



Public Works  
Building Safety Department.  
1088 East Kamm Avenue  
Dinuba, Ca. 93618  
559-591-5906

## 2022 CALIFORNIA TITLE 24 BUILDING CODES CHANGES.

### **2022 California Building Code Adoption and Submittals Under the 2019 California Building Code**

This Information Bulletin announces the publication of the 2022 California Building Standards Code, the effective date and application of the codes, availability, as well as enforcement responsibility. The 2022 California Building Standards Code, Title 24, California Code of Regulations (Title 24) was published on July 1, 2022.

### **Effective Date and Application of the 2022 California Building Standards Code**

January 1, 2023, is the statewide effective date for the 2022 California Building Standards Code as established by the California Building Standards Commission (CBSC). In accordance with California Health and Safety Code, Section 18938.5, **all applications for building permits submitted on or after January 1, 2023, are subject to compliance with the 2022 California Building Standards Code.**

The 2019 California Building Standards Code remains in effect and is applicable to all plans and specifications related to construction performed where the **application for a building permit is received on or before December 31, 2022.**

If you have any questions pertaining to building permit applications, please reach out to our Permit Staff at 559-591-5906 or email [permits@dinuba.ca.gov](mailto:permits@dinuba.ca.gov)

For a more detailed scope of the changes as well as affected code sections, please visit the Building Standards Commission website by <https://www.dgs.ca.gov/BSC>

### **CALIFORNIA BUILDING STANDARDS CODE (CALIFORNIA CODE OF REGULATIONS, TITLE 24)**

The California Building Standards Code is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes;
- Building standards that have been adopted and adapted from national model codes to address California's ever-changing conditions; and
- Building standards, authorized by the California legislature, that constitute amendments not covered by national model codes, that have been created and adopted to address particular California concerns.

All occupancies in California are subject to national model codes adopted into Title 24, and occupancies are further subject to amendments adopted by state agencies and ordinances implemented by local jurisdictions' governing bodies.

Rick Hartley  
Building Official  
City of Dinuba  
559-591-5906

# 2022 TITLE 24

# California Code Changes

July 2022  
1st Edition



# C A L I F O R N I A

BUILDING STANDARDS COMMISSION

# Acknowledgements

Governor Gavin Newsom

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Director of the Department of General Services, Ana Lasso

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Peter Santillan

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Aaron Stockwell

Laura Rambin

Frank Ramirez

James Haskin

Executive Director, Mia Marvelli

Deputy Executive Director, vacant

The California Building Standards Commission is a commission within  
the Department of General Services

Visit [our website](http://dgs.ca.gov/BSC) at [dgs.ca.gov/BSC](http://dgs.ca.gov/BSC)

Please submit comments and suggestions for improvements or additions to this  
publication to [cbsc@dgs.ca.gov](mailto:cbsc@dgs.ca.gov)

or mail to

California Building Standards Commission

Mia Marvelli, Executive Director

2525 Natomas Park Drive, Suite 130

Sacramento, CA 95833

Some of CBSC's publications available on the website's [Resources page](#):

Guide to Title 24

Public Guide to the Building

It's Your Building Department

Standards Adoption Process

Guide for Local Amendments of

Frequently Asked Questions

Building Standards

Glossary of Terms

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## **INTRODUCTION**

During the 2021 Triennial Code Adoption Cycle, California state agencies reviewed the most recent edition of national model codes and standards, and made amendments and additions to most parts of the California Building Standards Code, Title 24 of the California Code of Regulations (Title 24). This publication contains information regarding substantive changes of interest to code users as they familiarize themselves with the 2022 edition of Title 24. For ease of reading, this document uses all normal font style (no italics). When looking at Title 24, it is a good idea to learn about and understand the various margin markings, banners and text styles that will indicate where changes have been made to the code and what amendments are model code changes versus California amendments. An explanation of margin markings can be found in the preface of each part of Title 24.

### **State agency acronyms that may be used in this publication**

BSC – Building Standards Commission  
CDPH – California Department of Public Health  
CEC – California Energy Commission  
DSA – Division of the State Architect  
DWR – Department of Water Resources  
HCD – Department of Housing and Community Development  
OSHPD – Office of Statewide Health Planning and Development (now Department of Health Care Access and Information – HCAI)  
SFM – State Fire Marshal

For the applications of amendments adopted by the various state agencies, reference Chapter 1 of each part of Title 24.

### **The parts of Title 24 may be abbreviated as follows:**

CBC – California Building Code, Part 2, Volumes 1 and 2  
CRC – California Residential Code, Part 2.5  
CMC – California Mechanical Code, Part 4  
CPC – California Plumbing Code, Part 5  
CFC – California Fire Code, Part 9  
CEBC – California Existing Building Code, Part 10  
CALGreen – California Green Building Standards Code, Part 11  
CRSC – California Referenced Standards Code, Part 12

To avoid confusion with other acronyms, abbreviations are not used for the California Administrative Code (Part 1), California Electrical Code (Part 3) or California Energy Code (Part 6).

Note that there were no significant updates to the California Historical Building Code, Part 8 of Title 24, and Part 7 is vacant, so those parts are not listed here. There are no changes to Part 8 because the State Historical Building Safety Board adopted the 2022 California Historical Building Code by carrying forward existing provisions from the 2019 edition without further amendment.

**Model code developers:**

Every three years the national model codes and standards are published, and by law California is required to incorporate specific model codes and standards into Title 24. The model code publishers often issue significant code change documents explaining national code updates and the reasons for them. Links to those documents are provide below.

IAPMO – The International Association of Plumbing and Mechanical Officials  
(Parts 4 and 5)

[Uniform Mechanical and Plumbing Code Updates webpage](#)

ICC – The International Code Council (Parts 2, 2.5, 9 and 10)

[Purchase ICC's 2021 Significant Changes publications](#)

NFPA – National Fire Protection Association (Part 3)

[2020 National Electrical Code updates links](#)

Please watch the California Building Standards Commission's (CBSC) video [About Title 24](#) to learn about the code's layout and contributing state agencies. For more in-depth information, visit CBSC's [Resources webpage](#) to view and download educational publications such as a [Guide to Title 24](#).



# CALIFORNIA ADMINISTRATIVE CODE – PART 1

## Chapter 1 – Building Standards Commission

### **1-209 Code Advisory Committees**

Amended existing section footnote to clarify the requirements of the Fire Official and Local Government Water Efficiency Official positions in the Code Advisory Committees.

### **Sections 1-407, 1-411, 1-415, 1-419**

Added document accessibility as a requirement for documents included in state agencies' rulemaking submittals and added reference to Government Code Section 11546.7.(a).

### **1-507 Fee Collection**

Amended existing section to remove information regarding the check-only payment method, added instructions for submitting payment and forms by mail (check) or email (electronic payment platform), and let fee payers know that they may only use the approved electronic payment platform, and that there is information regarding the platform on CBSC's website.

## Chapter 3 – State Fire Marshal

### **Article 3-1 General Provisions and Article 3-2 Definitions**

Added sections to Chapter 3 that was reserved for SFM in the 2019 edition. These sections provide clarifying language regarding the SFM fire and life safety authority for state-owned buildings, specified state-occupied buildings, and state institutions.

## Chapter 4 – Division of the State Architect

### **4-309(c).2.B Reconstruction or alteration projects in excess of \$100,000 in cost**

Repealed exception to the section as it is inconsistent with the definition of "rehabilitation" in the regulations. The exception also implied that only the "...elements of the lateral force resisting system" need be evaluated, which led to confusion as DSA's Seismic Performance Requirements per Table 317.5 explicitly require that the evaluation include assessment of non-structural components.

### **4-330 Time of beginning construction and partial construction**

Changed requirements that construction must commence on all school buildings with an approved project within four years instead of one year or else the approval is void. Given this new four-year rule, extensions no longer apply and were repealed. Added an exception permitting DSA to withdraw approval or institute post-approval

requirements as necessary to address life-safety concerns in response to information received after approval of plans and before commencement of construction.

#### **4-335(f)4 Structural tests and special inspections**

Clarified requirements to provide DSA with daily special inspection reports when requested.

#### **Group 3, Article 3 and deletion of Article 4**

Revised procedure regarding submission of landscape plans for modifications, rehabilitations and new construction of landscape areas at public K-12 schools and community colleges.

The revisions include the elimination of a fee for review of landscape plans and revisions to the self-certification form, a provision that periodic site observations during construction will occur to ensure the work is completed in accordance with CALGreen Section 5.304 requirements, and replacement of two previously required self-certification forms with a single form.

### **Chapter 7 – Office of Statewide Health Planning and Development**

#### **7-111 Definitions**

Added clarification that the equipment referred to in the definition of “Actual Construction Cost” is construction equipment only.

Added the definition of “Start of Construction” to clarify that the start date of construction may include actual physical work as well as the preparation for construction such as manufacturing components offsite.

#### **Sections 7-111, 7-121, 7-130, 7-133 and others**

Combined “Phased Plan Review” and “Collaborative Review and Construction” into a single process called “Integrated Review.” Renamed “Phased Plan Review” to “Integrated Review” so the definition of “Integrated Review” is added, the definition of “Phased Plan Review” is repealed, all references to “Phased Plan Review” and “Collaborative Review and Construction” are removed, and Memorandum of Understanding (MOU) is renamed to Integrated Review Plan (IRP).

#### **Sections 7-113, 7-153 and others**

Amended existing language to provide requirements for electronic submittals and field records.

#### **7-123 Preliminary plans and specifications**

Amended existing language to remove “outline” from the submittal requirements for specifications during a preliminary review as it has been proven an outline specification is insufficient for most preliminary reviews.

## **7-129 Time limitations**

Amended following subsections:

**7-129(b)** to provide revised time limitations based on the cost of a project.

**7-129(d)** to include a description of when a project is considered abandoned.

**7-129(d)** Exception to limit the exception to paragraphs (a) and (b) so they do not apply to managed projects. Manage project time limitations would not apply as the durations are negotiated.

## **7-133 Fees**

Amended following subsections:

**7-133(a)** to allow for projects with estimated construction cost of less than \$250,000 to be invoiced at the rate of 2.0 percent of the estimated construction cost.

**7-133(h)** to remove collaborative review and replace phased review with integrated review. The fee of 1.95% is to be applied to integrated review.

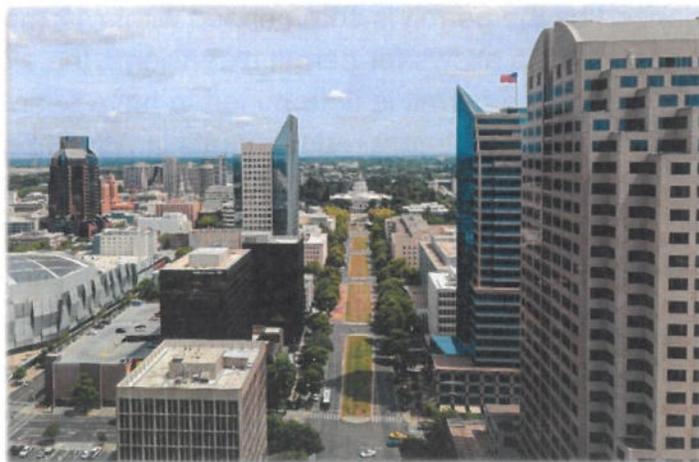
## **7-145 Continuous inspection of the work**

Clarified the requirement for the Inspector of Record to notify the office in writing when work is started and for the field record report to include the time and date of all correspondence with the contractor regarding incomplete work, potential deficiencies or deviation which require the contractor's attention. Added additional requirements for the reports.

## **Chapter 10 – California Energy Commission**

Please visit the [California Energy Commission's website](https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/online-resource-center/overview) for updates.

[energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/online-resource-center/overview](https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/online-resource-center/overview)



## CALIFORNIA BUILDING CODE – PART 2

### Tall Wood/Mass Timber provisions in various chapters of Part 2

#### BSC—DSA—HCD—OSHPD—SFM

Sections regarding construction elements of Tall Wood/Mass Timber and Heavy Timber were early adopted by various state agencies as amendments to the 2019 California Building Code (CBC) during the 2019 Intervening Code Adoption Cycle and issued as a supplement with a July 1, 2021, effective date. The amendments are repealed, as they are now included in the adopted 2021 International Building Code (IBC).

Part 2 Chapter	Sections
Chapter 1	110.3.5
Chapter 2	202
Chapter 5	508.4.4.1, 509.4.1.1
Chapter 6	602.4 through 602.4.4.2
Chapter 7	703.6, 703.7, 718.2.1, 722.7 through 722.7.2.2
Chapter 17 - Sections	1705.5.3, 1705.5.5, 1705.11.1, 1705.11.2, 1705.12.2, 1705.12.3, 1705.20, 1705A.4.1, 1705A.5.5, 1705A.5.7
Chapter 17 - Tables	1705.5.3, 1705.5.7, 1705A.5.3
Chapter 23	2304.10.1.2, 2304.11.3, 2304.11.4
Chapter 31	3102.3, 3102.6.1.1
Chapter 35	ANSI/APA PRG 320-2019, ASTM D3498-03(2011)

### Chapter 1 – Scope and Administration

#### Building Standards Commission

##### 105.5.1 [Permit] Expiration

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Statutes of 2018), which became operative January 1, 2019, and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019, to local building departments, state agencies and CBSC interested parties.

## **Office of Statewide Health Planning and Development**

### **1.10.2 OSHPD 2, 2A and 2B**

OSHPD added new occupancy classifications to address distinctions between skilled nursing facility and intermediate care facility buildings erected with specific construction materials.

OSHPD 2 has been split into two (2) categories. OSHPD 2A is for skilled nursing facility and intermediate care facility buildings of single-story, wood-frame, or light steel frame construction or buildings of single-story, wood-frame, or light steel frame construction where only skilled nursing or intermediate care services are provided if the building is separated from a building housing other patients of the health facility receiving higher levels of care and must meet model code requirements.

OSHPD 2B skilled nursing facility and intermediate care facility buildings of all other types must meet the requirements designated by the OSHPD 2B banner.

If the only designation is OSHPD 2, the application is for both 2A and 2B.

## **State Fire Marshal**

### **1.11.1 Specified state-occupied buildings**

New definition with 11 criteria has been added in response to Senate Bill 85 (Public resources: omnibus trailer bill. (2019-2020)) that required the State Fire Marshal to provide a more accurate definition.

### **1.11.6 Certificate of Occupancy**

Amendment citing a reference to Section 105.2 clarifying work exempt from permit.

## **Division of the State Architect, Department of Housing and Community Development, Office of Statewide Health Planning and Development, and State Fire Marshal**

### **110.3.12 Types IV-A, IV-B and IV-C connection protection inspection**

This amendment was added in the 2019 intervening cycle but is now part of model code language in the 2021 IBC, therefore, this section is repealed to avoid duplication.

## **Chapter 2 – Definitions**

### **California Energy Commission**

**CLIMATE ZONE** Amended definition with specific reference to Figure 100.1-1 of the California Energy Code pertaining to the applicability of assigned climatic criteria for geographic regions to distinguish between the International Energy Conservation Code (IECC) and the California Energy Code.

## **State Fire Marshal**

**CHILD CARE** Added a new defined term for child care that is consistent with the definition in Title 22 (Social Security) of the California Code of Regulations (Title 22).

**DAY-CARE** Amended the defined term day-care to specify the time period for the care of persons is not to exceed 24 hours, and is to be consistent with Title 22.

**INFLATABLE AMUSEMENT DEVICE** New defined term to specify characteristics of inflatable structures that need to be properly constructed and anchored.

**PHOTOVOLTAIC (PV) PANEL SYSTEM, GROUND-MOUNTED** New defined term to be consistent with references in CBC Chapters 16 and 31, CRC Chapter 3 and CFC Chapter 12.

**PHOTOVOLTAIC (PV) SUPPORT STRUCTURE, ELEVATED** New defined term for an elevated PV support structure designed with space underneath intended for secondary use such as providing shade for motor vehicle parking. Requirements for installation are addressed in Chapters 15 and 16.

**TODDLER** New defined term to align with the legal definition of toddlers from Health and Safety Code Section 1596.55. By distinguishing age differences, officials will be able to classify the related occupancies based on social services' classifications used for licensing.

## **Chapter 3 – Occupancy Classification and Use**

### **State Fire Marshal**

#### **304.1 Business Group B and 304.4 Higher education laboratories**

Removed new model code language about higher education laboratories from Section 304.1 and deleted new model code Section 304.4 since model code language for higher education laboratories is not used in California and conflicts with California's Group L occupancy classification.

#### **305.2 Group E, Child care facilities**

Amendments clarifying child care regarding emergency situations applying to Groups I, E and R Occupancies.

#### **310.3 Residential Group R-2**

Amended the definition for Group R-2 to meet requirements of SB 234 (Chapter 244, Statutes of 2019): Small and large family child care in apartment houses can operate in R-2 occupancies when they comply with the regulations and with Health and Safety Code Section 1597.46.

## Chapter 4 – Special Detailed Requirements

### State Fire Marshal

#### 455 Large Family Day-Care Homes

**455.2.** Amendment to meet requirements of SB 234 (Chapter 244, Statutes of 2019): Small and large family child care in apartment houses can operate in R-2 occupancies when they comply with the regulations and with Health and Safety Code Sections 1597.45 and 1597.46 (reprinted in this section).

#### 455.6 Compliance

Repealed an amendment regarding the enforcement of Health and Safety Code Sections 13145 and 13146 to align with Section 455.2.

## Chapter 5 – General Building Heights and Areas

### State Fire Marshal

#### 508 Mixed Use and Occupancy

##### 508.2.4 Separation of occupancies

Amendment permitting the consideration of some uses as accessory occupancies. Among other requirements, the amendment revises **Section 508.2.4 Exception** and limits permitted, unseparated accessory covered entrances to those required by **Section 11B-206.4.10** for weather protection at entrances to medical care and long-term care facilities or **Section 1224.33.2.1**, emergency medical service exterior entrances. The amendment eliminates a conflict with provisions enforced by Centers for Medicare-Medicaid Services (CMS).

##### Table 508.4 Required separation of occupancies (hours), Footnote J

Amendment to the footnotes in Table 508.4 that reduces the fire-resistive separation criteria for covered vehicle entrances required by other provisions of the California Building Code associated with Group I-2 occupancies from 2-hour to 1-hour fire-resistance-rated construction.

## Chapter 7A – Materials and Construction Methods

### State Fire Marshal

Extensive amendments to Chapter 7A Wildland-Urban Interface (WUI) regulations. The amendments were developed through the Office of the State Fire Marshal WUI task group and collaboration with local fire departments, other state agencies, building industry, testing labs, and stakeholders.

Other amendments have been made to be consistent with newly defined terms and to clarify established guidelines in WUI regulations that address different fire severity areas and agency responsibilities that are outlined in Chapter 49 of the CFC.

## **702A Definitions**

**FIRE PROTECTION PLAN** Amended this defined term to align with the same defined term in Section 4903 of the CFC.

**FIRE-RESISTANT VEGETATION** New definition of plants less likely to ignite, contribute heat or spread flame. Also provides a list of resources for more information about these types of plants.

**704A IGNITION-RESISTANT CONSTRUCTION** Added testing standard for wood structural panels in Subsection **704A.3.1 Fire testing of wood structural panels**. Additional amendments in Section 704A are consistent with previous amendments made in Chapter 23 regarding fire-retardant-treated-wood and pressure treated materials.

## **710A Accessory Buildings and Miscellaneous Structures**

**710A.1 General** Clarifies that Group U Occupancy accessory buildings shall conform to this section.

**710A.3 Where required** Amendment and subsections that are organized by uniform categories of distances from applicable buildings, and mandate enforcement for buildings greater than 120 square feet, and leave discretion to local Authority Having Jurisdiction (AHJ) for buildings less than 120 square feet.

**710A.4 Roof construction** Amendment that for an accessory building required to be constructed of noncombustible or ignition resistant materials, its roof must meet Class A fire rating.

## **Chapter 9 – Fire Protection Systems**

### **State Fire Marshal**

#### **903.3.1.1.3 Solar photovoltaic power systems**

Amendment to delete a requirement for the installation of smoke detectors in outdoor locations as a substitute for sprinkler protection.

### **Department of Housing and Community Development**

#### **915 Carbon monoxide detection**

Modified to reference NFPA 72 National Fire Alarm and Signaling Code.

## **Chapter 10 – Means of Egress**

### **State Fire Marshal**

#### **1032.2.1.2 Maintenance and 1032.2.1.3 Examination**

Adjustments and revisions to CFC Sections 1104.16.7 and 1104.16.5.1 regarding the maintenance requirements for fire escapes have been relocated to **Section 1032**.

## Chapter 11B – Accessibility to Public Buildings

### Division of the State Architect – Access Compliance

#### 11B-108 Maintenance of Accessible Features

Added requirements to include facilities regulated in Chapter 11B, including public and commercial buildings, as well as public housing in addition to public accommodations.

## Chapter 12 – Interior Environment

### California Energy Commission

#### User Note

Modified to properly reference the California Energy Code.

#### 1202.3.1 California Energy Code and International Energy Conservation Code (IECC) Climate Zones and Table 1202.3.1 IECC vs California Energy Code Climate Zone Comparison

Added section and table to prevent confusion between climate zones identified in ICC model codes and climate zones identified in the California Energy Code by explaining the relationship between the two codes and adding Table 1202.3.1 to represent these differences.

### Department of Housing and Community Development

#### 1202.2.1 Ventilated attics and rafter spaces and 1202.3 Unvented attic and unvented enclosed rafter assemblies

Repealed reference to Climate Zones 14 and 16 and California Energy Code Figure 100.1-A since the California Energy Commission adopted a new Table 1202.3.1 from the International Energy Conservation Code.

#### Table 1202.3 Insulation for condensation control

Repealed reference to specific climate zones from the table since the California Energy Commission adopted a new Table 1202.3.1 from the International Energy Conservation Code.

### Office of Statewide Health Planning and Development

#### 1224.3 Definitions

**HANDWASHING STATION** Amended existing language to clarify that hands-free operation is required at the door and not at the handwashing fixture.

**INVASIVE PROCEDURE** New definition to be used to determine the classification of the imaging room or procedure room required.

**LOCATION TERMINOLOGY** Terms for relationship to an area or room.

**READILY ACCESSIBLE** Amended existing language to avoid ambiguity by removing the requirement that the area or room also be “directly accessible.” New language added to include option for locating readily accessible areas or rooms to within 200 feet of department or space served to accommodate space orientation or security concerns.

**PROCEDURE ROOM** New definition specifically designates the procedure room as the intermediate level room for procedures that do not require a full surgical environment.

**RESTRICTED AREA** Amended existing language to better align with Facilities Guidelines Institute (FGI), which stipulates that a restricted area is a designated space contained within the semi-restricted area and accessible only through a semi-restricted area. This definition is required to determine the level of procedure room to be used and the requirements therein.

**SEMI-RESTRICTED AREA** New defined term per request of CDPH. This area applies to intermediate level procedures and imaging as well as peripheral areas that support surgical services.

**START OF CONSTRUCTION** OSHPD added the definition to Part 1, California Administrative Code. The banner note added to this definition avoids ambiguity and clarifies that the term is not adopted by OSHPD.

**UNRESTRICTED AREA** New defined term per CDPH request. This area applies to any area of the department that is not defined as semi-restricted or restricted. This definition is required to determine the level of control outside a surgical area or within a medical department.

#### **1224.4.4.1 Examination, treatment, and procedure rooms**

Amended existing language to add “procedure room” to the heading.

##### **1224.4.4.1.2 Treatment room**

OSHPD has coordinated with CDPH to add a requirement for providing a new service space for exercise stress testing. This space can be in several locations within a hospital and not assigned to any one service. Amended language allows for exercise stress testing in a treatment room due to the need for space for a crash cart and possible resuscitation.

##### **1224.4.4.1.4 Procedure room**

Added new language to align with Facilities Guidelines Institute (FGI) requirements and renumbered following sections.

##### **1224.4.4.4.1 Medication preparation room**

Per CDPH request, amended existing language to remove the requirement that a medication preparation room be directly accessible from the nursing station.

#### **Table 1224.4.6.1**

Line 6 has been identified specifically for “Intensive Care” to avoid confusion with the similarly named room on Line 3.

#### **Table 1224.4.6.5**

Added Note 1 to the line for Patient Toilet Room under column 1226. Current language is confusing and is often misinterpreted that a nurse call station is required in all clinic patient toilets under column 1226. The note clarifies that a nurse call station is not required for Primary Care, Chronic Dialysis or Psychology Clinic patient toilet rooms.

#### **1224.4.11 and 1224.4.11.4.1 Interior Finishes**

Added a pointer to the new table for different levels of procedure and imaging rooms. Includes new **Table 1224.4.11.4a** which identifies the different levels of exam/procedure rooms as well as the different classes of imaging rooms, including the room type, the uses in each type of room, if the room is unrestricted, semi-restricted or restricted, how it is accessed, and the level of finishes required.

#### **1224.14.2 Support areas**

Amended existing language to allow for support areas that service nursing units to be shared if there is direct access, including nurses’ office, a clean utility/workroom, soiled workroom or soiled holding room, nourishment area and equipment storage room.

#### **1224.14.2.15 Special bathing facilities**

Amended existing language for special bathing facilities to be optional. Per review with CDPH, special bathing facilities for roll-in gurneys should not be a requirement as there are several other methods of bathing or cleaning bedridden patients.

#### **1224.15.1 General**

Amended existing language to clarify that a sterile core where clean equipment is stored prior to bringing into an operating room is required to be in a restricted area.

#### **1224.15.2.2 Procedure room(s)**

Added a pointer to the requirements for a procedure room. The following section 1224.15.2.2.1 was renumbered.

#### **1224.16.3 Recovery and Post-Anesthesia Care Unit (PACU)**

Amended existing language to clarify the clearances required between beds and the access aisle at the foot of a bed.

#### **1224.18 Radiological/diagnostic imaging service space**

Amended existing language to provide direction for applying the new classes of imaging rooms. To alleviate confusion, pointers are provided to **Table 1224.4.11.4a** and to address more acute-level procedures using imaging systems in hybrid operating rooms.

### **1224.18.1 Minimum requirements**

Amended existing language to allow a CT scanner to be used as the primary imaging modality once Title 22 is revised. Existing language was also amended to allow the space used for processing images to also be used exclusively for viewing, as processing technology is no longer required on newer equipment. Requirements for handwashing stations were added to provide direction for applying the new classes of imaging rooms.

#### **1224.18.1.1 Radiation protection**

Added requirements for radiation protection in the new classes of imaging rooms.

#### **1224.18.1.2 Multiple-modality devices**

Added new language to clarify that when two or more modalities are integrated into one device, the requirements of both must be met. This would apply to space requirements, radiation protection and any differences in the requirements.

#### **1224.18.4 Magnetic resonance imaging (MRI)**

Added new language to provide safety zones for MRIs. Existing language for the imaging equipment room was amended to align with other imaging equipment room annotation.

#### **1224.18.5 Ultrasound**

Amended existing language to properly identify an ultrasound exam room. An exception is added to not require a directly accessible toilet if only specific exams are conducted. Language is added for the requirements of a processing room if it is to be provided as a support service.

#### **1224.19.7 Support areas for staff**

Amended existing language to align with Title 22 and Board of Pharmacy regulations that pharmacy staff lounge, lockers and toilet may be readily accessible in lieu of immediately accessible.

#### **1224.20.3 Outside service**

Amended existing language to clarify that if a temporary mobile kitchen is approved by CDPH for use during construction, a separate warming kitchen is not needed internally.

#### **1224.22 Central sterile supply**

Per a request from CDPH, amended existing language to clarify that a central sterile supply process includes distinct spaces within one or more rooms.

#### **1224.25 Employee dressing rooms and lockers**

Amended existing language to clarify that the lockers must be separate from the toilet room and not within it.

#### **1224.28.2.1 Procedure room and 1224.28.2.3 Equipment space**

Amended existing language to update “x-ray” to “imaging” equipment.

#### **1224.28.4.8 Imaging equipment room**

Amended existing language for the imaging equipment room to align with other imaging equipment room annotations.

#### **1224.28.4.12 Staff changing areas**

Amended existing language to clarify that both male and female staff changing areas are required as interventional procedures are equivalent to surgery and have the same changing requirements.

#### **1224.28.5.2 Control room**

Added new language to allow cameras to be used for patient observation in hybrid operating rooms as the configuration of the rooms may prevent full patient visibility within the equipment bore from within the control room.

#### **1224.28.5.5.2 iMRI**

Corrected reference pointer in Item 3 of 1224.28.5.5.2 to indicate that the anteroom must comply with Section 1224.18.4.2, Item 2.

#### **1224.28.5.5.3 Vascular imaging**

Corrected reference pointer to indicate that hybrid operating rooms with vascular imaging systems *must comply with Section 1224.18.4.*

#### **1224.29.1.12 Medication station**

Added to existing language to clarify that refrigerated storage is required for the medication station in an ICU.

#### **1224.29.1.13 Airborne infection isolation room**

Amended existing language to clarify that ICU units that are protected environments do not require airborne infection isolation rooms as all rooms are already negative pressure.

#### **1224.29.2 Newborn intensive care units (NICU)**

Amended existing language to clarify that the headwall in a NICU does not need to be 13 feet long as in an ICU. This would force the NICU bed spaces to be much larger than needed.

#### **1224.30 Pediatric and Adolescent Unit**

Amended existing language to align with Title 22 language for pediatric and adolescent units, and clarified that both an exam room and a treatment room are required in or adjacent to the pediatric unit.

#### **1224.31.1.1 General**

Amended existing language to clarify that the requirements for a psychiatric nursing unit in Section 1224 is for a psychiatric medical unit and Section 1228 is for a psychiatric ambulatory unit.

#### **1224.31.1.10 Occupational therapy**

Amended existing language to remove the requirement for an area for teaching daily living activities.

#### **1224.31.1.17 Administrative center(s) or nurse stations(s)**

Added new language to state that a nurse station can be no further than 90 linear feet from the furthest patient room doorway. This is a Title 22 requirement for a medical psychiatric unit which was not currently in the building code.

### **Chapter 14 – Exterior Walls**

#### **California Energy Commission**

##### **1404.3.3 California Energy Code and International Energy Conservation Code Climate Zones**

Amendment added to prevent confusion between climate zones identified in ICC model codes and climate zones identified in the California Energy Code and to cross-reference Table 1202.3.1, which describes the differences between these codes.

### **Chapter 16 – Structural Design**

#### **Office of Statewide Health Planning and Development**

##### **1605.2 (Formerly 1605.3.2) Alternative allowable stress design load combinations**

Added variable load requirement for the alternative allowable stress design load combinations for OSHPD 1R, 2B and 5.

##### **Table 1613.2.3(1) and Table 1613.2.3(2)**

Amendment language for Site Class E (Table 1613.2.3(1) only) and Footnote C to be consistent with ASCE 7-16 Supplement 3 as amended in CBC Chapter 35.

#### **Division of the State Architect**

##### **1617.3.2 Alternative allowable stress design load combinations**

Added variable load requirement where the alternative allowable stress design load combinations of Section 1605.2 are used.

### **Chapter 16A – Structural Design**

#### **Division of the State Architect and Office of Statewide Health Planning and Development**

Updates, clarifications and revisions to ASCE 7 standards: Seismic ground motion values, response modification coefficient; Two-Stage Analysis Procedure; Horizontal and Vertical Irregularities for Seismic Design Categories; Foundation connections; Wall, Roof or Floor Hung Equipment; Provisions for piping and tubing systems.

### **1605A.2 Alternative allowable stress design load combinations**

Added a variable load requirement for the alternative allowable stress design load combinations.

### **Table 1613A.2.3(1) and Table 1613A.2.3(2)**

Amendment language in Site Class E (Table 1613.2.3(1) only) and footnote C to be consistent with ASCE 7-16 Supplement 3 as amended in CBC Chapter 35.

### **1617A.1.3 ASCE 7, Section 11.4**

Modifications to ASCE 7 including an amendment added to adopt ASCE 7-16 Supplement 3 which updates various subsections in ASCE 7-16 Section 11.4 to the seismic ground motions values.

### **1617A.1.5 ASCE 7, Section 12.2.3, 12.2.3.1, and 12.2.3.2**

Amended to incorporate the ballot change proposals related to combining of different lateral force resisting systems and the Two Stage Analysis Procedures that passed main committee ballot of ASCE 7-22. Some of these amendments will need to be deleted when ASCE 7-22 is adopted to avoid duplication.

### **1617A.1.10 ASCE 7, Section 12.3.3.1**

Exception 2 added to address structures having a horizontal structural irregularity Type 1b of Table 12.3-1.

### **1617A.1.16 ASCE 7, Section 12.13.9.2**

Clarification added that lateral building response including seismic load combinations do not need to be considered concurrently with differential settlements for shallow foundations on liquefiable sites, and to clarify that force demands due to differential settlements are not required to be additive to the seismic earthquake demands.

### **1617A.1.18 ASCE 7, Section 13.1.4**

This section applying to different types of equipment is now being co-adopted by DSA with varying weight requirements. Wall, Roof or Floor Hung Equipment requirements added by both DSA and OSHPD.

### **1617A.1.27 and 1617A.1.28**

Clarification added that minimum horizontal acceleration requirement is an allowable stress design load.

## **Chapter 17 – Special Inspections and Tests**

### **Office of Statewide Health Planning and Development**

#### **1705.3.9 (formerly 1705.19) Shotcrete and 1705.3.9.1 (formerly 1705.19.1) Visual examination for structural soundness of in-place shotcrete**

Existing amendments about shotcrete inspections and tests relocated to Section 1705.3 that addresses concrete construction.

### **1705.3.9.2 Preconstruction tests**

ICC deleted requirements for shotcrete from the model code Section 1908 as they are now incorporated in referenced standard ACI 318-19, so OSHPD added new section 1705.3.9.1 to incorporate requirements previously located in an amendment to Section 1908A.10.2 and model code Sections 1908.4.1 and 1908.5.

## **Chapter 17A – Special Inspections and Tests**

### **Division of the State Architect and Office of Statewide Health Planning and Development**

#### **1705A.3.9 (formerly 1705A.19) Shotcrete and 1705A.3.9.1 (former 1705A.19.1) Visual examination for structural soundness of in-place shotcrete**

Existing amendments about shotcrete inspections and tests relocated to Section 1705.3 that addresses concrete construction.

#### **1705A.3.9.2 Preconstruction tests**

ICC deleted requirements for shotcrete from the model code Section 1908 as they are now incorporated in referenced standard ACI 318-19, so OSHPD added new section 1705.3.9.1 to incorporate requirements previously located in amendment to Section 1908A.10.2 and model code Sections 1908.4.1 and 1908.5.

#### **1705A.8.1 Micropile tests and 1705A.9.1 Helical pile tests**

Added preproduction and production load tests requirements.

#### **1705A.13.5.2 Structural sealant glazing and 1705A.14.2.1 Structural sealant glazing testing**

Added testing, manufacturer's certification, and special inspection requirements.

## **Chapters 18 and 18A – Soils and Foundations**

### **Division of the State Architect and Office of Statewide Health Planning and Development**

Amendments regarding construction documentation, seismic designs of precast concrete piles and corrosion protection throughout Chapters 18 (OSHPD only) and 18A (OSHPD and DSA) are to correspond with revisions and updated references in model code regarding OSHPD and DSA occupancies and compliance to ACI 318 and ASCE 7.

## **Chapter 19 – Concrete**

### **Office of Statewide Health Planning and Development**

#### **1901.3.4 Tests for post-installed anchors in concrete and 1901.3.4.3 Test frequency**

OSHPD 2A excluded from the scope of Section 1901.3.4. Exception added for OSHPD 2B to clarify that for in-state detention and correctional facilities, tension

testing is not required for post-installed anchors used for attaching nonstructural components under certain circumstances.

#### **1905.1.7 ACI 318, Section 14.1.4**

Amendment to ACI 318 has been revised to not permit plain concrete in place of required longitudinal reinforcing of footings in Seismic Design Categories D, E and F.

#### **1908 Shotcrete**

The model code has repealed all shotcrete requirements in favor of those contained in the new version of the adopted material standard ACI 318-19, so some amendments have been relocated to Section 1905 or 1705 and amendments were added to coordinate with the updated standards.

### **Division of the State Architect**

#### **1909.2.8 Flat wall insulating concrete form (ICF)**

Amendment to facilitate the enforcement of code and industry standards where appropriate based on unique aspects of ICF construction.

#### **1909.3 Modifications to ACI 318 and 1909.4 Shotcrete**

Existing amendments revised as necessary to coordinate with the new version of the adopted material standard ACI 318-19. The 2021 IBC repealed shotcrete requirements in deference to requirements contained in the adopted material standard ACI 318-19, so continued DSA amendments associated with the repealed model code language are relocated to amend the applicable sections.

## **Chapter 19A – Concrete**

### **Division of the State Architect and Office of Statewide Health Planning and Development**

#### **1903A.4 Flat wall insulating concrete form (ICF) systems**

Amendment to facilitate the enforcement of code and industry standards where appropriate based on unique aspects of ICF construction (DSA only).

#### **1905A.1.3 ACI 318, Section 9.6.1.3**

Amendment to allow the minimum steel reinforcement limit given in the adopted material standard ACI 318-19 to apply to foundation members resisting seismic loads designed for load combinations, including the overstrength factor.

#### **Sections 1905A.1.15, 1905A.1.16, 1908A**

The 2021 IBC has repealed shotcrete requirements in deference to requirements contained in the adopted material standard ACI 318-19 so continued DSA amendments associated with the repealed model code language are relocated to amend the applicable sections.

### **1910A.5.3 Test frequency**

Exception added for OSHPD 4 to clarify that in state detention and correctional facilities, tension testing is not required for post-installed anchors used for attaching nonstructural components under certain circumstances (OSHPD only).

## **Chapter 21 – Masonry**

### **California Energy Commission**

#### **2109.2.4.8.2 Vapor permeance**

Amendment added with specific reference to Table 1202.3.1 to distinguish between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

### **Division of the State Architect**

#### **2115 Additional requirements for community colleges**

Existing amendments in sections 2115.5, 2115.6, 2115.7 and 2115.9 revised as necessary to align with changes DSA and OSHPD made in sections 2104A.3, 2105A.2 and 2106A.1, and changes OSHPD made in 2104.2, 2105.2 and 2106.1. All the above-mentioned amendments in Chapters 21 and 21A have been made to provide better clarity and alignment with TMS 402/602.

### **Office of Statewide Health Planning and Development**

#### **Sections 2101, 2103, 2104, 2105, 2106, 2107 and 2108**

Added a new occupancy classification OSHPD 2B to address skilled nursing and intermediate care facilities to distinguish application to care facilities other than OSHPD 2A regarding grout pours, approved masonry admixtures and quality assurance measures. Revisions also made to the existing amendments to provide better clarity and alignment with TMS 402/602.

#### **2103.4 Metal reinforcement and accessories**

Amendment added clarifying that unidentified reinforcement also includes bar reinforcement without mill certification.

#### **2103.5 Air entrainment**

Amendment repealing the use of air-entraining materials or air-entraining admixtures in masonry grout.

## **Chapter 21A – Masonry**

### **Division of the State Architect and**

### **Office of Statewide Health Planning and Development**

#### **2103A.4 Metal reinforcement and accessories**

Amendment added clarifying that unidentified reinforcement also includes bar reinforcement without mill certification.

### **2103A.5 Air entrainment**

Amendment repealing the use of air-entraining materials or air-entraining admixtures in masonry grout.

### **2104A Construction, 2105A Quality assurance, 2106A Seismic design, 2107A Allowable stress design and 2108A Strength design of masonry**

Revisions to existing amendments including relocation to other sections that modify associated sections in TMS 402 and 602 and adding amendments to provide better clarity and alignment with the referenced standards.

## **California Energy Commission**

### **2109.2.4.8.2 Vapor permeance. Exception**

Amendment to distinguish between climate zones identified in ICC model codes and climate zones identified in the California Energy Code, and to cross-reference Table 1202.3.1 that describes the differences between these codes.

## **Chapter 24 – Glass and Glazing**

### **Division of the State Architect and Office of Statewide Health Planning and Development**

#### **2410 Structural sealant glazing (SSG)**

OSHPD 2A facilities excluded from the scope of Section 2410.

#### **2410.1.2 Testing and inspection**

In Item 1, the reference to ASCE 7 Section 13.5.9.2 is removed for clarity, as the language contradicts the requirements of Item 1 by allowing engineering analysis in lieu of testing. DSA added an exception to reduce testing requirements for Risk Category I, II, and III buildings within DSA-SS and DSA-SS/CC authority where the prevention of glass fallout is not dependent on the structural sealant in two-sided configurations.

## **Chapter 25 – Gypsum Board, Gypsum Panel Products and Plaster**

### **California Energy Commission**

#### **2510.6.3 California Energy Code and International Energy Conservation Code Climate Zones**

Amendment with reference to Table 1202.3.1 pertaining water-resistive barriers and applicability of climate zone criteria to distinguish between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

## Chapter 27 – Electrical

### State Fire Marshal

#### Section 2702 Emergency and Standby Power Systems

##### [F] 2702.1.2 Fuel-line piping protection

Added new Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access to the section.

## Chapter 31 – Special Construction

### California Building Standards Commission

#### 3109.2 California swimming pool safety act (statewide)

Amended to reflect Senate Bill 1078, Statutes of 2018.

### Department of Housing and Community Development

#### 3115 Intermodal Shipping Containers, Exception 5

Adopted IBC Section 3115 and added an amendment to clarify that the use of shipping containers constructed or converted off-site that qualify as Factory-built Housing pursuant to HSC Section 19971 or Commercial Modular(s) pursuant to HSC Section 18001.8, must be approved by HCD.

### State Fire Marshal

#### 3111.3.5 Elevated photovoltaic (PV) support structures and 3111.3.5.1 PV panels installed over open grid framing or non-combustible deck

Amendment establishing appropriate fire testing and listing criteria for overhead photovoltaic (PV) support structures that could have people or vehicles in the space beneath them.

### Division of the State Architect

#### 3115 Intermodal shipping containers

Added regulations regarding the use of shipping containers.

## Chapter 31B – Public Swimming Pools

### Department of Housing and Community Development

#### Chapter 31B Public swimming pools

Adopted as applicable to swimming pools which are permanent accessory structures in Mobilehome Parks (MHP) and Special Occupancy Parks (SOP). The adoption provides health and safety standards similar to those for public pools outside of MHPs and SOPs.

## Chapter 35 – Referenced Standards

### **Division of the State Architect and Office of Statewide Health Planning and Development**

Amendments to update the edition of various referenced standards including but not limited to AAMA 501.4, AAMA 501.6, ACI 355.2 and ACI 355.4. Add amendment to adopt Supplements 2 and 3, in addition to Supplement 1 of ASCE/SEI 7-16. Add amendments to adopt 506.4R-94 and 506.6T-17 for facilities within OSHPD authority.

### **State Fire Marshal**

#### **ASTM F2374 Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices**

Added provisions for inflatable amusement devices.

Several updates to **NFPA referenced standards** including **NFPA 10-21, 13-22, 13D-22, 13R-22, 24-19, 37-18, 54-18, 72-22, 111-19, 130-20, 289-19, 502-20** to follow 2021 IBC model code revisions and to align with state laws and regulations based on California specific topographical, climatic and geological issues.

#### **NFPA 13-22 Installation of Sprinkler Systems**

Corrections made to the referenced standard to resolve conflicts in requirements for positive alarm features and pre-signaling devices in I-2 and R2.1 occupancies affected by CBC Section 1008.3.2 regarding signaling delay issues and emergency power and egress illumination.

**NFPA 45-19** is deleted since it conflicts with CFC regulations.

#### **NFPA 72-22 National Fire Alarm and Signaling Code**

Corrections made to the referenced standard to resolve conflicts in requirements for positive alarm features and pre-signaling devices in I-2 and R2.1 occupancies affected by CBC Section 1008.3.2 regarding signaling delay issues and emergency power and egress illumination.



## CALIFORNIA RESIDENTIAL CODE – PART 2.5

### Chapter 1 – Scope and Application

#### Building Standards Commission

##### R105.5.1 [Permit] Expiration

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Statutes of 2018), which became operative January 1, 2019 and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019 to local building departments, state agencies and CBSC interested parties.

#### State Fire Marshal

##### 1.11.1 Specified State-occupied Buildings

New definition with 11 criteria has been added in response to Senate Bill 85 (Chapter 31, Statutes of 2019) that required the State Fire Marshal to provide a more accurate definition.

### Chapter 2 – Definitions

#### State Fire Marshal

Added new **DEFINITIONS** to support 2022 code changes: Child Care; Exterior Wall Assembly; Exterior Wall Covering; Inflatable Amusement Device; Photovoltaic (PV) Panel System, Ground Mounted; Photovoltaic (PV) Support Structure, Elevated; Toddler; Wildland-Urban Interface (WUI).

### Chapter 3 – Building Planning

#### Department of Housing and Community Development

##### R301.2.2.10 Anchorage of water heaters

Repealed model code language about seismic design categories and replace references to IRC sections not adopted in California with reference to CPC.

##### R320.2 Live/work units

Amendment to correct references to CBC Chapters 11A and 11B for accessibility requirements.

### **R327 Aging-in-place design and fall prevention**

Added new section that replaces IRC Section 327, Swimming Pools, Spas and Hot Tubs. Added to address specific aging-in-place design elements in new residential construction to facilitate access to operational features and to allow people to stay longer in their homes as they age.

## **State Fire Marshal**

### **R310.1 Emergency escape and rescue opening required**

Repealed language that conflicts with the CFC and California Code of Regulations, Title 19, Public Safety.

### **R313.3.2 Sprinklers**

Amended existing California amendment to add dry pipe sprinkler.

### **R324.8 Elevated photovoltaic (PV) support structures, R324.8.1 and R324.8.2**

Added new sections to establish appropriate fire testing and listing criteria for overhead photovoltaic (PV) support structures that could have people or vehicles in the space beneath them.

### **Figure R328.8.1 ESS vehicle impact protection**

Added to illustrate the zones in which a typical residential garage Energy Storage System (ESS) installation would trigger the need for impact protection.

### **R328.8.2 Other locations subject to vehicle impact**

Added to address other-than-garage locations that may also have vehicle access, such as residential driveways, and allows some flexibility to the AHJ and installer for larger, non-typical, or custom residential garages where the normal path of vehicle travel falls outside of the area defined in R328.8.1.

### **R328.8.3 Impact protection options**

Added to define an impact protection area and set the expectation that the barriers are intended to deflect, resist or visually deter an impact. This language matches Section 312.3 in the IFC.

### **R336.2. Health and Safety Code Section 1597.46**

Amendment to comply with changes made to the California Health and Safety Code (HSC) by Senate Bill 234 (Chapter 244, Statutes of 2019) regarding large family day-care homes. The revised HSC Section 1597.46 is printed in this section.

### **R336.6 Compliance**

The paragraph regarding enforcement of HSC Sections 13145 and 13146 is repealed to comply with SB 234 (Chapter 244, Statutes of 2019).

### **R337.2 Definitions**

**APPLICABLE BUILDING** Added to define an applicable building relative to the regulations of Chapter 7A.

**EXTERIOR WALL ASSEMBLY and EXTERIOR WALL COVERING** Added to distinguish between different exterior wall products in Section 707 of the California Building Code.

**FIRE PROTECTION PLAN** Modified existing definition to provide a reference pointer to CFC Chapter 49 for Wildland-Urban Interface (WUI) Fire Area requirements.

**FIRE-RESISTANT VEGETATION** Add new definition of plants less likely to ignite, contribute heat or spread flame. Also provides a list of resources for more information about these types of plants.

**IGNITION-RESISTANT MATERIAL** Revised because SFM Standard 12-7A-5 has been repealed and rendered obsolete.

**LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONE** Repealed existing definition.

**R337.6.2.1 Off ridge and ridge vents**

Repealed language regarding vents mounted on a vertical surface that has been incorporated into CBC Section 706A.2 requirements. The new language in R337.6.2.1 allows for a compliance path for off ridge and ridge vents to be used in the wildland urban interface, with protections against ember intrusion.

**R337.7.3 Exterior wall coverings and R337.7.3.1 Exterior wall assembly**

Separated into two sections.

**R337.7.4 Exterior wall assemblies and R337.7.4.1 Conditions of acceptance when tested in accordance with ASTM E2707**

Revised language to clarify that the fire resistance rating for the newly defined “exterior wall assemblies” is consistent with exterior wall coverings in Section R337.7.3.

**R337.10.4 Roof construction**

Revised language to clarify that when an accessory building is required to be constructed of noncombustible materials or of ignition-resistant materials, its roof must meet Class A fire rating.

## **Chapter 4 – Foundations**

### **Department of Housing and Community Development**

**R408.3 Unvented crawl space**

Repealed amendment regarding crawl space perimeter wall insulation and reference to the California Energy Code.

## **California Energy Commission**

### **R408.8 Under-floor vapor retarder**

New Note with a specific reference to Table R702.7(5) in this section regarding the applicability of vapor retarders and insulation with respect to the difference between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

## **Chapter 7 – Wall Covering**

### **Department of Housing and Community Development**

#### **R702.7.1 Class III vapor retarders**

Repealed amendments pertaining to the California Climate Zones relative to vapor retarders for interior wall coverings. The California Energy Commission amended sections specific to climate zones in CRC Chapters 4, 7, 8, and Appendix AS and in the California Energy Code.

### **California Energy Commission**

#### **R702.7.2 California Energy Code and International Energy Conservation Code Climate Zones.**

New section with a specific reference to Table R702.7(5) pertaining to the use spray foam plastic insulation and the difference between the applicability of climate zones identified in ICC model codes and the climate zones identified in the California Energy Code.

#### **Table R702.7(5) IECC vs. California Energy Code Climate Zone Comparison**

New Table depicting specific differences between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

## **Chapter 8 – Roof-Ceiling Construction**

### **California Energy Commission**

#### **R806 Roof Ventilation, Note**

Informational Note added to the section with specific reference to Table R702.7(5) regarding the applicability of energy efficiency measures and to reinforce the difference between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

### **State Fire Marshal**

#### **R806.1.1 Vents in the Wildland Urban Interface (WUI)**

Amended to ensure that where vents are provided in WUI areas, they are required to be protected from the intrusion of burning embers and flame.

## Chapter 9 – Roof Assemblies

### State Fire Marshal

#### **R902.1.2 Roof coverings within state responsibility areas**

This existing amendment is repealed to correlate with CBC Chapters 7A and 15 for roof coverings in WUI areas.

## Chapter 44 – Referenced Standards

### State Fire Marshal

#### **ASTM F2374**

Added to address safety requirements for inflatable amusement devices also known as “bounce houses,” and to correlate with the type of devices covered by IFC requirements.

#### **UL 9540-2020**

Modifies the existing standard. The second edition of UL 9540 has new requirements that limit the maximum energy capacity of individual nonresidential electrochemical Energy Storage Systems (ESS) to 50 kWh with certain exceptions.

#### **UL 9540A-Edition 4 2019**

Modified the existing California amendment to correlate with other updates and new regulations regarding battery ESS.

## Appendix AS – Strawbale Construction

### California Energy Commission

#### **Appendix AS – Strawbale Construction**

Informational Note added to the appendix title heading with specific reference to Table R702.7(5) regarding the applicability of energy efficiency measures and to reinforce the difference between climate zones identified in ICC model codes and climate zones identified in the California Energy Code.

### Department of Housing and Community Development

Amended this appendix to repeal references to climate zones and the California Energy Code.

## Appendix AX

### Building Standards Commission

#### Swimming Pool Safety Act

Amended the note under the title to reflect this law is mandatory, not optional for local adoption. To align with the CBC, Chapter 31, Appendix AX section numbers were reformatted to reflect the numbering used in HSC 115920 through 115929.



# CALIFORNIA ELECTRICAL CODE – PART 3

## California Energy Commission

Sections of the California Electrical Code were amended by CEC to assist code users by identifying additional applicable energy efficiency-based electrical requirements in the California Energy Code that are applicable to the following systems:

- Electrical power distribution systems.
- Panelboards in single-family and multifamily buildings
- Heat pump water heaters, electric cooktops, electric clothes dryers and their electric readiness in single-family and multifamily buildings
- Electrical requirements for energy storage systems (ESS) and their electric readiness in multifamily buildings

Part 3 Chapter	Sections
Chapter 1	89.101.8.2
Chapter 4	408.2(A), 408.2(B), 422.3(A), 422.3(B), 440.3(E), 440.3(F)
Chapter 7	706.10

## Housing and Community Development

### 90.2 Scope

New amendment to avoid conflict with text in Section 89.101.3.3 regarding installations in ships, watercraft other than floating dwelling units, railway rolling stock, aircraft, automotive vehicles, commercial coaches, mobile homes and recreational vehicles.

## State Fire Marshal

### 620.71 Guarding Equipment

Repealed California amendment that prohibited the installation of an elevator motor controller and/or motion controller in the hoistway.

## Office of Statewide Health Planning and Development

### 110.2 Approval

Defined new requirements for equipment that must be satisfied in order to be approved by OSHPD for use.

### 110.26 Spaces About Electrical Equipment. (C) Entrance to and Egress from Working Space. (3) Personnel Doors

Amendment to reference the CBC for additional exit door requirements for electrical equipment room rated 800-amperes or more.

**404.4 Damp or Wet Locations. (C) Switches in Tub or Shower Spaces**

Amendment to reduce the restriction distance for the installation of receptacles from five feet to three feet horizontally. This aligns with model code language in Section 406.9(C).

**517.30 Sources of Power. (B) Types of Power Sources. (3) Battery Systems**

Amendment to allow battery systems to be used as an alternate power source.

**517.32 Branches Requiring Automatic Connection. (A) Life Safety and Critical Branch Used in a Type 1 EES**

Restore the 10-second restoration time for Type 1 life safety and critical branches.

**517.34 Critical Branch. (A) Task Illumination, Fixed Equipment, and Selected Receptacles**

Amendment for imaging equipment used for diagnostic services of emergency/trauma patients to be powered by the critical branch or equipment branch.

**517.44 Connection to Equipment Branch. (B) Delayed Automatic or Manual Connection to the Equipment Branch. 517.44.1 [OSHPD 2, 4 & 5] Connection to Equipment Branch**

Amendment to restore the requirement that Type 2 EES equipment branch load listed in Section 517.44(A) must automatically restore to operation at appropriate time-lag intervals following the energization of the life safety branch.

**517.123 [OSHPD 1, 2, 3, 4 & 5] Call Systems**

**(A) General.** Added references to the CBC's applicable sections for nurse call systems.

**(C) Bath Stations.** Changed the mounting height requirements for nurse call system "bath station" devices located at the patient toilets.

**700.12 General Requirements. (C) Storage Battery**

Amendment to require a storage battery system used as an alternate power source to have the equivalent capacity and operating duration as an equivalent generator set operating on an on-site fuel supply.



## **CALIFORNIA MECHANICAL CODE – PART 4**

### **Chapter 1 – Scope and Application**

#### **Building Standards Commission**

##### **104.4.3.1 Expiration**

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Chapter 655, Statutes of 2018), which became operative January 1, 2019 and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019 to local building departments, state agencies and CBSC interested parties.

#### **State Fire Marshal**

##### **1.11.4.4 Fire Clearance Preinspection and 1.11.4.5 Care Facilities**

Updated to meet Health and Safety Code Section 13244 and to align with other parts of Title 24 regarding fee structures for Fire Clearance Pre-inspection and Care Facilities.

##### **1.11.6 Certificate of Occupancy**

Updated to correlate with the requirements for certificate of occupancy in the CBC.

#### **California Energy Commission**

##### **Section 1.1.8 California Energy Code Requirements for Locally Adopted Energy Standards**

Amendment clarifies that “local jurisdictions that adopt changes to energy conservation or insulation standards (including energy efficiency measures) may not enforce such changes until the California Energy Commission has made the findings required by Public Resources Code Section 25402.1(h)(2), following the process specified in Section 10-106 of the California Administrative Code.”

## Chapter 2 – Definitions

### Office of Statewide Health Planning and Development

#### 228.0 Z

#### ZONE [OSHPD 1, 2, 3, 4 & 5]

New code section has been added. OSHPD has added the definition of Zone to OSHPD 1, 2, 3, 4 & 5 to specify the meaning of this term within Part 4 and reduce confusion.

## Chapter 3 – General Regulations

### Department of Housing and Community Development

#### 311.2 Air Filters

Repealed amendment in the exceptions referencing the California Energy Code, since the California Energy Commission included this amendment in their rulemaking.

### California Energy Commission

#### Section 311.5 California Energy Code Requirements for Residential Air Filtration

New code section added pointers specifying requirements for outdoor air delivery to occupied spaces where specified in California Energy Code Sections 150.0(m)12 and 160.2(b).

## Chapter 4 – Ventilation Air

### Building Standards Commission

#### 402.1 Occupiable Spaces

Repealed amendment in the exceptions referencing the California Energy Code, since the California Energy Commission included this amendment in their rulemaking.

### Department of Housing and Community Development

#### 405.3 Bathroom Exhaust

Amendment providing a reference pointer to CALGreen (Part 11 of Title 24), Division 4.5, Environmental Quality.

### Office of Statewide Health Planning and Development

#### 407.5.1.3 Variable Air Volume

Amendment clarifies that spaces with pressure requirements per Table 4-A shall utilize an automatic modulating damper in the return or exhaust air for each space and that the damper will modulate from full open to minimum position in conjunction with the supply air VAV terminal equipment.

### **407.6 Economizers**

New code section requires that systems with economizers shall include modulating relief and/or return fans to ensure compliance with the pressure requirements of spaces listed in Table 4-A.

### **420.0 Air Distribution Devices [OSHPD 1, 2, 3, 4 & 5]**

New code section requires all air distribution devices and supply air outlets meet ASHRAE 170-2013, Section 6.7.2 and Table 6.7.2. This is consistent with other regulations that address prevention measures to abate disease-causing microorganisms within mechanical systems.

## **Chapter 6 – Duct systems**

### **Department of Housing and Community Development**

#### **601.2 Sizing Requirements**

Repealed amendment in the exceptions referencing the California Energy Code, since the California Energy Commission included this amendment in their rulemaking

#### **603.10.1.1 Duct Leakage Tests for Residential Buildings**

Repealed amendment in the exceptions referencing the California Energy Code, since the California Energy Commission included this amendment in their rulemaking.

### **California Energy Commission**

#### **Section 601.2.1 California Energy Code Residential Return Duct Sizing Requirements**

New code section applicable to new construction and alterations with pointers to California Energy Code Tables 150.0-B and 150.0-C to specify return duct sizing requirements for single return and multiple return duct systems, respectively.

#### **603.9.2.1 Duct Leakage Tests for Buildings that Meet Air Distribution System Duct Leakage Sealing Criteria in Title 24, Part 6**

New code section with pointers to the California Energy Code applicable to single-family and multifamily buildings, hotels/motels and nonresidential buildings.

## **Chapter 9 – Installation of Specific Appliances**

### **Department of Housing and Community Development**

#### **911.2.2 In Manufactured Homes and 912.1.1 Prohibited Installations and Exception**

HCD does not adopt model code sections 911.2.2 and 912.1.1 to avoid possible conflict and to properly align with CCR, Title 25, and HSC Section 18025 regarding references and standards incorporated by reference for construction of manufactured homes, including decorative gas appliances for installation in fireplaces. HCD has reserved these sections accordingly.

## Chapter 11 – Refrigeration

### State Fire Marshal

#### **1104.6 Applications for Human Comfort and for Nonindustrial Occupancies**

Exceptions 1 and 2 added to allow the use of A2L refrigerant in specific self-contained factory sealed air conditioning units.

## Chapter 12 – Hydronics

### Department of Housing and Community Development

#### **1217.5.2 Insulation, 1217.7 Wall and Ceiling Panels and 1220.4.5 Insulation**

HCD repealed amendments in the exceptions referencing the California Energy Code, since the California Energy Commission included this amendment in their rulemaking for insulation requirements for concrete radiant flooring heated slabs, pipe insulation, and concrete snow melt heated slab floors.

### California Energy Commission

#### **1217.7.1 California Energy Code Pipe Insulation Requirements**

New code section to reference the California Energy Code Sections 150.0(j)2 and 120.3(c) for pipe insulation requirements based on fluid temperature and pipe diameter. Also, where California Energy Code Table 120.3-A specifies insulation greater than R-12, the higher value is required.

#### **1220.4.5.1 California Energy Code Insulation Requirements for Heated Slab Floors**

New code section to reference the California Energy Code Section 110.8(g) and Table 110.8-A for additional insulation requirements for heated slab floors. Also, a higher level of insulation is required for Climate Zone 16, and more detailed requirements for installing insulation are specified in all climate zones.



# CALIFORNIA PLUMBING CODE – PART 5

## Chapter 1 – Scope and Application

### Building Standards Commission

#### R105.5.1 [Permit] Expiration

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Chapter 655, Statutes of 2018), which became operative January 1, 2019 and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019 to local building departments, state agencies and CBSC interested parties

## Chapter 4 – Plumbing Fixtures and Fixture Fittings

### Building Standards Commission

#### 412.1.4.1 Nonwater Urinals with Drain Cleansing Action

Changed the term from “Urinals, Hybrid.”

### Building Standards Commission and Division of the State Architect

#### Table 4-1 Occupant Load Factor

Co-adopted with BSC, who made the changes during the 2019 Intervening Code Adoption Cycle.

#### 422.1 Fixture count and Table 422.1

Co-adopted with BSC to permit an alternate Table 4-1 (replaced Table A) as an exception which can be used if the jurisdiction has adopted it. In the 2019 edition of the CPC, DSA inadvertently omitted the language. DSA co-adopted the BSC amendment in the statement at the top of Table 422.1 to allow usage of Table 4-1 as an alternate for calculations.

#### Table A/Table 4-1

Table A is superseded by Table 4-1 which incorporates numerous additions, deletions and revisions for determining plumbing fixture count minimums.

## **California Energy Commission**

### **401 General**

Amended to prevent confusion regarding the interaction between standards for plumbing fixtures and fittings subject to regulation as water-using appliances, and standards for plumbing systems specified in adopted model code language.

## **Chapters 5 and 6 – Water Heaters and Water Supply and Distribution**

### **California Energy Commission**

#### **501 General and 609.12 Residential Fire Sprinkler Systems**

Amended to assist readers of the CPC by identifying additional energy efficiency requirements applicable to water heating systems and pipe insulation.

## **Chapter 6 – Water Supply and Distribution**

### **State Fire Marshal**

#### **612.2 through 612.7.2 Water Supply and Distribution**

Removed residential fire sprinkler systems from California Plumbing Code, and comply with California Residential Code and California Fire Code.

## **Chapter 13 – Health Care Facilities and Medical Gas and Vacuum Systems**

### **Office of Statewide Health Planning and Development**

#### **1304.1.1 [OSHPD 1, 1R, 2, 3, 4 & 5]**

Added a reference to the California Fire Code Chapter 80.

#### **1304.1.2 [OSHPD 1, 1R, 2, 3, 4 & 5]**

New exception that a medical gas source system serving only an OSHPD 1R or 3 building may be located within it.

## **Chapter 15 – Alternate Water Sources for Nonpotable Applications**

### **Department of Water Resources**

#### **1505.1 General**

Amended this section to clarify the applicability of Section 1505 to landscape irrigation systems using recycled water.

#### **1505.4 Connections to Potable or Recycled Water Supply Systems – Exception (4)**

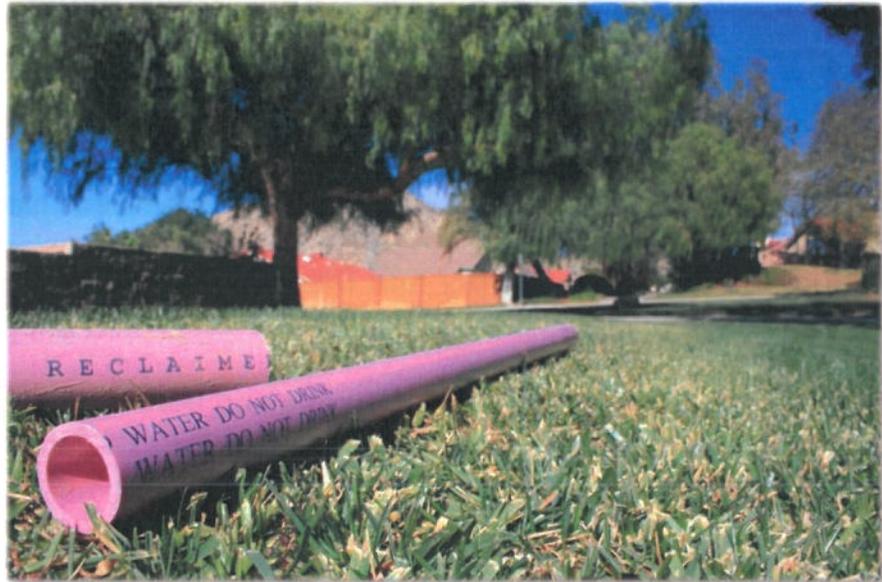
Added an exception for the use of a swivel ell or changeover device to supply potable water to a dual-plumbed system during an interruption in recycled water service.

## Chapter 17 – Referenced Standards

### Office of Statewide Health Planning and Development

#### Table 1701.1

Added ANSI/AAMI reference standard for water treatment equipment for hemodialysis applications.



## CALIFORNIA ENERGY CODE – PART 6

Please visit the [California Energy Commission's website](https://www.energy.ca.gov) for Part 6 updates.

[energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/online-resource-center/overview](https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/online-resource-center/overview)



# CALIFORNIA FIRE CODE – PART 9

## Overview

### State Fire Marshal

The Office of the State Fire Marshal (SFM) has authority for the building standards in the California Fire Code (CFC). Unless otherwise noted, all updates noted in this section were made by SFM.

The bulk of amendments regarding Energy Storage Systems (ESS) occur in Chapters 1, 2, 9, 12 and Chapter 80, Referenced Standards. SFM repealed California ESS Intervening Code Adoption Cycle amendments and definitions that were early adopted ICC provisions in the 2019 Intervening Code Adoption Cycle, then adopted and replaced with unamended 2021 International Code Council (ICC) model code provisions in several chapters.

The bulk of amendments regarding Type IV construction—tall wood/mass timber and cross-laminated timber—occur in Chapter 7 Section 701.6, Chapter 9 Section 914.3.1.2, and Chapter 33 Section 3303.5, based on changes in model code. SFM repealed California tall wood/mass timber amendments that were early-adopted ICC provisions in the 2019 Intervening Code Cycle, then adopted and replaced with unamended 2021 ICC model code provisions.

Part 9 Chapter	Sections
Chapter 2	202 Definitions MASS TIMBER (CA amended defined term remains)
Chapter 7	Section 701 General 701.6 Owners responsibility (Updated model code references)
Chapter 9	Section 914 Fire Protection Based on Special Detailed Requirements of Use and Occupancy 914.3.1.2 Water supply to required fire pumps. (CA amendment remains)
Chapter 33	Section 3303 Owners Responsibility for Fire Protection. 3303.5 (Adopted model code section and repealed California Section 3308.9)

## Chapter 1 – Scope and Application

### Building Standards Commission

#### R105.5.1 [Permit] Expiration

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This

amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Chapter 655, Statutes of 2018), which became operative January 1, 2019 and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019 to local building departments, state agencies and CBSC interested parties.

## **State Fire Marshal**

### **1.11.1 Scope Specified state-occupied buildings**

New definition with 11 criteria has been added in response to Senate Bill 85 (Chapter 31, Statutes of 2019) that required the State Fire Marshal to provide a more accurate definition.

### **1.11.6 Certificate of Occupancy**

Amendment referencing CBC Section 105.2 to clarify work exempt from permitting requirements.

### **105.6.53 Lithium batteries**

Amendment to require an operational permit for an accumulation of more than 15 cubic feet of lithium-ion and lithium metal batteries and storage shall comply with new amendments in CFC Section 322.

## **Chapter 2 – Definitions**

**CHILD CARE** Added a new defined term for child care that is consistent with Title 22 (Social Security) of the California Code of Regulations.

**DAY-CARE** Amended the defined term day-care to specify the time period for the care of persons is not to exceed 24 hours, and is to be consistent with Title 22.

**INFLATABLE AMUSEMENT DEVICE** New defined term to specify characteristics of inflatable structures that need to be properly constructed and anchored.

**MOBILE FOOD PREPARATION VEHICLES** Repealed this term to align with California Code of Regulations Title 25, Housing and Community Development. See Chapter 3 changes below.

**PHOTOVOLTAIC (PV) PANEL SYSTEM, GROUND-MOUNTED** New defined term to be consistent with references in CBC Chapters 16 and 31, CRC Chapter 3 and CFC Chapter 12.

**PHOTOVOLTAIC (PV) SUPPORT STRUCTURE, ELEVATED** New defined term for an elevated PV support structure designed with useable space underneath intended for secondary use such as providing shade for motor vehicle parking. Requirements for installation are addressed in CBC Chapters 15 and 16.

**TODDLER** New defined term to align with the legal definition of toddlers from Health and Safety Code Section 1596.55. By distinguishing age differences, officials will be able to classify the related occupancies based on social services' classifications used for licensing.

### **Chapter 3 – General Regulations**

#### **User Note, Section 301.2 Permits and Section 319 Mobile Food Preparation Vehicles**

Repealed model code and references to mobile food vehicles throughout the code to address concerns regarding conflicting jurisdiction requirements between Title 25 and the CFC.

#### **Section 322 Storage of Lithium-ion and Lithium Metal Batteries**

Adopted new section to address safety requirements, as well as associated sections in Chapter 4 below.

### **Chapter 4 – Emergency Planning and Preparedness**

#### **403.10.6 Lithium-ion and lithium metal batteries and 403.10.6.1 Mitigation planning**

Amendments in these sections address fire safety and emergency action regarding battery storage and mitigation planning in the event of thermal runaway.

### **Chapter 9 – Fire Protection and Life Safety Systems**

Amendments in this chapter address nearly every subsection regarding every occupancy and SFM application.

SFM repealed several California amendments and adopted 2021 IFC model code language for automatic sprinkler systems, energy storage systems, explosion control, venting, and gas detection systems.

Major amendments were made to requirements for compliance with updated NFPA 72 standards in model code regarding solar photovoltaic power systems, portable fire extinguishers and gas detection systems.

#### **907.2.6.4 Group I-4**

New section to include the intent of the smoke detection requirements for Group I-4 occupancies with a reference to Section 436.1.

#### **907.2.11.8 Specific location requirements**

Modified to address the references based on changes to both the NFPA 72 Standard 29.11.3.4, and the model code regarding smoke alarms and smoke detection systems.

### **913.1 General**

Amend the exception for automatic sprinkler pumps to correlate with the California Residential Code section R313.

## **Chapter 10 – Means of Egress**

### **1032.2.1.2 Maintenance and 1032.2.1.3 Examination**

Adjustments and revisions to address maintenance requirements for fire escapes that have been relocated to Section 1032.

## **Chapter 12 – Energy Systems**

### **Sections 1202, 1203, 1204, 1205, 1206 and 1207**

Repealed, renumbered, amended and carried forward existing amendments in Chapter 12 to adopt updated 2021 IFC model code language.

### **1207.11.7 through 1207.11.7.3**

#### **Section 1207.11.7**

Amendments regarding specific appliances, ESS equipment and devices that need protection from impact in a clearly defined area in residential garages and carports.

#### **Figure 1207.11.7.1**

Added to illustrate the zones in which a typical residential garage ESS installation would trigger the need for impact protection, following prescriptive barrier and post designs.

## **Chapter 31 – Tents, Temporary Special Event Structures and Other Membrane Structures**

### **3101.1 Scope**

Carried forward existing amendments and added new amendment regarding temporary structures, water filled vessels and inflatable amusement devices.

### **3103.8.2 Location**

Repealed the reference to Title 19 regulations regarding vehicle parking near tents.

### **3103.9.1 Water Filled Vessels**

Amendment requiring the tent manufacturer to provide the documentation permitting use of water filled vessels for anchoring and securing their tents.

### **Section 3106 Inflatable Amusement Devices**

Amendment requiring basic design and safety criterion in accordance with ASTM F2374 for inflatable amusement devices also known as “bounce houses.”

## **Chapter 38 – Higher Education Laboratories**

IFC Chapter 38 is omitted in its entirety to correlate with the California Building Code and amendments regarding the Group L occupancy.

## **Chapter 49 – Requirements for Wildland-Urban Interface (WUI) Fire Areas**

The WUI amendments to the CFC were developed through the Office of the State Fire Marshal WUI task group and collaboration with local fire departments, state agencies, building industry, testing labs, and stakeholders.

The user note under the Chapter 49 title is added to give the code user a general understanding and background information on the development process of the regulations and their application.

### **4902 Definitions**

**FIRE-RESISTANT VEGETATION** New definition of plants less likely to ignite, contribute heat or spread flame. Also provides a list of resources for more information about these types of plants.

**LOCAL RESPONSIBILITY AREA (LRA)** Amended to be consistent with language used in rest of the WUI regulations.

### **4903 Plans**

Added to grant authority to local fire officials to require building owners to provide a fire protection plan to mitigate the wildfire hazards that may exist based on a project-specific wildfire hazard assessment that includes considerations of location, topography, aspect, and climatic and fire history.

The fire protection plan shall address fire department access, egress, road and address signage, water supply, fuel reduction and defensible space requirements in accordance with the California Public Resources Code.

### **4904.3 Local Agency Requirements**

New amendment establishes requirements for local agencies to provide information to the public regarding the identification of very high fire hazard severity zones (VHFHSZ) within a 30-day period. Other new requirements in this subsection address local agency responsibilities and duties to develop fire severity zone maps accessible to the general public, as well as requirements to designate by ordinance VHFHSZ.

### **Section 4906 Vegetation Management**

New amendments in this section include additional requirements for the development, identification and maintenance of the vegetation management zones adjacent to structures, as well as design criteria for specific types of fire-resistant and non-fire-resistant vegetation.

### **4908 Fire Safe Development Regulations & Section 4909 Subdivision Review Survey**

New code sections added to comply with AB 2911 (Chapter 641, Statutes of 2018) which requires a survey of local governments every five years to identify existing subdivisions in the state responsibility area (SRA) or VHFHSZ without a secondary egress route. Subsections authorize the Board of Forestry and SFM-specified local

government bodies to make recommendations to include creating secondary access or access road improvements, among other options.

#### **4910 General Plan Safety Element**

Added to comply with AB 2911 (Chapter 641, Statutes of 2018) which requires cities and counties to adopt a comprehensive general plan with various elements including a safety element for protection of the community from unreasonable risks associated with various hazards, including wildfires.

### **Chapter 80 – Referenced Standards**

Amended several referenced standards to correlate with model code revisions and new California amendments.

#### **ASTM F2374**

Added regarding provisions for inflatable amusement devices.

### **Appendix P – Community Wildland-Urban Interface (WUI) Fire Hazard Evaluation Framework**

Although SFM does not adopt Appendix P statewide in the California Fire Code, when adopted by local jurisdictions and fire districts, this appendix is meant to be a tool to enable communities to collect, assemble and represent the associated risks within a WUI fire area.



## CALIFORNIA EXISTING BUILDING CODE – PART 10

### Chapter 1 – Scope and Application

#### Building Standards Commission

##### **R105.5.1 [Permit] Expiration**

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance. This amendment also allows for permit extensions; the exception being when the work authorized by the permit is determined to have been abandoned. The new code language reflects statutory requirements in Assembly Bill 2913 (Chapter 655, Statutes of 2018), which became operative January 1, 2019 and amended Health and Safety Code (HSC) Section 18938.5(b)(2)(B) and added HSC Section 18938.6 to Building Standards Law.

[CBSC Information Bulletin 19-03](#) regarding permit expiration dates was issued May 23, 2019 to local building departments, state agencies and CBSC interested parties.

#### Division of the State Architect

##### **1.9.2.1.4 Reference to other chapters and 1.9.2.2.4 Reference to other chapters**

Added to redirect references for public schools and community colleges to the applicable “A” chapters of the CBC.

#### State Fire Marshal

##### **1.11.1 SFM—Office of the State Fire Marshal**

Added a definition of Specified State-occupied Building.

##### **1.11.4.4 Fire clearance preinspection and 1.11.4.5 Care facilities**

Update the fees that are charged for inspections to meet the requirements of Health and Safety Code Section 13244.

##### **1.11.6 Certificate of Occupancy**

Correlated the requirements for certificate of occupancy with the regulations in the California Building Code.

### Chapter 2 – Definitions

#### Building Standards Commission and Division of the State Architect

##### **202 General Definitions**

Relocated existing definitions for BUILDING OFFICIAL and ENFORCEMENT AGENCY from Section 318.1 to Section 202.

## **Division of the State Architect**

### **201 General**

Adopted Section 201 (it was not adopted in 2019 CEBC).

### **201.3 Terms defined in other codes**

Amended to reference applicable sections of the California Administrative Code (Part 1 of Title 24) where the definitions contained therein govern.

## **Chapter 3 – Provisions for All Compliance Methods**

### **Building Standards Commission and Division of the State Architect**

#### **Table 317.5 Minimum seismic design performance levels for structural and nonstructural components**

Revised table footnote #2 and added footnote #3 to clarify that there are two alternate compliance paths in addition to the criteria presented in the table.

#### **317.8 ASCE 41 Chapter 14**

Coordinated with the latest version of referenced standard ASCE 41.

#### **319.7 Prescriptive selection of the design method**

Revised Subsection 319.7.2 to clarify the condition triggering Method B approach based on building irregularities.

#### **319.10 Structural observation, testing and inspection**

Revised the language to coordinate with associated regulations in Chapter 17 of the California Building Code and repeal redundant and/or contradictory regulations.

### **Building Standards Commission**

#### **318 Definitions**

Relocated BUILDING OFFICIAL and ENFORCEMENT AGENCY definitions to Chapter 2 and repealed the rest of the definitions from Section 318.1 except ADDITION, ALTERATION, and REPAIR.

### **Division of the State Architect**

#### **318 Definitions**

Relocated BUILDING OFFICIAL and ENFORCEMENT AGENCY definitions to Chapter 2 and repealed the rest of the definitions from Section 318.1 except for REPAIR. Added reference to applicable sections of California Administrative Code (Part 1), where the definitions contained therein govern.

#### **319.1 Basis for evaluation and design**

Revised Exception 2 to restore original intent and update for compatibility with current code adoption cycle. As originally authored, Exception 2 was intended to apply to the conversion of a nonconforming building to use as a school building in accordance with Section 4-307 of Part 1. It was not intended to apply to the rehabilitation of an

existing school building when required by Section 4-309(c) of Part 1. Restored the phrase “as it was adopted by the governing jurisdiction” to make clear that the previous code is permitted to be used as originally applied rather than requiring compliance with its DSA-SS or DSA-SS/CC amendments (e.g., the “A” chapters).

### **321.2.3 Peer review**

Added language to align with the current practice of review and approval by the California Geological Survey. This updates regulations to reflect the current requirements for seismic ground motion records used in time history analysis.

## **Office of Statewide Health Planning and Development**

Because several sections were added to the IEBC, OSHPD sections in Chapters 3 and 3A were relocated and renumbered.

### **312.3.3.2 (formerly 309.3.3.2) Psychiatric nursing service**

Amended existing language to replace 1224.31 with Section 1228 for psychiatric nursing service. Section 1224.31 applies to medical psychiatric services and is not acceptable for an OSHPD 1R building.

### **304A.3.4.5 (formerly 303A.3.4.5) SPC-4D using ASCE 41**

Replaced entire section on seismic separations in ASCE 41-13 to be more consistent with the initial intent of the change and current inventory of SPC-3 and higher buildings, at the same time ensuring adequate level of safety from collapse of the adjacent building due to potential pounding impacts.

### **304A.3.5.9 ASCE 41 Section 8.4.2.3.2.1**

Added new section for foundations modeled as a fixed base or a flexible base.

### **304A.3.5.13 ASCE 41 Section 10.12.3**

Added new section to modify ASCE 41 Section 10.12.3 and provide a new exception to this section.

## **Chapter 5 – Prescriptive Compliance Method**

### **Building Standards Commission**

#### **502.1 General**

Repealed the language requiring Sections 502.4 and 503.3 be replaced by the requirements of Sections 317 through 322. Sections 502.4 and 503.3 have been adopted by BSC since 2016.

## **Chapter 16 – Referenced Standards**

### **State Fire Marshal**

Added amendments to the adopted and referenced NFPA 13R and NFPA 72 standards from the California Fire Code, so the same information is found in both codes.

### **Division of the State Architect**

Adopted Supplement 3 of ASCE 7 in addition to Supplement 1, which is already adopted by the model code.

### **Office of Statewide Health Planning and Development**

Adopted ASCE 7-16 Supplement 3 for **OSHPD 1, 1R, 2, 4 and 5**. Adopt ASCE 41-17 Supplement 1 for **OSHPD 1R, 2, 4 and 5**.

### **Department of Housing and Community Development**

HCD proposed editorial changes only with no intended change in regulatory effect, such as moving existing amendments following model code changes. Example: carbon monoxide alarm requirements were moved from Chapter 5 to Chapter 3.



# CALIFORNIA GREEN BUILDING STANDARDS CODE – PART 11

## Chapter 2 – Definitions

**Building Standards Commission (BSC), Division of the State Architect (DSA), Department of Housing and Community Development (HCD)**

**AUTOMATIC LOAD MANAGEMENT SYSTEMS – ALMS** (BSC, DSA, HCD) Added to clarify the term as used within CALGreen and in the EV charging industry and refers to ALMS which is allowed for use by the California Electrical Code.

**ELECTRIC VEHICLE (EV) CAPABLE SPACE** (BSC, HCD, DSA) Added to clarify the term as used within CALGreen and in the EV charging industry and refers to a space which has capability or infrastructure to facilitate future EV charging.

**ELECTRIC VEHICLE (EV) READY SPACE** (HCD) Added to clarify the term as used within CALGreen and in the EV charging industry and refers to a space which is ready for EV charging and equipped with a receptacle or charger.

**LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)** (HCD) Added to residential sections of CALGreen and clarifies that the new term as used within Sections 4.106.4.2. and A4.106.8.2.1 refers a Level 2 EV charger and supporting electrical equipment.

**LOW-POWER LEVEL 2 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE** (HCD) Added to residential sections of CALGreen to clarify the electrical requirements for this type of receptacle as required in Sections 4.106.4.2.1 and 4.106.4.2.2.

**ZERO-EMITTING AND HIGH-EFFICIENT VEHICLES** (BSC, DSA) Amended from “Low-Emitting and Fuel-Efficient Vehicles” to “Zero-emitting and High-efficient Vehicles.”

**OFF-STREET LOADING SPACES** (BSC, DSA) Added to align with the new code language for EV charging for medium-duty and heavy-duty vehicles.

**NONWATER URINAL WITH DRAIN CLEANSING ACTION** (BSC, HCD, DSA) Amended from “Urinal, Hybrid” to “Nonwater Urinal with Drain Cleansing Action” to align terminology with the California Plumbing Code; no change in regulatory effect.

## Chapter 4 – Residential Mandatory Measures

**Department of Housing and Community Development**

HCD repealed various existing code sections and provisions to reformat, modify, and adopt new sections addressing EV charging for multifamily buildings, and hotels and motels.

#### **4.106.4 and subsections. EV charging for new construction**

Expanded EV charging requirements to installation of EV charging receptacles and EV chargers (EVSE).

- Modified Exception 1 to address situations in which there is no local utility power supply or when the local utility is unable to supply adequate power.
- Repealed references to specific dollar amounts for exceptions due to variations in utility costs based upon locations.
- Included an exception related to adverse impact to construction cost of a project, similar to the provision for nonresidential EV charging.

#### **4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities**

New regulation to clarify that calculations for EV spaces are to be rounded up to the nearest whole number and EV spaces to be counted as parking spaces only for the purposes of meeting parking space requirements at the local level (Vehicle Code Section 22511.2).

##### **4.106.4.2.1 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms**

New regulation requiring that ten percent of the total number of parking spaces on a building site support future Level 2 EVSE, the installation of EV ready spaces for twenty-five percent (25%) of the total number of parking spaces equipped with low power Level 2 EV charging receptacles, and clarification that no more than one receptacle must be installed per dwelling unit.

##### **4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms**

New regulations requiring that ten percent (10%) of the total number of parking spaces on site support future Level 2 EVSE; the installation of EV-ready spaces for twenty-five percent (25%) of the total number of parking spaces equipped with low power Level 2 EV charging receptacles; and five percent (5%) of the total number of parking spaces shall be equipped with Level 2 EVSE. The use of an ALMS is allowed when low-power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required.

##### **4.106.4.2.2.1 Electric vehicle charging stations (EVCS)**

Added requirements for space location and dimensions, with a reference to the California Building Code to address accessibility.

##### **4.106.4.2.3 EV space requirements**

Amended requirements for single and multiple EV spaces, and added a requirement for EV-ready space signage.

#### **4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings**

Expanded EV charging infrastructure for additions and alterations triggered when new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered, and the work requires a building permit. The new regulation requires that 10 percent (10%) of the total number of parking spaces being added or altered be EV capable to support future Level 2 EVSE.

#### **4.410.1 Operation and maintenance manual**

Amended existing Item 11 to add Department of Forestry and Fire Protection, and added a new Item 12 to require that the operation and maintenance manual contain information and/or drawings identifying the location of grab bar reinforcements.

## **Chapter 5 – Nonresidential Mandatory Measures**

### **Building Standards Commission and Division of the State Architect**

#### **5.106.5.2 Designated parking for clean air vehicles**

Repealed the mandatory requirement for designated parking for clean air vehicles.

#### **5.106.5.3 Electric vehicle (EV) charging and subsections**

Amended to increase the EV capable space percentages and add a new requirement for installed Level 2 or DCFC chargers.

#### **5.504.4.7 Thermal insulation**

Relocated thermal insulation from voluntary to mandatory and added verification of compliance.

#### **5.504.4.8 Acoustical ceilings and wall panels**

Relocated acoustical ceilings and wall panels from voluntary to mandatory along with verification of compliance.

### **Building Standards Commission**

#### **5.106.5.4 Electric vehicle (EV) charging: medium-duty and heavy-duty and subsections**

Added new regulations for electric vehicle charging readiness requirements for new construction of warehouses, grocery stores and retail stores with planned off-street loading spaces.

### **Division of the State Architect – Structural Safety**

#### **5.506.3 Carbon dioxide (CO<sub>2</sub>) monitoring in classrooms**

Added new requirement for carbon dioxide monitors in classrooms only in new building construction, and not alterations and additions.

### **5.106.12 Shade trees and subsections**

Amended exceptions for surface parking and hardscape areas to provide clarity that excepted play areas for organized sports activities, such as basketball courts, are removed from the total area calculation of the hardscape areas on the campus.

## **Chapter A4 – Residential Voluntary Measures**

### **California Energy Commission**

#### **A4.2 Energy efficiency**

##### **A4.201.1 Scope**

Updated and provided a new web link to the CEC website.

##### **A4.203.1.1 Hourly source energy design rating (EDR1) and Table A4.203.1.1**

Updated for EDR1 margins for climate zones.

##### **A4.203.1.2.3 HERS – Verified compact hot water distribution system and**

##### **A4.203.1.2.4 HERS – Verified drain water heat recovery**

Amended to add details for compliance.

##### **A4.203.1.2.5 High performance vertical fenestration, A4.203.1.2.6 Heat pump water heater demand management, A4.203.1.2.7 Battery storage system controls and A4.203.1.2.8 Heat pump space and water heating**

Added as prerequisite options to standardize phrasing to remove unneeded references to HERS verification and to apply a broader range of equipment types and construction performance approaches to meet the overall requirements.

##### **A4.203.1.3 Performance standard (repealed), A4.203.1.3.1 Tier 1 (repealed), A4.203.1.3.2 Tier 2. (repealed) and A4.203.1.3 Consultation with local electric service provider (renumbered)**

Sections repealed and amended to remove reference to CALGreen tiers and to recommend consultation with a local electric service provider for jurisdictions considering reducing the Energy Design Rating (EDR) target when using solar PV systems larger than required by the California Energy Code.

## **Chapter A5 – Nonresidential Voluntary Measures**

### **Building Standards Commission**

#### **A5.106.5.1.1, A5.106.5.1.2, Table A5.106.5.1.1 and Table A5.106.5.1.2 Designated parking for clean air vehicles**

Amended the Tier 1 and Tier 2 voluntary requirements and repealed Tables A5.106.5.1.1 and A5.106.5.1.2.

#### **A5.106.5.3.1 and A5.106.5.3.2 Electric vehicle charging**

Increased voluntary EV capable space percentages.

**A5.303.4.1 Nonwater urinal with drain cleansing action**

Amended to align with the new definition and California Plumbing Code.

**A5.504.4.8 Thermal insulation**

Amended to move Tier 2 requirements to Tier 1 (Tier 1 moved to mandatory) and verification of compliance was renumbered to A5.504.8.1.

**A5.6 Voluntary Tiers and CALGreen Verification Guidelines**

Amend checklists affected by proposed mandatory and voluntary updates.

**California Energy Commission**

**A5.201.1 Scope**

Updated and provided a new web link to the CEC website.



## CALIFORNIA REFERENCED STANDARDS – PART 12

### Building Standards Commission

#### Cross Reference Table

Amended the chapter titles and associated sections in Title 24. This table serves as a non-regulatory aid to the code user.

### State Fire Marshal

#### Chapter 12-7A, Materials and Construction Methods for Exterior Wildfire Exposure

Repealed ignition-resistant material SFM Standard 12-7A-5.

