APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION   
JUNE 27, 2023

# FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE STATE FIRE MARSHAL REGARDING THE 2022 CALIFORNIA RESIDENTIAL CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2.5 (SFM 03/22)

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

If using assistive technology, please adjust your settings to recognize underline, strikeout, italic and ellipsis.

## LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

* Model Code language appears upright
* Existing California amendments appear in *italic*
* Amended model code or new California amendments appear *underlined & italic*
* Repealed model code language appears ~~upright and in strikeout~~
* Repealed California amendments appear in *~~italic and strikeout~~*
* Ellipses ( ...) indicate existing text remains unchanged

## FINAL EXPRESS TERMS

### ITEM 1 Chapter 1 SCOPE AND ADMINISTRATION, Division I, California Administration,

#### ITEM 1-1 Section 1.11.1 SFM-Office of the State Fire Marshal

[The SFM is proposing to amend the definition of Specified State-Occupied.]

***Specified state-occupied buildings.*** *Any building, structure or area that meets any of the following criteria:*

*…*

*8. Properties leased by California State University (CSU) ~~or University of California (UC)~~.*

*…*

*~~Except as provided in Items 1 through 11, buildings shall become the responsibility of the local jurisdiction.~~*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 2 Chapter 3 BUILDING PLANNING

[Correct the term Wildland-Urban Interface (WUI) used in the text to correlate with the definition of WUI]

#### ITEM 2-1 Section R337.1.1 Scope

***R337.1.1 Scope.*** *Section R337 and all subsections apply to building materials, systems and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface (WUI) ~~Fire~~ ~~A~~area as defined in Section R337.2.*

#### ITEM 2-2 Section R337.1.2 Purpose

***R337.1.2 Purpose.*** *The purpose of Section 337 is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas (SRA) or Local Responsibility Areas (LRA) or any Wildland-Urban Interface (WUI) ~~Fire~~ ~~A~~areas as specified in Section R337.1.1.1 to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.*

#### ITEM 2-3 Section R337.1.3 Application, Section R337.1.3.1 Application date and where required, Section R337.2 Definitions:Fire Protection Plan

***R337.1.3 Application.*** *New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface (WUI) ~~Fire~~ ~~A~~area designated by the enforcing agency constructed after the application date shall comply with the provisions of this section. …*

***R337.1.3.1 Application date and where required.*** *New buildings for which an application for a building permit is submitted on or after July 1, 2008, located in any Fire Hazard Severity Zone or Wildland-Urban Interface ~~Fire~~ ~~A~~area shall comply with all sections of this chapter, including all ~~of~~ the following areas:*

1. *All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:*
   1. *Moderate Fire Hazard Severity Zones.*
   2. *High Fire Hazard Severity Zones.*
   3. *Very-High Fire Hazard Severity Zones.*
2. *Land designated as Very-High Fire Hazard Severity Zone by cities and other local agencies.*
3. *Land designated as a Wildland-Urban Interface ~~Fire~~ ~~A~~area by cities and other local agencies.*

***Exceptions:***

1. *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*
2. *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, or any Wildland-Urban Interface ~~Fire~~ ~~A~~area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005, but prior to July 1, 2008, shall only comply with the following sections of this chapter:*
   1. *Section R337.5 – Roofing.*
   2. *Section R337.6 –Vents.*

***…***

***SECTION R337.2 DEFINITIONS***

***…***

***FIRE PROTECTION PLAN.*** *A document prepared for a specific project or development proposed for a Wildland-Urban Interface (WUI) ~~Fire~~ ~~A~~area. It describes ways to minimize and mitigate potential for loss from wildfire exposure. See the California Fire Code, Chapter 49, for required elements of a Fire Protection Plan.*

***…***

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 3 Chapter 3 BUILDING PLANNING, Section R337.5 ROOFING

[The SFM proposes to amend Chapter 3 and roofing provisions for Fire Hazard Severity Zones.]

#### ITEM 3-1 Section R337.5.1 General

***R337.5.1 General.*** *Roofs shall comply with the requirements of Sections R337 and R902. ~~Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer’s installation instructions.~~  Roof assemblies in ~~the~~ Fire Hazard Severity Zones shall be ~~Class A rating when~~ tested in accordance with ASTM E108 or UL790 and meet a Class A fire classification. For additional compliance see Section R902 for Class A roof assemblies. The roof assembly shall be installed in accordance with its listing and the manufacturer’s installation instructions.*

*The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any 1-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A rating fire classification.*

#### ITEM 3-2 Section R337.5.2 Roof Covering Voids

***R337.5.2 Roof covering~~s~~ voids.***  *Where there is a void under the roof covering it shall comply with R337.5.2.1 or R337.5.2.2.*

***R337.5.2.1 Airspace under roof covering.*** *Where the roofing profile has an airspace under the roof covering, …*

***R337.5.2.2 Roof underlayment.*** *~~Alternately,~~ A Class A fire ~~rated~~ classification roof underlayment, tested in accordance with ASTM E108 or UL 790, shall be permitted to be used. If the sheathing consists of exterior fire-retardant treated wood, the underlayment shall not be required to comply with a Class A classification. Bird stops shall be used at the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers.*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 4 Chapter 3, Sections R337.7 EXTERIOR COVERING and R337.10 ACCESSORY BUILDINGS AND MISCELLANEOUS STRUCTURES

[The SFM proposes to delete the exception to R337.7.5, R337.7.6, R337.7.7, R337.7.8 and R337.10.2 for fascia and architectural trims. Through data collections, these features have been identified as adding the potential for fire spread to the building or structure, when exposed to wildfire embers.]

***…***

#### ITEM 4-1 Section R337.7.5 Open roof eaves, R337.7.6 Enclosed roof eaves and roof eave soffits, R337.7.7 Exterior porch ceilings, R337.7.8 Floor projections, R337.10.2 Applicability

***R337.7.5 Open roof eaves.*** …

***~~Exception to Section R337.7.5:~~*** *~~The following materials do not require protection:~~*

*~~Fascia and other architectural trim boards.~~*

***R337.7.6 Enclosed roof eaves and roof eave soffits.*** …

***~~Exception to Section R337.7.6:~~*** *~~The following materials do not require protection:~~*

*~~Fascia and other architectural trim boards.~~*

***R337.7.7 Exterior porch ceilings.*** …

***~~Exception to Section R337.7.7:~~*** *~~Architectural trim boards do not require protection.~~*

***R337.7.8 Floor projections.*** …

***~~Exception to Section R337.7.8:~~*** *~~Architectural trim boards do not require protection.~~*

***…***

***R337.10.2 Applicability.*** …

***Exceptions:***

…

*~~3. Exterior wall architectural trim, embellishments, and fascia.~~*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 5 Chapter 3, Section R337.11 MODEL ORDINANCE FOR FIRE SEVERITY ZONE ADOPTION

[Adopt a model ordinance that provides for the establishment of very high fire hazard severity zones pursuant to the Government Code Section 51179.]

#### ITEM 5-1 Section R337.11 Model Ordinance for Fire Severity Zone Adoption

***SECTION R337.11  
MODEL ORDINANCE FOR FIRE HAZARD SEVERITY ZONE ADOPTION***

Section 711A Model Ordinance for Fire Hazard Severity Zone Adoption

Adopt a model ordinance that provides for the establishment of fire hazard severity zones pursuant to the Health and Safety Code Section 51179.

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 6 Chapter 9 ROOF ASSEMBLIES, Section R902 FIRE CLASSIFICATION

[The SFM proposes to amend Chapter 9 regarding the roofing provisions for Fire Hazard Severity Zones.]

#### ITEM 6-1 Section R902.1 Roof covering materials.

**R902.1 Roof covering materials.** Roofs shall be covered with materials as set forth in Section R904 and R905. *A minimum Class A, B or C roofing shall be installed in areas designated by this section* or where the edge of the roof is less than 3 feet (914 mm) from a lot line. Class A, B and C roofing required by this section to be listed shall be tested in accordance with ASTM E108 or UL 790.

**Exceptions:**

1. Class A roof assemblies include those with coverings of brick, masonry ~~and~~ *or an* exposed concrete roof deck.
2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks *or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing*.
3. Class A roof assemblies include minimum 16 ounces per square foot (4.882 kg/m2) copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over *ASTM D226, Type II* underlayment over combustible decks.

#### ITEM 6-2 Section R902.1.1 Roof coverings within fire hazard severity zones

***~~R902.1.1 Roof coverings within fire hazard severity zones.~~*** *~~The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.~~*

***~~Exception:~~*** *~~The requirements shall not apply in any jurisdiction that adopts the model ordinance approved by the State Fire Marshal pursuant to Section 51189 of the Government Code or an ordinance that substantially conforms to the model ordinance and transmits a copy to the State Fire Marshal.~~*

#### ITEM 6-3 Section R902.1.1 Roofing requirements within Fire Hazard Severity Zones or in the Wildland-Urban Interface (WUI), R902.1.2 Roof coverings in all other area other than Fire Hazard Ceverity Zones or a Wildland-Urban Interface (WUI) area

***~~R902.1.3~~ R902.1.1 Roofing requirements within Fire Hazard Severity Zones or in ~~a~~ Wildland-Urban Interface (WUI) ~~Fire A~~area.*** *Roofing requirements for structures located within Fire Hazard Severity Zones or**in a Wildland-Urban Interface (WUI) ~~Fire~~ area shall also comply with Section R337.5.*

***R902.1.2 Roof coverings in all other areas other than Fire Hazard Severity Zones or a Wildland-Urban Interface (WUI) area.*** *The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class C fire classification.*

#### ITEM 6-4 Section R902.2 Fire-retardant-treated wood shingles and shakes.

**R902.2** **Fire-retardant-treated wood shingles and shakes.** Fire-retardant-treated wood shakes and shingles *are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 or**ASTM E108 or UL 790 for use on Class A, B or C roofs. …*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 7 Chapter 44 REFERENCED STANDARDS, ASTM E108

#### ITEM 7-1

[Adopt the latest edition of ASTM E108]

**E108—~~2017~~ *2020a*: Test Methods for Fire Tests of Roof Coverings**

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 8 Chapter 44 REFERENCED STANDARDS, UL 790

#### ITEM 8-1

[Adopt the 9th edition of UL 790]

**790 *Edition 9*—~~04~~ *2022*: Standard Test Methods for Fire Tests of Roof Coverings—~~with Revisions through October 2018~~**

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.

### ITEM 9 Items added per SFM addendum dated February 13, 2023

#### ITEM 9-1 Chapter 3, Section R328.5 Energy Ratings

[The SFM proposal provides the clear intent of the maximum threshold of kWh of ESS for each location on a property.]

**R328.5 Energy ratings.** Individual ESS units shall have a maximum rating of 20 kWh. The ~~aggregate rating~~ *ratings* of the ESS *in each location* shall not exceed *the ratings in Table R328.5.* ~~:~~ *The total aggregate ratings of ESS on the property shall not exceed 600kWh.*

~~1. 40 kWh within utility closets and storage or utility spaces.~~

~~2. 80 kWh in attached or detached garages and detached accessory structures.~~

~~3. 80 kWh on exterior walls.~~

~~4. 80 kWh outdoors on the ground.~~

ESS installations exceeding the permitted individual or aggregate ratings shall be installed in accordance with Section~~1207~~*1207.1 through 1207.9* of the *California Fire Code.*

#### ITEM 9-2 Chapter 3, Table R328.5 Maximum Aggregate Ratings of ESS

[The SFM proposal provides the clear intent of the maximum threshold of kWh of ESS for each location on a property.]

***TABLE R328.5 MAXIMUM AGGREGATE RATINGS OF ESS***

|  |  |  |
| --- | --- | --- |
| ***LOCATION*** | ***MAXIMUM AGGREGATE RATINGS (kWh)*** | ***INSTALLATION REQUIREMENTS*** |
| *Within utility closets, basements, and storage or utility spaces located within dwellings* | *40* |  |
| *In attached garages* | *80* |  |
| *On or within 3 feet of exterior walls of dwellings and attached garages* | *100* |  |
| *On or within 3 feet of exterior walls of dwellings and attached garages* | *200* | *Exterior walls and eaves are constructed with noncombustible surfaces a* |
| *In detached garages and detached accessory structures* | *200* |  |
| *In detached garages and detached accessory structures* | *600* | *Detached garage or detached accessory structure is a minimum 10 feet away from property lines and dwellings.* |
| *Outdoors on the ground* | *200* | *ESS is a minimum 3 feet away from property lines and dwellings.* |
| *Outdoors on the ground* | *600* | *ESS is a minimum 10 feet away from property lines and dwellings.* |

*For SI: 1 foot = 304.8 mm*

*a. Noncombustible wall surface shall extend in accordance with all the following:*

*1. A minimum of 5 feet horizontally from the edge of the ESS.*

*2. A minimum of 1 foot vertically below the bottom edge of the ESS.*

*3. A minimum of 8 feet vertically above the ESS, or to a non-combustible eave, whichever is less.*

*The code official is authorized to approve reductions of installation requirements based on large-scale fire testing complying with Section 1207.1.5 of the California Fire Code.*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 1597.44 - 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13145, 13146, 13211, 16022.5, 17921, 18928, 18949.2, 25500 through 25545; Government Code Sections 51176, 51177, 51178 and 51179, 51189; Education Code Section 17074.50; Public Resources Code Sections 4201 through 4204.

Reference(s): Health and Safety Code Sections 13108, 13108.5, 13113, 13113.5, 13114, 13132, 13132.7, 13133, 13135, 13143, 13143.1, 13143.2, 13143.6, 13143.9, 13145, 13146, 13210, 13211, 16022.5, 17921.