

**FINAL STATEMENT OF REASONS  
FOR PROPOSED BUILDING STANDARDS  
OF THE OFFICE OF THE STATE FIRE MARSHAL  
REGARDING THE 2022 CALIFORNIA BUILDING CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2**

**(04/21)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

**UPDATES TO THE INITIAL STATEMENT OF REASONS:**

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical, or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

**Item 1-4**

**Chapter 1, Scope and Administration, Division I, California Administration, Section 1.11.1 SFM-Office of the State Fire Marshal**

The SFM had additional internal discussions with other state agencies and stakeholders. The new proposed language is a result of the discussions and an SFM staff workgroup.

There were questions about what a “build-to-suit lease” is, so SFM is providing an explanation here.

The term is used in the amended Health and Safety Code section 13108 (e) (1) from 2019-2020 Senate Bill 85. Build-to-suit lease describes buildings that are built for a state agency to their design specification, and use. It is a long-term lease, commonly with an option to buy. This is done for fiscal reasons and very similar in use to a state-owned building.

The SFM made editorial changes to the 45-Day Expressed Terms and had an additional 15-Day public comment period. No comments were received during the 15-Day public comment period.

To clarify that the SFM had jurisdiction of the state areas, and the local jurisdiction maintains authority over the non-state areas, the SFM added the term “State occupied areas” in number 5 to provide this clarification.

To provide a clear line to determine the jurisdiction in number 5, the SFM modified the threshold to high-rises, which the State Fire Marshal’s authority is clearly defined in Health and Safety Code statute 13211 and regulation. The 75% state occupied was maintained. This is to address a common business practice that the first floor of a high-rise is leased to food retail and mercantile services with business operations occupying the remaining floors.

The SFM added number 10 to maintain continuity of existing functions and to eliminate duplicative workload between the state and the city/county in which leased facilities are obtained through contract.

The SFM added number 11 for clarification. The areas where there is only an all-volunteer fire department the SFM has historically been the authority having jurisdiction. SB 85 (2019-2020) modified the Health and Safety section 13146.6 statute to address these areas by stating that the governing body can contract to a neighboring jurisdiction or to the SFM for enforcement. SFM added this section to clarify that the SFM will maintain authority for state leased occupancies in areas where there is not a paid full time fire department.

### **Item 7A-10**

#### **Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 702A Definitions**

During the 15-Day public comment period (November 1, 2021 through November 16, 2021) the SFM made an editorial correction to the term Local Agency to the correct term Local Responsibility Area. During the 15-Day public comment period the SFM added text that reflects the changes in Government Code Section 51178 statute. Senate Bill 63 (2021-2022) changed the Government Code to require the mapping of moderate and high fire hazard severity zones in the local responsibility areas.

An addendum attached withdraws the 15-Day proposed language as it relates to expanding the Wildland-Urban Interface (WUI) requirements to Local Responsibility Areas in the Moderate and High Fire Severity Zones. The Fire Severity Zone maps that designate both State and Local areas are anticipated to be published by CALFIRE early 2022. The SFM will continue development with stakeholders and other state agencies in the SFM WUI public forum workgroup to come to a consensus for the next rulemaking cycle to address legislation changes as they pertain to Local Responsibility Areas.

### **MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS**

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

The Office of the State Fire Marshal has determined that the proposed regulatory action would not impose a mandate on local agencies or school districts.

The proposed regulations are minimum standards for the prevention of fire and for the protection of life and property against fire.

### **OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).**

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an

explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed changes was made available to the public for a 45-day comment period from September 3, 2021, until October 18, 2021. Comments were received during the comment period are shown here.

### **Item 2-9**

#### **Chapter 2, Section 202 General Definitions, Photovoltaic (PV) Support Structure Elevated**

The SFM proposes a new definition. This proposal clarifies that PV panels marked "not fire rated" cannot be used on elevated/overhead PV structures that could have people or cars beneath them, with or without a full roof assembly.

#### **Commenter(s) and Recommendation (if applicable):**

Benjamin Davis, Policy Associate, California Soal & Storage Association; Joseph H. Cain Director of Codes and Standards, Solar Energy Industries Association

Recommendation: For the California Building Code, we support the new section on Elevated PV Support Structures – and the associated new definitions – as Proposal G193-21 was approved As Submitted during the live ICC Group A Public Comment Hearings by near-unanimous vote (pending Online Governmental Consensus Vote).

#### **Agency Response:**

The SFM appreciates the support from industry stakeholders and continues to work closely with the development of model codes for the advancement of technology.

### **Item 7-7**

#### **Chapter 7, Fire And Smoke Protection Features, Section 716.3.2.1.1.1 Energy storage system separation**

The SFM is proposing to repeal all California amendments and adopt model code language.

#### **Commenter(s) and Recommendation (if applicable):**

Benjamin Davis, Policy Associate, California Soal & Storage Association; Joseph H. Canin Director of Codes and Standards, Solar Energy Industries Association

#### Section 716.3.2.1.1.1 Energy storage system separation

The proposed language strikes out: "716.3.2.1.1.1 Energy storage system separation. Fire-protection-rated glazing is not permitted for use in fire window assemblies in fire barriers required by Section 1206 of the California Fire Code to enclose energy storage systems."

We would appreciate having a discussion with the State Fire Marshal's office on the intention of deleting this section and the opportunity to propose modifications if appropriate. Striking through language that prohibits fire-protection-rated glazing would make the code more lenient. However, the rationale in the ISOR implies that the code change would tighten the standards due to the alleged need to prevent radiant heat flow.

#### **Agency Response:**

The SFM will continue development with stakeholders in the SFM ESS workgroup for the next rulemaking cycle to address industry and technology advances. The consensus from the current workgroup is to repeal the California amendments and adopt model code language.

#### **Item 7A-1**

#### **Chapter 7A, *Materials And Construction Methods For Exterior Wildfire Exposure***

General adoption of existing amendments to carry forward.

#### **Commenter(s) and Recommendation (if applicable):**

Massoud Araghi, Fire Marshal, Ventura County Fire Protection District

Recommendation: Add acronym "WUI" to be consistent with this change in other sections of CBC Chapter 7A. CRC Section R337, CFC Chapter 49. The word "any" has been recommended to bring up a concern that by using the word "any", these sections apply to all FHSZs in both the SRA and LRA and any area designated by the local agency. SB63, Chaptered September 2021, now requires both the Moderate and High FHSZs to be mapped in the LRA effective January 1, 2022. The definition of Wildland-Urban Interface (WUI) Fire Areas will now include the same LRA moderate and high FHSZs as they are required under GC 51175-51189. This should be clarified in these sections based upon your response to the follow comment:

S863 amends Health & Safety Code Section 13108.5 by adding new item (2) and (3) regarding applicability of Chapter 7 A to the new (2) LRA High and (3) Moderate FHSZ. As this law takes effect January 1, 2022, and the tri-annual code adoption cycle is still in process. The SFM is in process of revising SRA and LRA FHSZ maps and the new LRA FHSZs should be issued and approved before the January 1, 2023, effective date of this Code. We should not wait another 3 years to apply the WUI building requirements in the LRA high FHSZ.

**Agency Response:**

The recommendation is for a section that was not originally proposed to be amended. The SFM will continue development with stakeholders in the SFM WUI workgroup for the next rulemaking cycle to address legislation changes as they will pertain to Local Responsibility Areas.

**Item 7A-3**

**Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 701A.3 Application and 701A.3.1**

The SFM proposes to restate the application as it applies to accessory buildings and structures.

**Commenter(s) and Recommendation (if applicable):**

Massoud Araghi, Fire Marshal, Ventura County Fire Protection District

Recommendation: Add word Urban to correct the proper term defined. Add acronym "WUI" to be consistent with this change in other sections of this chapter, CFC Chapter 49, and CRC Section R337.

The word "any" has been recommended to bring up a concern that by using the word "any", these sections apply to all FHSZs in both the SRA and LRA and any area designated by the local agency. SB63, Chaptered September 2021, now requires both the Moderate and High FHSZs to be mapped in the LRA effective January 1, 2022. The definition of Wildland-Urban Interface (WUI) Fire Areas will now include the same LRA moderate and high FHSZs as they are required under GC 51175-51189. This should be clarified in these sections based upon your response to the follow comment:

S863 amends Health & Safety Code Section 13108.5 by adding new item (2) and (3) regarding applicability of Chapter 7 A to the new (2) LRA High and (3) Moderate FHSZ. As this law takes effect January 1, 2022, and the tri-annual code adoption cycle is still in process. The SFM is in process of revising SRA and LRA FHSZ maps and the new LRA FHSZs should be issued and approved before the January 1, 2023, effective date of this Code. We should not wait another 3 years to apply the WUI building requirements in the LRA high FHSZ.

**Agency Response:**

The SFM will continue development with stakeholders in the SFM WUI workgroup for the next rulemaking cycle to address legislation changes as they will pertain to Local Responsibility Areas. Editorial corrections have been addressed.

### **Item 7A-9**

#### **Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 702A Definitions**

The SFM proposes to modify the definition of a fire protection plan, which will correlate to changes proposed in the California Fire Code Chapter 49.

#### **Commenter(s) and Recommendation (if applicable):**

Massoud Araghi, Fire Marshal, Ventura County Fire Protection District

Recommendation: Revise as follow. Note: The order of listing Fire Protection Plan and Fire Hazard Severity Zones should be reversed to follow proper alphabetical order of listing definitions.

Add acronym "WUI" to be consistent with this change in other sections of CBC Chapter 7A. CRC Section R337, CFC Chapter 49.

Definitions should not state requirements. There are no other sections within Chapter 7A that specify actual elements for a Fire Protection Plan. The only requirement under Section 703A.6 is that a Fire Protection Plan be submitted in accordance with CFC Chapter 49. A separate proposed change to CFC Section 4903.2 referencing CBC Section 703A.6 is being submitted under a separate letter regarding CFC Chapter 49.

#### **Agency Response:**

The SFM will continue development with stakeholders in the SFM WUI workgroup for the next rulemaking cycle to enhance the provisions that are proposed. The definition of Fire Protection Plan is being proposed for Chapter 7A as a reminder to the code user to see the California Fire Code for the details of a Fire Protection Plan. Editorial corrections will also be addressed at that time.

### **Item 7A-10**

#### **Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 702A Definitions**

The SFM proposed to make an editorial correction to the definition of Fire Hazard Severity Zones.

#### **Commenter(s) and Recommendation (if applicable):**

Massoud Araghi, Fire Marshal, Ventura County Fire Protection District

Recommendation: SB63 requires the mapping of moderate and high FHSZ in the LRA. The FHSZ maps are not limited to SRA and include the LRA. Additionally,

there is no other reference to Title 14, Section 1280, within Chapter 7 A and California Fire Code Chapter 49. This paragraph can be deleted. Senate Bill 63 (2021-2022) requires the mapping of moderate and high fire hazard severity zones in the Local Responsibility Areas. The recommend language reflects the changes in Government Code section 51178 statute.

**Agency Response:**

During the 15-Day public comment period (November 1, 2021 through November 16, 2021) the SFM added text that reflects the changes in Government Code Section 51178 statute. Senate Bill 63 (2021-2022) changed the Government Code to require the mapping of moderate and high fire hazard severity zones in the local responsibility areas.

An attached addendum withdraws the 15-Day proposed text as it relates to expanding the Wildland-Urban Interface (WUI) requirements to Local Responsibility Areas in the Moderate and High Fire Severity Zones. The Fire Severity Zone maps that designate both State and Local areas are anticipated to be published by CALFIRE early 2022. The SFM will continue development with stakeholders and other state agencies in the SFM WUI public forum workgroup to come to a consensus for the next rulemaking cycle to address legislation changes as they pertain to Local Responsibility Areas.

**Item 7A-10**

**Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 702A Definitions**

The SFM proposed to make an editorial correction to the definition of Fire Hazard Severity Zones.

The text with proposed changes was made available to the public for an additional 15-day comment period from November 1, 2021, until November 16, 2021, to address editorial changes in the 45-day Express Terms related. Comments were received during the 15-day comment period are shown below. There was no subsequent public comment period.

**Commenter(s) and Recommendation (if applicable):**

Chris Ochoa and Robert Raymer, California Building Association (CBIA)

Please be advised that CBIA has a concern that, while well-intended, the State Fire Marshal may be prematurely amending code to incorporate specific provisions of SB 63 (Stern), legislation recently signed into law by Governor Newsom.

CBIA, along with the fire service, strongly supported the passage of SB 63. Relating to building in the Wildland-Urban Interface, this bill directs the Office of the State Fire Marshal to complete fire hazard severity zone maps for “moderate” and “high” fire severity zones (GC 51178). Once the SFM completes this task, the maps will be

forwarded to local jurisdictions for certification. Once a local jurisdiction has received the maps from the SFM, the local jurisdiction shall have 300-days to make the maps available for public comment (GC 51178.5).

SB 63 takes effect on January 1, 2022. Once the maps are completed and certified by the local jurisdictions, CBIA will support the expansion of the WUI building standards to High Fire Severity Zones during the next regularly occurring code adoption cycle. Depending on when the SFM completes the maps and forwards them to the local jurisdictions, this could come as early as the code that becomes effective in July of 2024.

Recommendation: CBIA respectfully requests the SFM withdraw these five changes from the 2021 Triennial Code Adoption Cycle and reconsider them in a subsequent rulemaking when all the maps are completed and certified by local jurisdictions. Once the maps are done and certified by locals, you can count on CBIA support for expansion of the WUI Building Standards to High Fire Severity Zones.

#### **Agency Response:**

During the 15-Day public comment period (November 1, 2021 through November 16, 2021) the SFM added text that reflects the changes in Government Code Section 51178 statute. Senate Bill 63 (2021-2022) changed the Government Code to require the mapping of moderate and high fire hazard severity zones in the local responsibility areas.

An attached addendum withdraws the 15-Day proposed text as it relates to expanding the Wildland-Urban Interface (WUI) requirements to Local Responsibility Areas in the Moderate and High Fire Severity Zones. The Fire Severity Zone maps that designate both State and Local areas are anticipated to be published by CALFIRE early 2022. The SFM will continue development with stakeholders and other state agencies in the SFM WUI public forum workgroup to come to a consensus for the next rulemaking cycle to address legislation changes as they pertain to Local Responsibility Areas.

#### **Item 7A-24**

##### **Chapter 7A, Materials And Construction Methods For Exterior Wildfire Exposure, Section 706A Vents**

The SFM proposes to delete language that was incorporated into the main Section 706A.2 and add a compliance path for the use of off ridge and ridge venting.

#### **Commenter(s) and Recommendation (if applicable):**

Aaron Phillips, Asphalt Roofing Assication (ARMA)



The Asphalt Roofing Manufacturers Association (ARMA) supports the replacement of Section 706A.2.1 in Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) of the California Building Code, as proposed in Item 7A-24 of SFM 04-21 ET-PT2-45Day. This is an important change necessary to improve the code by providing a compliance path for rooftop vents.

Existing code language requires vents to be listed in accordance with ASTM E2886. However, the scope of that standard excludes “Roof ridge and off-ridge (field) vents.” The proposed new language fills an important gap in the existing code by establishing an ember resistance requirement for rooftop (i.e., ridge and off-ridge) vents. This proposed change is especially important in satisfying Building Standards criteria number 3 by addressing a critical fire safety public interest. ARMA encourages acceptance of this change to Section 706A.2.1.

ARMA suggests a minor amendment to the proposed language of Section 706A.2.1—removal of the phrase “in diameter.” Mesh used in these applications may contain openings that are square, rectangular, circular, or some other shape. Removal of the phrase, “in diameter,” will improve the language and eliminate the implication that only circular shaped openings are permissible.

**Agency Response:**

The SFM appreciates the support from stakeholders.

**Item 15-1**

**Chapter 15, Roof Assemblies And Rooftop Structures**

The SFM proposes to adopt sections 1501, 1503.3, 1503.3.1, 1503.3.2, 1503.4, 1505, 1506, 1507, 1509, 1510, 1511 of Chapter 15.

**Commenter(s) and Recommendation (if applicable):**

Benjamin Davis, Policy Associate, California Soal & Storage Association; Joseph H. Cain Director of Codes and Standards, Solar Energy Industries Association

General recommendations for photovoltaic (PV)

For both the International Building Code (IBC) and the International Residential Code (IRC) as national model codes, the solar industry has worked to create “solar road maps.” In the IBC, the “solar road map” is in Section 3111. In the IRC, the “solar road map” is in Section R324.

In both national model codes, the solar industry has deliberately left the topic of fire classification in the roofing chapters, where it belongs with other issues of fire classification for roofing systems and rooftop-mounted systems. Therefore, fire classification for rooftop-mounted photovoltaic panel systems is in IBC Chapter 15, and in IRC Chapter 9. The solar road maps include pointers to the sections that apply in these chapters.

All other requirements are either included in the solar road maps or are referenced by pointers to other relevant sections of the model codes. In turn, IRC Section R907.1 includes a pointer back to the solar road map in Section R324.

Note that to solve a specific problem, it took us three cycles to remove structural PV requirements from IBC Chapter 15. The problem was that individual subsections of Chapter 15 are assigned to the Structural Committee and other sections of Chapter 15 to the IBC-Fire Safety Committee. We were experiencing confusion when the Structural Committee was asked to vote on fire provisions, and the IBC-FS was asked to vote on structural provisions. Our general request is to follow the 2021 model codes on these topics, rather than the prior version of the California codes.

### **Agency Response:**

The SFM appreciates the support from stakeholders and will continue to enhance and improve on the correlation within the specific chapters and code sections that reference each other. This will be accomplished in a public workgroup by consensus with all interested parties.

### **Item 31-3 Chapter 31, Special Construction**

The SFM proposes to add new language 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.

### **Commenter(s) and Recommendation (if applicable):**

Benjamin Davis, Policy Associate, California Solar & Storage Association; Joseph H. Canin Director of Codes and Standards, Solar Energy Industries Association

Recommendations: For the California Building Code, we support the new section on Elevated PV Support Structures – and the associated new definitions – as Proposal G193-21 was approved As Submitted during the live ICC Group A Public Comment Hearings by near-unanimous vote (pending Online Governmental Consensus Vote). For both the International Building Code (IBC) and the International Residential Code (IRC) as national model codes, the solar industry has worked to create “solar road maps.” In the IBC, the “solar road map” is in Section 3111. In the IRC, the “solar road map” is in Section R324.

In both national model codes, the solar industry has deliberately left the topic of fire classification in the roofing chapters, where it belongs with other issues of fire classification for roofing systems and rooftop-mounted systems. Therefore, fire classification for rooftop-mounted photovoltaic panel systems is in IBC Chapter 15, and in IRC Chapter 9. The solar road maps include pointers to the sections that apply in these chapters.

All other requirements are either included in the solar road maps or are referenced by pointers to other relevant sections of the model codes. In turn, IRC Section R907.1 includes a pointer back to the solar road map in Section R324.

Note that to solve a specific problem, it took us three cycles to remove structural PV requirements from IBC Chapter 15. The problem was that individual subsections of Chapter 15 are assigned to the Structural Committee and other sections of Chapter 15 to the IBC-Fire Safety Committee. We were experiencing confusion when the Structural Committee was asked to vote on fire provisions, and the IBC-FS was asked to vote on structural provisions. Our general request is to follow the 2021 model codes on these topics, rather than the prior version of the California codes.

### **Agency Response:**

The SFM appreciates the support from stakeholders and will continue to enhance and improve on the correlation within the specific chapters and code sections that reference each other. This will be accomplished in a public workgroup by consensus with all interested parties.

### **DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS**

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

The SFM has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective as and less burdensome to affected private persons than the proposed amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption and amendment of this code.

### **REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:**

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

n/a