.1	X																					
401.2			X																			
401.3	X																					
402			X																			
402.2				X	X																	
402.3				X	X																	
403			X																			
404			X																			
405.2.1 – 405.2.4.1																						
405.2.3.1			X																			
405.2.5	X																					
406											†	†		†	†							
407																						
407.1				X	X																	
408.1				X	X																	
408.2				X	X																	

The state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.



## CHAPTER 4

# REPAIRS

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### User note:

**About this chapter:** Chapter 4 provides requirements for repairs of existing buildings. The provisions define conditions under which repairs may be made using materials and methods like those of the original construction or the extent to which repairs must comply with requirements for new buildings.

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### SECTION 401 GENERAL

**401.1 Scope.** Repairs shall comply with the requirements of this chapter. Repairs to historic buildings need only comply with Chapter 12. *[OSHPD 1R, 2, 4 & 5] Repairs to historic buildings not adopted by OSHPD shall comply with the requirements in the California Building Code, Sections 1224.2, 1225.2, 1226.2, 1227.2 and 1228.2 for functional requirements.*

**401.1.1 Scope.** *[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 405.2.1 and 405.2.3 are replaced by the requirements of Sections 317 through 322.*

**401.2 Compliance.** The work shall not make the building less complying than it was before the repair was undertaken.

**[BS] 401.3 Flood hazard areas.** In flood hazard areas, repairs that constitute substantial improvement shall require that the building comply with Section 1612 of the *California Building Code*, or Section R322 of the *California Residential Code*, as applicable.

### SECTION 402 BUILDING ELEMENTS AND MATERIALS

**402.1 Glazing in hazardous locations.** Replacement glazing in hazardous locations shall comply with the safety glazing requirements of the *California Building Code* or *California Residential Code* as applicable.

**Exception:** Glass block walls, louvered windows and jalousies repaired with like materials.

**402.2 Existing materials.** *[HCD] Existing materials shall comply with Section 302.4.*

**402.3 New and replacement materials.** *[HCD] New and replacement materials used for repairs shall comply with Section 302.5.*

### SECTION 403 FIRE PROTECTION

**403.1 General.** Repairs shall be done in a manner that maintains the level of fire protection provided.

### SECTION 404 MEANS OF EGRESS

**404.1 General.** Repairs shall be done in a manner that maintains the level of protection provided for the means of egress.

### SECTION 405 STRUCTURAL

**[BS] 405.1 General.** Structural repairs shall be in compliance with this section and Section 401.2.

**[BS] 405.2 Repairs to damaged buildings.** Repairs to damaged buildings shall comply with this section.

**[BS] 405.2.1 Repairs for less than substantial structural damage.** Unless otherwise required by this section, for damage less than substantial structural damage, the damaged elements shall be permitted to be restored to their predamage condition.

**[BS] 405.2.1.1 Snow damage.** Structural components whose damage was caused by or related to snow load effects shall be repaired, replaced or altered to satisfy the requirements of Section 1608 of the *California Building Code*.

**[BS] 405.2.2 Disproportionate earthquake damage.** A building assigned to Seismic Design Category D, E or F that has sustained disproportionate earthquake damage shall be subject to the requirements for buildings with substantial structural damage to vertical elements of the lateral force-resisting system.

**[BS] 405.2.3 Substantial structural damage to vertical elements of the lateral force-resisting system.** A building that has sustained substantial structural damage to the vertical elements of its lateral force-resisting system shall be evaluated in accordance with Section 405.2.3.1, and either repaired in accordance with Section 405.2.3.2 or repaired and retrofitted in accordance with Section 405.2.3.3, depending on the results of the evaluation.

#### Exceptions:

1. Buildings assigned to Seismic Design Category A, B or C whose substantial structural damage was not caused by earthquake need not be evaluated or retrofitted for load combinations that include earthquake effects.

2. One- and two-family dwellings need not be evaluated or retrofitted for load combinations that include earthquake effects.

**[BS] 405.2.3.1 Evaluation.** The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its predamage state, would comply with the provisions of the *California Building Code* for load combinations that include wind or earthquake effects, except that the seismic forces shall be the reduced seismic forces.

**[BS] 405.2.3.2 Extent of repair for compliant buildings.** If the evaluation establishes that the building in its predamage condition complies with the provisions of Section 405.2.3.1, then the damaged elements shall be permitted to be restored to their predamage condition.

**[BS] 405.2.3.3 Extent of repair for noncompliant buildings.** If the evaluation does not establish that the building in its predamage condition complies with the provisions of Section 405.2.3.1, then the building shall be retrofitted to comply with the provisions of this section. The wind loads for the repair and retrofit shall be those required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the *California Building Code*. The seismic loads for this retrofit design shall be those required by the building code in effect at the time of original construction, but not less than the reduced seismic forces.

**[BS] 405.2.4 Substantial structural damage to gravity load-carrying components.** Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions for dead and live loads in the *California Building Code*. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Undamaged gravity load-carrying components that receive dead, live or snow loads from rehabilitated components shall also be rehabilitated if required to comply with the design loads of the rehabilitation design.

**[BS] 405.2.4.1 Lateral force-resisting elements.** Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section 405.2.3.1 and, if noncompliant, retrofitted in accordance with Section 405.2.3.3.

**Exceptions:**

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or retrofitted for load combinations that include earthquake effects.
2. One- and two-family dwellings need not be evaluated or retrofitted for load combinations that include earthquake effects.

**[BS] 405.2.5 Flood hazard areas.** In flood hazard areas, buildings that have sustained substantial damage shall be brought into compliance with Section 1612 of the *California Building Code*, or Section R322 of the *California Residential Code*, as applicable.

## SECTION 406 ELECTRICAL

*[OSHPD 1R, 2, 4 & 5] Not adopted by OSHPD. Existing electrical wiring and equipment undergoing repair shall be in accordance with Title 24 Part 3 California Electrical Code (CEC).*

**406.1 Material.** Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.

**406.1.1 Receptacles.** Replacement of electrical receptacles shall comply with the applicable requirements of Section 406.4(D) of NFPA 70.

**406.1.2 Plug fuses.** Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of Section 240.51(B) of NFPA 70.

**406.1.3 Nongrounding-type receptacles.** For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system or to any accessible point on the grounding electrode conductor in accordance with Section 250.130(C) of NFPA 70.

**406.1.4 Group I-2 receptacles.** Receptacles in patient bed locations of Group I-2 that are not “hospital grade” shall be replaced with “hospital grade” receptacles, as required by NFPA 99 and Article 517 of NFPA 70.

**406.1.5 Grounding of appliances.** Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Section 250.140 of NFPA 70.

## SECTION 407 MECHANICAL

**407.1 General.** Existing mechanical systems undergoing repair shall not make the building less complying than it was before the damaged occurred. *[HCD 1 & HCD 2] Existing mechanical systems undergoing repair shall comply with the California Mechanical Code.*

## SECTION 408 PLUMBING

**408.1 Materials.** Plumbing materials and supplies shall not be used for repairs that are prohibited in the *California Plumbing Code*. *[HCD 1 & HCD 2] Existing plumbing sys-*

*tems undergoing repair shall comply with the California Plumbing Code and Division 4.3 of the CALGreen Code, as applicable.*

**408.2 Water closet replacement.** The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.28 gallons (4.8 L) per flushing cycle.



# CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE

## CHAPTER 5 – PRESCRIPTIVE COMPLIANCE METHOD

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.  
See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHDP						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)				X	X	X																	
Adopt only those sections that are listed below	X		X					X	X		X	X		X	X								
Chapter / Section																							
501											X	X		X	X								
501.1	X			X																			
501.1 <i>Exception 2</i>					X																		
501.1 <i>Exception 3</i>				X																			
501.1.1 – 501.3			X	†	†	†																	
501.1.2	X																						
502											X	X		X	X								
502.1 <i>Exception</i>	X																						
502.3	X																						
502.4	X																						
502.6			X																				
502.7			X	X																			
503											X	X		X	X								
503.1	X																						
503.2	X																						
503.3	X							X	X														
503.14			X	†	†	†																	
503.15			X	X																			
503.16.1				†	†	†																	
503.16.2				†	†	†																	
504			X	†	†	†					X	X		X	X								
505											X	X		X	X								
505.2				X	X																		
506			X								X	X		X	X								
506.1	X																						
506.1.1	X																						
506.3	X																						
506.4 <i>Exception</i>	X																						
507				†	†	†																	

The state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.





#### 506.4.3 Seismic loads (seismic force-resisting system).

Where a change of occupancy results in a building being assigned to a higher risk category, the building shall satisfy the requirements of Section 1613 of the *California Building Code* for the new risk category using full seismic forces.

##### Exceptions:

1. Where the area of the new occupancy is less than 10 percent of the building area and the new occupancy is not assigned to Risk Category IV, compliance with this section is not required. The cumulative effect of occupancy changes over time shall be considered.
2. Where a change of use results in a building being reclassified from Risk Category I or II to Risk Category III and the seismic coefficient,  $S_{DS}$ , is less than 0.33, compliance with this section is not required.
3. Unreinforced masonry bearing wall buildings assigned to Risk Category III and to Seismic Design Category A or B, shall be permitted to use Appendix Chapter A1 of this code.

**506.4.4 Access to Risk Category IV.** Any structure that provides operational access to an adjacent structure assigned to Risk Category IV as the result of a change of occupancy shall itself satisfy the requirements of Sections 1608, 1609 and 1613 of the *California Building Code*. For compliance with Section 1613, *California Building Code*-level seismic forces shall be used. Where operational access to the Risk Category IV structure is less than 10 feet (3048 mm) from either an interior lot line or from another structure, access protection from potential falling debris shall be provided.

## SECTION 507 HISTORIC BUILDINGS (NOT ADOPTED BY HCD)

**507.1 Historic buildings.** The provisions of this code that require improvements relative to a building's existing condition or, in the case of repairs, that require improvements relative to a building's predamage condition, shall not be mandatory for historic buildings unless specifically required by this section.

**507.2 Life safety hazards.** The provisions of this code shall apply to historic buildings judged by the code official to constitute a distinct life safety hazard.

**[BS] 507.3 Flood hazard areas.** Within flood hazard areas established in accordance with Section 1612.3 of the *California Building Code*, or Section R322 of the *California Residential Code*, as applicable, where the work proposed constitutes substantial improvement, the building shall be brought into compliance with Section 1612 of the *California*

*Building Code*, or Section R322 of the *California Residential Code*, as applicable.

**Exception:** Historic buildings meeting any of the following criteria need not be brought into compliance:

1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places.
2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district.
3. Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

**[BS] 507.4 Structural.** Historic buildings shall comply with the applicable structural provisions in this chapter.

##### Exceptions:

1. The code official shall be authorized to accept existing floors and existing live loads and to approve operational controls that limit the live load on any floor.
2. Repair of substantial structural damage is not required to comply with Sections 405.2.3, and 405.2.4. Substantial structural damage shall be repaired in accordance with Section 405.2.1.



# CHAPTER 15

## CONSTRUCTION SAFEGUARDS

**User note:**

**About this chapter:** The building construction process involves a number of known and unanticipated hazards. Chapter 15 establishes specific regulations in order to minimize the risk to the public and adjacent property. Some construction failures have resulted during the initial stages of grading, excavation and demolition. During these early stages, poorly designed and installed sheeting and shoring have resulted in ditch and embankment cave-ins. Also, inadequate underpinning of adjoining existing structures or careless removal of existing structures has produced construction failures.

### SECTION 1501 GENERAL

**[BG] 1501.1 Scope.** The provisions of this chapter shall govern safety during construction and the protection of adjacent public and private properties.

**[BG] 1501.2 Storage and placement.** Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers or adjoining property for the duration of the construction project.

**[BG] 1501.3 Alterations, repairs and additions.** Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure.

**Exceptions:**

1. Where such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. Maintenance of such elements and devices is not required where the existing building is not occupied.

**[BG] 1501.4 Manner of removal.** Waste materials shall be removed in a manner that prevents injury or damage to persons, adjoining properties and public rights-of-way.

**[BG] 1501.5 Fire safety during construction.** Fire safety during construction shall comply with the applicable requirements of the *California Building Code* and the applicable provisions of Chapter 33 of the *California Fire Code*.

**[BS] 1501.6 Protection of pedestrians.** Pedestrians shall be protected during construction and demolition activities as required by Sections 1501.6.1 through 1501.6.7 and Table 1501.6. Signs shall be provided to direct pedestrian traffic.

**[BS] 1501.6.1 Walkways.** A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. A walkway shall be provided for pedestrian travel that leads from a building entrance or exit of an occupied structure to a public way. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but shall be not less than 4 feet (1219 mm) in width. Walkways shall be provided with a durable walking surface and shall be accessible in accordance with *Chapter 11A* of the *California Building Code*. Walkways shall be designed to support all imposed loads and the design live load shall be not less than 150 pounds per square foot (psf) (7.2 kN/m<sup>2</sup>).

**[BS] 1501.6.2 Directional barricades.** Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.

**[BS] 1501.6.3 Construction railings.** Construction railings shall be not less than 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas.

**[BS] TABLE 1501.6  
PROTECTION OF PEDESTRIANS**

HEIGHT OF CONSTRUCTION	DISTANCE OF CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than one-fourth the height of construction	Barrier and covered walkway
	5 feet or more, but between one-fourth and one-half the height of construction	Barrier
	5 feet or more, but exceeding one-half the height of construction	None

For SI: 1 foot = 304.8 mm.

**[BS] 1501.6.4 Barriers.** Barriers shall be not less than 8 feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors that are normally kept closed.

**[BS] 1501.6.4.1 Barrier design.** Barriers shall be designed to resist loads required in Chapter 16 of the *California Building Code* unless constructed as follows:

1. Barriers shall be provided with 2-inch by 4-inch (51 mm by 102 mm) top and bottom plates.
2. The barrier material shall be boards not less than  $\frac{3}{4}$  inch (19.1 mm) in thickness or wood structural use panels not less than  $\frac{1}{4}$  inch (6.4 mm) in thickness.
3. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.
4. Wood structural use panels  $\frac{1}{4}$  inch (6.4 mm) or  $\frac{5}{16}$  inch (7.9 mm) in thickness shall have studs spaced not more than 2 feet (610 mm) on center.
5. Wood structural use panels  $\frac{3}{8}$  inch (9.5 mm) or  $\frac{1}{2}$  inch (12.7 mm) in thickness shall have studs spaced not more than 4 feet (1219 mm) on center, provided that a 2-inch by 4-inch (51 mm by 102 mm) stiffener is placed horizontally at mid-height where the stud spacing is greater than 2 feet (610 mm) on center.
6. Wood structural use panels  $\frac{5}{8}$  inch (15.9 mm) or thicker shall not span over 8 feet (2438 mm).

**[BS] 1501.6.5 Covered walkways.** Covered walkways shall have a clear height of not less than 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. The design live load shall be not less than 150 psf (7.2 kN/m<sup>2</sup>) for the entire structure.

**Exception:** Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (3.6 kN/m<sup>2</sup>) or the loads imposed on them, whichever is greater. In lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:

1. Footings shall be continuous 2-inch by 6-inch (51 mm by 152 mm) members.
2. Posts not less than 4 inches by 6 inches (102 mm by 152 mm) shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.
3. Stringers not less than 4 inches by 12 inches (102 mm by 305 mm) shall be placed on edge on the posts.
4. Joists resting on the stringers shall be not less than 2 inches by 8 inches (51 mm by 203 mm)

and shall be spaced not more than 2 feet (610 mm) on center.

5. The deck shall be planks not less than 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification not less than  $\frac{23}{32}$  inch (18.3 mm) thick nailed to the joists.
6. Each post shall be knee-braced to joists and stringers by members not less than 2 inches by 4 inches (51 mm by 102 mm); 4 feet (1219 mm) in length.
7. A curb that is not less than 2 inches by 4 inches (51 mm by 102 mm) shall be set on edge along the outside edge of the deck.

**[BS] 1501.6.6 Repair, maintenance and removal.** Pedestrian protection required by Section 1501.6 shall be maintained in place and kept in good order for the entire length of time pedestrians are subject to being endangered. The owner or the owner's authorized agent, on completion of the construction activity, shall immediately remove walkways, debris and other obstructions and leave such public property in as good a condition as it was before such work was commenced.

**[BS] 1501.6.7 Adjacent to excavations.** Every excavation on a site located 5 feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than 6 feet (1829 mm) in height. Where located more than 5 feet (1524 mm) from the street lot line, a barrier shall be erected where required by the code official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 16 of the *California Building Code*.

**1501.7 Facilities required.** Sanitary facilities shall be provided during construction or demolition activities in accordance with the *California Plumbing Code*.

## SECTION 1502 PROTECTION OF ADJOINING PROPERTY

**[BS] 1502.1 Protection required.** Adjoining public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. Said notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

## SECTION 1503 TEMPORARY USE OF STREETS, ALLEYS AND PUBLIC PROPERTY

**[BG] 1503.1 Storage and handling of materials.** The temporary use of streets or public property for the storage or handling of materials or equipment required for construction or demolition, and the protection provided to the public shall

## CHAPTER 16

# REFERENCED STANDARDS

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### User note:

**About this chapter:** This code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 16 contains a comprehensive list of all standards that are referenced in the code, including the appendices. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the building code official, contractor, designer and owner.

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.4, or California Administration Division I, as applicable. **[OSHPD 1] Reference to other chapters.** In addition to the code sections referenced, the standards listed in this chapter are applicable to the respective code sections in Chapters 2, 3A, 4A and 5A.

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## ASCE/SEI

American Society of Civil Engineers  
Structural Engineering Institute  
1801 Alexander Bell Drive  
Reston, VA 20191-4400

**7—16: Minimum Design Loads and Associated Criteria for Buildings and Other Structures**  
303.2, 303A.2, 303.3.1, 501A.3, 502A.5, 503A.13, 503.4, 503.12, 800.3, 806.4

**41—13: Seismic Evaluation and Retrofit of Existing Buildings**  
303A.2, 303A.3.4, 303A.3.5

**41—17: Seismic Evaluation and Retrofit of Existing Buildings**  
303.3.1, Table 303.3.1, 303.3.2, Table 303.3.2

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## ASHRAE

ASHRAE  
1791 Tullie Circle, NE  
Atlanta, GA 30329

**62.1—2016: Ventilation for Acceptable Indoor Air Quality**  
808.2

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## ASME

American Society of Mechanical Engineers  
Two Park Avenue  
New York, NY 10016

**ASME A17.1—2016/CSA B44—16: Safety Code for Elevators and Escalators**  
305.8.2, 902.1.2

**A17.3—2015: Safety Code for Existing Elevators and Escalators**  
902.1.2

**A18.1—2014: Safety Standard for Platform Lifts and Stairway Chair Lifts**  
305.8.3

# ASTM

ASTM International  
100 Barr Harbor Drive, P.O. Box C700  
West Conshohocken, PA 19428-2959

**A615–15ae1: Specification for Deformed and Plain Carbon-steel Bars for Concrete Reinforcement:**

303A.3.5.3

**C94/C94M—15A: Specification for Ready-mixed Concrete**

109.3.1

**E84—2016: Standard Test Method for Surface Burning Characteristics of Building Materials**

1204.9

**E108—16: Standard Test Methods for Fire Tests of Roof Coverings**

1204.5

**E136—16: Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C**

202

**F2006—17: Standard Safety Specification for Window Fall Prevention Devices for Non-Emergency Escape (Egress) and Rescue (Ingress) Windows**

505.2, 702.4

**F2090—17: Standard Specification for Window Fall Prevention Devices with Emergency (Egress) Release Mechanisms**

505.2, 505.3, 702.4, 702.5

# ICC

International Code Council, Inc.  
500 New Jersey Avenue, NW  
6th Floor  
Washington, DC 20001

**CBC—19: California Building Code®**

101.4.1, 104.2.1, 106.2.2, 109.3.3, 109.3.6, 109.3.9, 110.2, 201A.3, 202, 202A, 301A.1, 301A.5, 301.3, 302A.4, 302.5.1, 302.6, 303.1, 303A.1, 303.3.1, 303.3.2, 304, 304A.1, 305.4, 305.4.2, 305.6, 305.8.1, 305.8.4, 305.8.5, 305.8.6, 305.8.7, 305.8.8, 305.8.10, 305.8.11, 305.8.15, 305.9, 305.9.3, 305.9.4, 309A.2, 309A.3, 309A.6, 310A.2, 310A.3, 401.2, 401A.3, 402A, 402.3, 405A.1, 405A.2, 405.2.1.1, 405.2.3.1, 405.2.3.3, 405.2.4, 405.2.5, 501.2, 501A.3, 502A.1, 502.1, 502.3, 502A.3, 502.4, 502A.4, 502.5, 502A.5, 503.1, 503A.1, 503.2, 503A.2, 503.3, 503A.3, 503.4, 503A.4, 503.5, 503.11, 503.12, 503.13, 503A.13, 503.16.1, 503.16.2, 503.16.3, 505.2, 505.3, 505.4, 506.1, 506A.1, 506.3, 506A.3, 506A.4, 506.4.1, 506.4.2, 506.4.3, 506.4.4, 507.3, 701.2, 701.3, 701.4, 702.1, 702.2, 702.3, 702.4, 702.5, 702.6, 705.1, 706.2, 801.3, 802.2.1, 802.2.3, 802.3, 802.4, 802.5.2, 802.6, 803.1.1, 803.2, 803.2.2, 803.2.3, 803.3, 805.3.1, 805.3.1.1, Table 805.3.1.1(1), 805.3.1.2.1, 805.4.3, 805.4.5, 805.5, 805.6, 805.7.1, 805.8.1, 805.9.2, 805.10.1.1, 805.10.1.2, 805.10.1.3, 805.10.2, 805.11.2, 806.2, 806.3, 806.4, 904.1.2, 904.1.3, 904.1.4, 904.2, 904.2.1, 904.2.2, 905.2, 905.3, 906.2, 906.3, 1001.2, 1001.3, 1002.1, 1002.2, 1004.1, 1006.1, 1006.2, 1006.3, 1006.4, 1010.1, 1011.1, 1011.1.1.1, 1011.1.1.2, 1011.2.1, 1011.2.2, 1011.3, 1011.4.1, 1011.4.2, 1011.4.3, 1011.5.1, 1011.5.1.1, 1011.5.3, 1011.6.1, 1011.6.3, 1011.7.1, 1011.7.2, 1011.7.3, 1102.1, 1102.2, 1102.3, 1103.1, 1103.2, 1103.3, 1201.4, 1202.2, 1203.12, 1204.2, 1204.9, 1206.1, 1301.2.2, 1301.2.3, 1301.2.4, 1301.3.3, 1301.4.1, 1301.6.1, 1301.6.1.1, 1301.6.2, 1301.6.2.1, 1301.6.3.1, 1301.6.3.2, 1301.6.4.1, 1301.6.5, 1301.6.5.1, 1301.6.6, 1301.6.7.1, 1301.6.8, 1301.6.9, 1301.6.9.1, 1301.6.10, 1301.6.10.1, 1301.6.11, 1301.6.11.1, 1301.6.12.1, 1301.6.13, 1301.6.15.1, 1301.6.16.1, 1301.6.17, 1301.6.17.1, 1301.6.18, 1301.6.18.1, 1301.6.19, Table 1301.6.19, 1301.6.20, 1401.2, 1402.1, 1402.2, 1402.2.1, 1402.3, 1402.4, 1402.5, 1402.6, 1501.5, 1501.6.1, 1501.6.4.1, 1501.6.7, 1506.3

**ICC A117.1—09: Accessible and Usable Buildings and Facilities**

301.5, 305.8.2, 305.8.3, 305.8.10

**ICC 300—17: ICC Standard on Bleachers, Folding and Telescopic Seating and Grandstands**

501.1

**ICC 500—14: Standard for the Design and Construction of Storm Shelters**

1106.1

**IECC—18: International Energy Conservation Code®**

302.3, 702.6, 707.1, 810.1, 907.1, 1107.1

**CFC—19: California Fire Code**

101.4.2, 301.3.1, 302.3, 502.6, 502.7, 503.14, 503.15, 802.2.1, 802.2.3, 803.4.1.1, 803.4.1.2, 803.4.1.3, 803.4.1.4, 803.4.1.5, 803.4.1.6, 803.4.1.7, 803.4.3, 804.1, 1011.5.1.1, 1104.1, 1105.1, 1301.3.2, 1301.6.8.1, 1301.6.14, 1304.6.14.1, 1401.2, 1501.5, 1504.1, 1504.2

## HISTORY NOTE APPENDIX

### 2019 California Existing Building Code California Code of Regulations, Title 24, Part 10


#### HISTORY:

For prior code history, see the History Note Appendix to the *California Existing Building Code*, 2016 Triennial Edition, effective January 1, 2017.

1. (BSC 05/18, DSA-SS 05/18, HCD 05/18, OSHPD 06/18, SFM 07/18) -- Adoption of the 2018 edition of the *International Existing Building Code*, published by the International Code Council, for incorporation into the 2019 *California Existing Building Code*, CCR Title 24, Part 10 with amendments for State regulated occupancies effective on January 1, 2020.
2. Erratum to correct editorial errors in Chapters 1 through 5, 15 and 16, effective January 1, 2020.







# S. K. Ghosh Associates LLC, Seismic and Building Code Consulting

S. K. Ghosh Associates LLC (SKGA) serves as a technical resource on structural codes and standards; it administers various training programs, develops and distributes support literature, and provides consultative services.

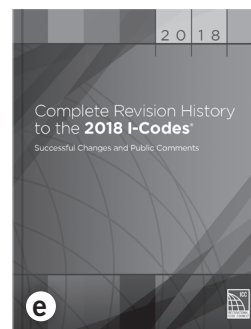
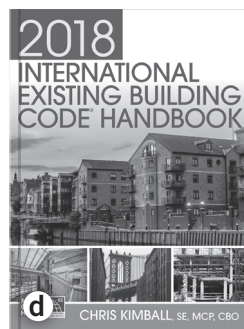
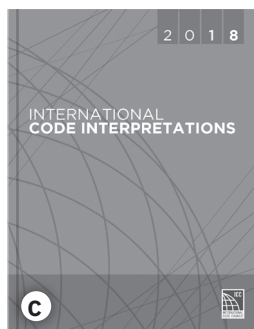
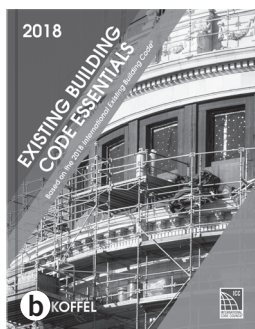
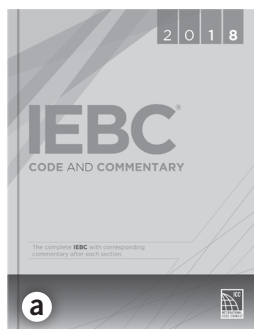
SKGA serves as a technical resource on structural codes and standards adopted by structural codes to:

- Enforcement Agencies and Personnel
- Design Professionals
- Academics
- Material Industries

Our technical support includes:

- **Publications** – various code support materials to aid in the learning and comprehension of specific codes.
- **Code Masters** – a condensed clear explanation of difficult code requirements on a particular structural topic in a durable reference tool for everyday use and for taking to P.E. and S.E. exams.
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Learn more about our robust list of services and support material at [skghoshassociates.com](http://skghoshassociates.com) or call **847-991-2700**.



## Helpful tools for Your Existing Building Code

### a. 2018 IEBC® Code and Commentary

This helpful tool contains the full text of 2018 IEBC, including tables and figures, followed by corresponding commentary at the end of each section to help code users understand the intent of the code provisions and learn how to apply them effectively.

SOFT COVER #3560S18

PDF DOWNLOAD #8756P18

SOFT + PDF COMBO #3560SP18

### b. Existing Building Code Essentials: Based on the 2018 International Existing Building Code

Explains provisions essential to understanding the application of the 2018 IEBC to the most commonly encountered building practices. The information is presented in a user-friendly manner with an emphasis on technical accuracy and clear easy-to-apply language. Full-color illustrations and examples assist the reader in visualizing the code requirements. Topic organization follows the IEBC options of compliance such as Prescriptive, Work Area, and Performance compliance options. A focused, concise approach on alteration levels in the Work Area Compliance option.

SOFT COVER #4552S18

PDF DOWNLOAD #8951P011

### c. 2018 International Code Interpretations

This publication is a compilation of interpretations applicable to the 2018 International Building, Energy Conservation, Existing Building, Fire, Fuel Gas, Mechanical, Plumbing, Residential, and Swimming Pool and Spa Codes. For convenience, the book is organized by code and code section, and includes applicable code text with each interpretation.

PDF DOWNLOAD #8950P863

### d. 2018 International Existing Building Code Handbook

This practical guide shows, step by step, how to apply the provisions of the 2018 IEBC when carrying out repairs, alterations, additions, changes in occupancy, and detailed evaluations for buildings of all sizes. It compiles all the information needed to understand and apply the IEBC provisions to meet structural, fire, accessibility, and other code-related requirements. It begins with an overview of the IEBC, permits, construction documents, and other administrative requirements. It goes on to explain the three different compliance methods that can be followed under the IEBC. Throughout, diagrams, flowcharts, and illustrated examples clearly demonstrate the proper application of the code.

HARD COVER #4550S18

### e. Complete Revision History to the 2018 I-Codes®: Successful Changes and Public Comments

This valuable collection greatly simplifies researching the history of a new, revised or deleted code section from 2015 to 2018. It collects all changes that occurred in the 2018 IBC®, IRC®, IEBC®, IECC®, IFC®, IMC®, and IPC®. For each successful change, the book includes:

- the original proposal with proponent's reason
- committee action with any modification
- any public comments made
- final action documentation

The book compiles the proponent's original reason for the change, unabridged statements that substantiated code development committee actions and the complete documentation for any public comment that was considered prior to final action on the change.

PDF DOWNLOAD #8950P830