### **INITIAL STATEMENT OF REASONS**

# FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF THE STATE FIRE MARSHAL

# REGARDING THE 2019 CALIFORNIA BUILDING CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2

### TRIENNIAL RULEMAKING CODE CYCLE

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

### STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:

(Government Code Section 11346.2(b)(1)) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem the agency intends to address for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.)

Health and Safety Code Section 18928:

The specific purpose of this rulemaking effort by the Office of the State Fire Marshal is to act accordance with Health and Safety Code section 18928, which requires all proposed regulations to specifically comply with this section in regard to the adoption by reference with amendments to a model code within one year after its publication.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies addressed in the 2018 International Building Code and be published as the 2019 California Building Code.

The general purpose of this proposed action is principally intended to update and codify a new edition of the California Building Code (California Code of Regulations, Title 24, Part 2) based upon a more current edition of a model code. The current California Building Code in effect is the 2016 California Building Code which is based upon the 2015 International Building Code of the International Code Council. This proposed action:

- Repeal the adoption by reference of the 2015 International Building Code and incorporate and adopt
  by reference in its place the 2018 International Building Code for application and effectiveness in the 2019
  California Building Code.
- Repeal certain amendments to the 2015 International Building Code and/or California Building Standards not addressed by the model code that are no longer necessary.
- Adopt new building standards or necessary amendments to the 2018 International Building Code that address inadequacies of the 2018 International Building Code as they pertain to California laws.
- Bring forward previously existing California building standards or amendments, which represent no change in their effect from the 2016 California Building Code.
- Codify non-substantive editorial and formatting amendments from the format based upon the 2015 International Building Code to the format of the 2018 International Building Code.

### NOTE OF EXPLANATION:

For the 2018 Triennial Code Adoption Cycle, the Express Terms are displayed as follows:

\*\*PART 1\*\*
Includes the California Amendments SFM proposes to bring forward from the 2016
California Building Code <u>with changes</u> as shown, and also identifies the model code standards from the 2018 International Building Code SFM proposes for adoption into the 2019 California Building Code.

\*\*PART 2\*\*
Displays the standards SFM proposes to bring forward from the 2016 California Building Code <u>without change</u>, except for non-substantive editorial corrections, for adoption into the 2019 California Building Code; the text is provided for context and the convenience of the code user.

# **SUMMARY OF REGULATORY ACTION**

#### SFM PROPOSES TO:

#### \*\*PART 1\*\*

- 1. Bring forward existing California Amendments from the 2016 California Building Code for adoption into the 2019 California Building Code with editorial updates and errata.
- 2. Adopt standards from the 2018 International Building Code into the 2019 California Building Code without amendment.
- 3. Adopt standards from the 2018 International Building Code into the 2019 California Building Code with amendment.
- 4. Repeal 2016 California Amendments, which are not brought forward into the 2019 California Building Code.

### \*\*PART 2\*\*

1. Bring forward existing California Amendments from the 2016 California Building Code for adoption into the 2019 California Building Code <u>without amendment</u>.

#### \*\*PART 1\*\*

# [Item 1. California editorial, updates and errata by chapter]

The SFM proposes to adopt Chapter 2 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

# CHAPTER 1 SCOPE AND ADMINISTRATION

1.1.1 1.11.1 1.11.6 Rationale: The SFM is proposing to repeal the adoption by reference of the 2018 International Building Code and incorporate and adopt by reference in its place the 2018 International Building Code for application and effectiveness in the 2019 California Building Code. Furthermore, SFM is co-adopting updates to sections in Division I being proposed by BSC and HCD.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# DIVISION II SCOPE AND ADMINISTRATION

The SFM proposes to maintain the Division II designation for the IBC Chapter 1 Administrative provisions - Sections 101 through 114.

The SFM proposes to only adopt Sections 105.2.1 - 105.2.2, 105.3 - 105.3.1, 105.4, 105.6 - 105.7, 106.1, 106.2 - 106.3, 107.1 - 107.3, 107.4, 107.5, 108.1 - 108.4, 110.1 - 110.3, 110.3.4 - 110.3.6, 110.3.8 - 110.3.10, 110.4 - 110.6, 111.1, 111.2, 111.3 - 111.4, 112, 114.1 - 114.2, 115 and 116 contained in Chapter 1, Division II pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 2 DEFINITIONS

The SFM proposes to adopt Chapter 2 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

#### CARE AND SUPERVISION.

Rationale: The SFM is proposing to number the provisions for the ease of code use. There is no change in regulatory effect.

#### **CLIMATE ZONE.**

Rationale: The SFM is proposing to correct the reference pointer. There is no change in regulatory effect.

#### **COMMON USE**

Rationale: The SFM is proposing to add the destination that the definition is strictly for DSA-AC applicability. The term is used in other sections within the code that has a deferent meaning than what is proposed by DSA-AC and it has caused confusion with code users. Since this is not a SFM proposed amendment we have offered a solution to benefit the code user and know that the definition only pertains to DSA-AC and not SFM regulations. There is no change in regulatory effect.

### COMMUNITY CARE FACILITY.

Rationale: The SFM is proposing to remove the reference to foster homes from the list of community care facilities. The statute that allows these homes to be regulated by the SFM does not need to be duplicated in the regulations. The list is a small example of what may be considered a community care facility and is not limited to all on the list. The change is intended to shorten the list and clean up the definition without duplicating the statute. There is no change in regulatory effect.

# CONGREGATE LIVING HEALTH FACILITY (CLHF).

**Rationale**: The SFM has duplicated the statute in the regulation. There was a change in the statute in 2017. The amendment to intended to match the changes in statute. There is no change in regulatory effect.

#### **IBGI CONGREGATE LIVING FACILITIES.**

Rationale: The SFM has proposed the deletion of the definition, as it conflicts with California statute. There is no change in regulatory effect.

#### FIREWORKS.

Rationale: The SFM is correcting the statute reference pointer. There is no change in regulatory effect.

#### **FOSTER CARE FACILITIES.**

Rationale: The SFM is proposing to remove all references to foster care facilities to correlate with the intent of the statute. There is no regulatory effect.

#### **HEAVY TIMBER (SFM)**

**Rationale**: The SFM is proposing to remove the definition of heavy timber to eliminate confusion for the code user with the definition in chapter 6. There is no regulatory effect.

#### HIGH-RISE BUILDING.

Rationale: The SFM is proposing to clean up the definition of high rise to align with the definition in statute. There is no regulatory effect.

# [F] LABORATORY SUITE.

Rationale: The SFM is proposing to delete the model code definition of Laboratory suite. The definition conflicts with the California State definition for L occupancy laboratory suite. There is no regulatory effect.

# MOTION PICTURE AND TELEVISION PRODUCTION STUDIO SOUND STAGES, APPROVED PRODUCTION FACILITIES AND PRODUCTION LOCATIONS.

Rationale: The SFM is correcting the chapter reference pointer. There is no regulatory effect.

### ORGANIZED CAMPS.

Rationale: The SFM is proposing to add a pointer to the Group C occupancy regulations. There is no regulatory effect.

### RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE).

Rationale: The SFM is correcting the occupancy classification from an outdated reference. There is no regulatory effect.

# SMALL MANAGEMENT YARD.

Rationale: The SFM is correcting the section reference pointer. There is no regulatory effect.

#### WILDLAND URBAN INTERFACE AREA (WUI). [SFM]

Rationale: The SFM is proposing to add the acronym WUI to the definition for consistency within the code . There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 3 USE AND OCCUPANCY CLASSIFICATIONS

The SFM proposes to adopt Chapter 3 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

302.1 304.1 307.1.1 308.1 308.3 308.3.1.1 308.3.1.2 308.3.<del>2</del>1 308.4.2 308.3.3 308.4.6 308.5.2 308.5.3 308.5.4 310.4 310.4.1 310.4.1 310.5 310.5.1 310.5.2

**Rationale**: The SFM is proposing errata and updates to the above section numbers to correlate with statute and correct reference pointers. There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

The SFM proposes to adopt Chapter 4 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

403.1 403.1.1 403.2.1.1 403.3.2 403.3.2.1

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403.3.3
406.6.2
407.2.6
407.5.1
407.5.2
407.5.1<u>3</u>
407.5.2
407.5.4
407.5.<del>3</del>5
407.6
407.67
407.<del>7</del>8
407.89
407.910
407.1011
407.<del>11</del>12
408.1.1
408.1.2.2
408.3.6
408.3.6.1
408.3.6.<del>2</del>1
408.3.6.32
408.3.6.4<u>3</u>
408.3.6.<del>5</del>4
408.9.1
415.5.4
415.11.7
415.11.7.1
415.11.7.1.2
415.11.7.1.3
415.11.7.1.4
415.11.7.2
415.12
415.12.1
415.12.1.4
415.13
415.13.2
415.13.3
420.7
420.8
<del>420.8.1</del>
420.9
420.10
420.10.1
421.1, <del>421.2</del>, 421.2, 421.2, 421.3, 421.3.1, 421.3.2, 421.4, 421.5, 421.5.1, 421.5.2, 421.6, 421.7
[Remove existing amendments to Section 421.1 through 421.7. Model code now matches old CA amendments.]
435.3.3
435.3.4
435.8.7
450.5.1
435.3.3
455.8
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**Rationale**: The SFM is proposing errata and updates to the above section numbers to correlate with statute and correct reference pointers. There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the

2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 9 FIRE PROTECTION SYSTEMS

The SFM proposes to adopt Chapter 9 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

**TABLE 903.2.11.6** 

903.4.3

905.3.1

907.2.1312

907.2.1312.1

907.5.2.2

907.6.4.2

911.1

904.12

904.13

907.2.5.1

[The State Fire Marshal's Office is proposing to delete the CA amendments and adopt the model text of Section 916]

916.1, 916.2, 916.3, 916.4, 916.5, 916.6, 916.7, 916.8, 916.9, 916.10, 916.11

**Rationale**: The SFM is proposing errata and updates to the above section numbers to correlate with statute and correct reference pointers. There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 27 ELECTRICAL

The SFM proposes to adopt Chapter 27 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

# 2702.2.<del>9</del>11

**Rationale**: The SFM is proposing to correlate the definition of a high-rise with the California Health and Safety Code. There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 30 ELEVATORS AND CONVEYING SYSTEMS

The SFM proposes to adopt Chapter 30 with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

3001.56 3005.4.1 3006.2 3006.3 3008.1.43 3008.2.1 3008.7.1

**Rationale**: The SFM is proposing errata and updates to the above section numbers to correlate with statute and correct reference pointers. There is no regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725. 13108. 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 31 SPECIAL CONSTRUCTION

The SFM proposes to only adopt Sections 3101, 3102.1, 3102.3.1, 3103, 3104, 3105.1-3105.3, 3106, 3110, 3111, 3112 and 3113 of Chapter 31 with amendment and California regulation.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

# [Editorial Note: Remove existing amendments to Section 3111. Replace with Model code.]

Rational: SFM is proposing the delete and replace the current California amendments to align with the model code provisions. The California amendments have been adopted by the model code. The advancement of solar energy systems and the incentives for California to have installations of solar energy systems on buildings has promoted the International codes to catch up with California regulations. The subject matter experts on the Building code action committee proposed the section clean up. The intent of this proposed change is to do for these codes what was done in the 2015 International Residential Code through Proposal. This proposed change consolidates and organizes all the requirements, with necessary section revisions and section additions, in an easily used format that assists the user to find all the applicable requirements – fire, electrical, structural, plumbing, and mechanical - related to solar thermal and photovoltaic systems.

Both systems are special building construction, and this proposal expands on the existing Section 3111 for photovoltaic panels and modules, providing clarity as to where specific requirements are in the building and other codes. As with the new Section R324 in the International Residential Code, expanding Section 3111 will allow for easy inclusion of new solar energy system types and locations.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### INDEX

The SFM proposes to adopt the index with amendment, editorial updates and errata.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

### **INSTITUTIONAL I-1**

**Rational:** SFM proposes to delete the reference for I-1 in the index because it is not used in California and all other references to the occupancy group have been removed. The change will eliminate confusion for the code user as there is no need to keep the reference in the index. The intent is to have consistency within the code.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 2. WUI Work Group]

The OSFM is proposing the modifications based on the recommendations of the WUI /7A Taskforce.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

701A 3

702A Heavy Timber definition

707A.3

707A.8

707A.9

708A.2.3

708A.4

709A.4.2

709A.5

710A.2

#### [701A.3]

Rationale: The Wildland-Urban Interface (WUI) regulations were created to provide a level of protection in the fire severity zone. The WUI workgroup did not consider the Group C building during the creation of the WUI regulations. The "C" occupancy is a special occupancy that is defined in the Health and Safety Code section 18897. The law created this occupancy for camps used for an outdoor group living experience. The special buildings defined in CBC

450.4.1 limited to one story and a maximum of any lateral dimension of 25 feet. In many camps, these are basically wood tents with open window spaces, that have tarp coverings. It is impractical to building these structures to be compliant with the CBC 7A building requirements. The WUI construction would interfere with the intent of the statute and limit the outdoor living experience.

This proposal is to exempt only the small special sleeping buildings found in CBC 450.4.1. The larger buildings in the camp would be required to comply with the WUI standards. This would maintain a level of fire protection where the campers gather and congregate.

# [702A Heavy Timber definition]

**Rationale:** This proposal is to remove the heavy timber definition from 7A, because it creates confusion with 601 Types of construction for heavy timber. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out where it was applicable. There is no regulation change.

#### [707A.3]

Rationale: The proposal to remove the definition of Heavy Timber effects the code section 707A.3 requirements. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

#### [707A.8]

**Rationale:** The proposal to remove the definition of Heavy Timber effects the code section 707A.8 exception. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

#### [707A.9]

Rationale: The proposal to remove the definition effects the code section 707A.9 exception. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

### [708A.2.2]

Rationale: This recommendation is to allow operable skylights in the Very High Fire Hazard Severity Zone (VHFHSZs) for new construction where a non-combustible mesh screen is installed to protect the opening from ember penetration when the skylight is in the open position. The proposal provides clarity for the designers, owners, developers, building and fire officials. Changes proposed for the CBC Chapter 7A will also be regulated within California Residential Code (CRC) Section R337, which is a mirrored section within the CRC. The purpose of the proposal is to limit and prevent the intrusion of combustible materials, debris, and embers into the structure from a roof opening.

#### [708A.4]

Rationale: The workgroup considered the studies that have been conducted by NIST and then identified the garage door gap as a possible area of concern for ember intrusion. (NIST study can be found at: https://ws680.nist.gov/publication/get\_pdf.cfm?pub\_id=861297)

- The focus of the paragraph is on controlling the door perimeter gap. Weather stripping is one means of controlling the gap. Thus, the heading should be "door perimeter gap".
- The two current sentences have been combined into one sentence for editorial clarification.
- Three methods of controlling gaps of up to 1/8-inch are described. Two are prescriptive and one is performance based. The performance based method would involve tensile strength and fire related performance.
- For tensile strength, acceptance criteria language is needed since neither ASTM G155 (accelerated weather test on non-metallic materials) nor ASTM D638 (tensile test on plastic materials) contain pass/fail criteria.
- For fire performance, the objective would be to limit weather stripping from contributing to the fire after encountering flying, embers as it closes gaps between garage doors and surrounding surfaces.
- Improved flammability testing can be determined through testing to UL 94. This standard contains a series of small-scale tests that evaluate the flammability of polymeric (plastic) materials, used for parts in devices and appliances, in response to a small, open flame heat source under controlled laboratory conditions.
- The UL 94 test is a simple and relatively inexpensive means of assessing the flammability of small materials, which could fit the description of weather stripping. UL 94 testing is intended for small plastic or rubber parts, typically those whose thickness does not exceed 1/2 inch (13 mm) or whose surface area does not exceed 10.74 square feet (1 square meter).

- UL 94 provides a method for rating the ignition characteristics of plastic or rubber materials. The flammability ratings are established using small-scale tests involve 5 inch by  $\frac{1}{2}$  inch samples, which are subjected to a  $\frac{3}{4}$  inch, 50 W Tirrell burner flame ignition source.
- Garage door industry preliminary research indicates that the flexible (plasticized) component of PVC weather stripping, comprising the "fin seal" resting against the perimeter jamb surface, achieves a V-2 rating when tested to UL 94. To achieve a V-2 flammability rating the test samples, placed vertically with the test flame impinging on the bottom of the sample, must extinguish within 30 seconds while not burning to the top clamp. Although drips of flaming particles are allowed, it should be noted that in a practical sense any dripping of flaming particles from weather stripping installed at a garage perimeter will fall onto a non-combustible surface which is the driveway.
- Specifying compliance to V-2 represents an improvement in the code.

### [709A.4.2]

Rationale: This proposal corrects an error in the code. When referring to ASTM E2726 it is necessary to explicitly state the burning brand to be used, because ASTM E2726, which has no pass/fail criteria, also allows for the option of conducting the test with a Class A brand or with a Class B brand. On the other hand, the sustained deck assembly combustion test in SFM 12-7-A-4, which is the equivalent test, must be conducted with a Class A brand. The proposal takes the missing language contained in the California code when referring to SFM 12-7-A-4 and adds it where it is missing.

#### [709A.5]

Rationale: This proposal simply corrects an error in the code.

In item 7 the code says the material shall comply with the requirements of 709A.5 when using ASTM E2632. Then 709A.5 says the requirements are that the material needs to be tested to ASTM ASTM E2632 and nothing else. An ignition resistant material (per 704A.3) has to be tested to the extended ASTM E84 test for 30 minutes and have a flame spread index of 25 (and other requirements). This means that a material that complies with item 7 does not have to be an ignition-resistant material and the words "ignition-resistant" need to be eliminated from 709A.5

#### [710A.2]

**Rationale:** Both long-term experience and the recent Northern California wildfires have demonstrated that burning embers originating in the areas on fire can travel long distances and are most likely going to affect horizontal surfaces. Therefore, it is not safe to exclude these assemblies from the requirements associated with those accessory structures that require a permit and are covered by section 710A.2 of the code.

Carports are being removed as it is already identified as a Group U occupancy and would comply with 701A.3

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# [Item 3. I-3 Work Group]

The OSFM is proposing the modifications based on the recommendations of the I-3 Taskforce.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

408.1.2.2

508.2.4

508.3.3

716.2.2.1

804.4.1

804.4.3

905.3.10

#### **Table 1004.5**

#### [408.1.2.2]

**Rationale:** The proposal to delete the section number is intended to clean up unintended correlation issues that were created by its adoption in the 2016 intervening code cycle. The code language as it is written is inconsistent with model code and requires additional workshop task force discussion to clean up.

### [508.2.4]

**Rationale:** The proposal is to state the exception first with in the sentence, followed by the example where no separation is required between the main occupancy use and the accessory occupancy use. The accessory occupancy use shall not exceed 10 percent of the main occupancy use to be considered for the exception. No regulatory change.

### [508.3.3]

**Rationale:** Nonseparated occupancies is a design option that if the building is designed to the most restrictive and most hazardous conditions that are expected to occur based on the occupancies contained in the building, a fire resistance rated separation is not needed. The height and area limitations for those occupancies will be used to determine the required type of construction for each occupancy, with the most restrictive type of construction required for the entire building.

Nonseparation method is not permitted for Group H-2, H-3, H-4, H-5, I-2, I-2.1 and L. It is proposed that Group I-3 occupancies be included within this exception.

Exception 3 follows the method of accessory uses of the main occupancy to be allowed as non-separated.

# [716.2.2.1]

# Rationale:

Modify exception #5 to include speaker ports. It is believed that speaker ports do not pose any more threat than cuff ports. The exception has been commonly used as an alternate means method for the installation of the cuff ports for security and safety measures for both inmates and staff. To codify the use of the installation of cuff ports eases the burden of creating an engineering judgment or alternate means for the owner, designer and contactor. The proposals intent is to allow consistency within the industry and as a tool for the code enforcer.

### [804.1, 804.4.1, 804.4.2, 804.4.3]

Rationale: The code currently permits only noncombustible flooring in areas occupied by patients or inmates whose personal liberties are restrained in I-2 and I-3 occupancies. Historically, the concern regarding combustible flooring in institutional occupancies was attributable to interior finish and flooring materials contributing to fuel loads that reduce the amount of time for flashover to occur in a fire event. A more specific concern is fire in a room of origin spreading to the means of egress system via the interior and floor finish materials. In January 1972, the Green Nursing Home fire in Lincoln Heights, Ohio, killed 10 of the 41 residents; this single-story was not sprinklered and the interior finish materials accelerated fire spread. Limiting the combustibility of interior finish materials is thought to delay, or not significantly add to, the time a flashover will occur.

Prior to 1981, interior floor finish materials were tested in accordance with ASTM E84 (*Test for Surface Burning Characteristics of Building Materials*) as testing for critical radiant flux of floor covering did not yet exist, or had not yet been standardized. Primarily due to the lack of any standards, noncombustible flooring was required in the above occupancies.

Currently, ASTM E648 and NFPA 253 (Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source) are the standard tests used for determination of combustibility of floor finishes and floor coverings. This test was specifically developed to evaluate the tendency of a floor covering to propagate flame and contribute to fuel loading. The greater its critical radiant flux value, the greater the resistance of a floor finish to flame propagation.

It seems that permitting the use of flooring, tested with actual underlayment to be installed (not the standard test underlayment), that meets ASTM Standard E648, Class I, having a critical radiant flux limit of not less than 0.45 watt per centimeter square, and a specific optical density smoke rating not exceeding 450, per ASTM E662, in fully sprinklered buildings housing Group I-2 and I-3 occupancies in areas occupied by patients or inmates whose personal liberties are restrained, would be reasonable.

This also appears to coincide with NFPA 101 requirements.

To permit the use Class I flooring in I-2 and I-3 occupancies in areas occupied by patients or inmates whose personal liberties are restrained (in lieu of noncombustible floor finishes), the following criteria shall be met:

1.The Group I-2 and I-3 buildings shall be fully sprinklered;

2. The floor finish material shall be tested with the actual underlayment to be used – not a test underlayment material – and shall meet the ASTM Standard E648 for Class I materials, having a critical radiant flux limit of not less than 0.45 watt per centimeter square, and a specific optical density smoke rating not exceeding 450, per ASTM E662:

If the above criteria are not met, noncombustible flooring shall be used, in accordance with the charging section 804.4.3.

#### [905.3.10]

**Rationale:** The proposal is to clarify where the standpipes are required, which is within the housing unit and housing pod. The reference to a cell complex is irrelevant to the requirement. The proposal is to clarify the definitions to match the 2016 intervening code cycle addition.

# [Table 1004.5]

Rationale: Table 1004.5 establishes minimum occupant densities based on the function or actual use of the space. The table presents the maximum floor area allowance per occupant based on studies and counts of the number of occupants in typical buildings. If it is intended that the occupant load will exceed that calculated in accordance with the table, then the occupant load is to be based on the estimated actual number of people, but not to exceed the maximum allowance in accordance with Section 1004.2. In determining the occupant load of a building with mixed groups, each floor area of a single occupancy must be separately analyzed, such as required by section 1004.4. The table 1004.5 presents a method of determining the absolute minimum occupant load of a space that the means of egress is to accommodate. The proposal to include detention facility spaces that are typically within a Group I-3 building. The occupant load factor numbers proposed are based on the stereotypical configuration of these spaces. For example, the dining area within a detention facility most closely resembles an assembly space with tables and chairs. The code user is conflicted between applying the assembly space provisions within a detention facility because it will not meet the remaining requirements of an assembly, because the doors for the exits are secured. The intent of the proposal is to give the code user a tool for calculating the number of required exits within a detention facility that may not otherwise be clear.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the

2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 4. L Work Group]

The OSFM is proposing the modifications based on the recommendation of the L-Occupancy Taskforce. The taskforce changes update the regulations to match changes that have occurred in the model code and to provide clarity in the regulations.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

# **202 LABORATORY SUITE** 302.1 307.1.1 313.1 414.1.1 453.1 453.3.1 453.3.2 453.4.2 453.4.2.1 453.4.2.2 453.4.3.1 453.4.3.2 453.4.4 453.4.5 453.4.6 453.4.6.1 453.4.7.2 453.4.7.3 453.4.7.4.2 453.4.7.4.3 453.4.7.5 453.4.7.6 453.4.7.7 453.6.1 453.6.5 453.7.1 453.1.1 453.7.<del>2</del>1 453.7.32 TABLE 453.7.32.1 453.7.4<u>3</u> 453.7.5 453.8 453.9 **TABLE 504.3 TABLE 506.2 TABLE 803.11** 903.2.16 903.2.16.1 903.2.5.4 **TABLE 903.2.11.6** 907.2.28 907.2.28.1 907.6.4 TABLE 1004.1.25 1006.2.1 **TABLE 1006.3.3(2)**

#### 2702.2.17

#### [LABORATORY SUITE]

Rationale: Revised text for clarification in the definition of the Laboratory Suite.

#### [302.1]

Rationale: Revised text for clarification, correlate the definition to the L occupancy.

#### [307.1.1]

Rationale: Revised text for clarification with a pointer to the appropriate section in the CFC.

#### [313.1]

Rationale: Revised for language consistency in Code.

# [414.1.1]

Rationale: Revised text for clarification.

#### [453.1]

Rationale: Reference correction and clarification that L occupancies are an optional design.

### [453.3.1]

Rationale: Revised to match definition of "Floor Area, Gross" in Section 202.

#### [453.3.2]

Rationale: Revised text for clarification in Lab Suites with multiple tenants.

### [453.4.2]

Rationale: Redundant Section. Already noted in CBC Table 1604.5.

### [453.4.2.1]

Rationale: Redundant Section. Already noted in CBC Table 1604.5.

#### [453.4.2.2]

Rationale: Redundant Section. Already noted in CBC Table 1604.5.

#### [453.4.3.1]

Rationale: Revised for language consistency in Code.

# [453.4.3.2]

Rationale: Revised for language consistency in Code.

#### [453.4.4]

**Rationale:** Purpose of this room is not well defined. When required it is for the spill mitigation supplies. This code change provides clarity and allows flexibility based on the needs for the AHJ.

# [453.4.5]

Rationale: Replace "present" to match text in other parts of the Code. "Integral coved base" addresses the issue of flooring termination at walls.

### [453.4.6]

Rationale: Revised for compliance with NFPA 110 and create consistency.

### [453.4.6.1]

#### Rationale:

1. "Emergency" replaced with "Standby" to coordinate with Section 453.4.6 revision.

- 2. "Emergency alarm and monitoring system", and "Egress lighting" removed because already covered in CEC.
- 3. ERRCS added to with correlate with the new regulations.

#### [453.4.7.2]

Rationale: Remove "product conveying and others" for clarification that all exhaust from "L" Occupancy should be continuous, unimpeded, and unobstructed.

### [453.4.7.3]

Rationale: Redundant. CMC covers this already.

#### [453.4.7.4.2]

Rationale: Code conflict and potentially causes a hazardous condition in the building.

#### [453.4.7.4.3]

Rationale: Reference correction and removal of "2 hour" because already covered in Section 713.

#### [453.4.7.5]

Rationale: Added clarification.

#### [453.4.7.6]

Rationale: Deleted because it conflicts with 453.4.7.5.

#### [453.4.7.7]

Rationale: Reference correction.

### [453.6.1]

#### Rationale:

- 1. Section number correction.
- 2. The word "portion" can be used for an alcove or area off a main lab. The word "room" resolves this issue.

#### [453.6.5]

Rationale: Delete because section is redundant. Already covered in CBC Table 1020.1.

# [453.1.1]

Rationale: No change to text, but move to front of section, because typically missed by designers.

#### [453.7.1]

Rationale: Add additional reference for clarification.

#### [453.7.2]

Rationale: Add additional reference for clarification.

### [TABLE 453.7.2.1]

Rationale: Clarification of the table for storage and correlation with the CFC.

### [453.7.4]

Rationale: Section number correction.

#### [453.7.5]

Rationale: Delete because this is Fire Code and not Building Code issue. CFC Section 5003.10.

### [453.8]

Rationale: Revised for language consistency in Code

#### [453.9]

**Rationale:** Clarification to how to deal with existing "H-8" Occupancies. There are some Higher Education facilities that are maintaining existing "H-8" Occupancies.

# [TABLE 504.3 a, i]

Rationale: Text "and all Group L" added for clarification that sprinklers required in all, not just new, Group L Occupancies

# [TABLE 506.2a, b, i]

Rationale: Clarification that sprinklers required in L Occupancies

#### [TABLE 803.11]

**Rationale:** In the H, L row under "NONSPRINKLERED" all three (3) columns should be changed to NP, because H and L Occupancies are not allowed in Non-Sprinklered buildings.

#### [903.2.16]

**Rationale:** Revised to clarify that only the "L" Occupancy portions of a floor are required to be designed with a higher sprinkler density, and the remainder of the building shall be designed in accordance with the nature of the hazard imposed by the occupancy and consistent with NFPA 13.

#### [903.2.16.1]

Rationale: Revised for consistency in Code.

#### [903.2.5.4]

Rationale: Revised for consistency in Code.

#### [TABLE 903.2.11.6]

Rationale: Revised for consistency in Code.

#### [907.2.28]

**Rationale:** Revised for consistency in Code. This is same wording as the sprinkler requirements in Section 903.2.16. Separate into two paragraphs, because two different points.

#### [907.2.28.1]

Rationale: Revised for consistency in Code.

#### [907.6.4]

Rationale: Revised for consistency in Code.

#### [TABLE 1004.1.2]

Rationale: Add (K-12) after "Educational" Clarification that "Educational is for K-12 only and not L occupancy laboratories.

### [1006.2.1]

**Rationale:** Fill in the 3 blank cells - Add "NP" in the two "Without Sprinkler System (feet)" columns. Add "75<sup>a</sup>" in "With Sprinkler System (feet)" column.

#### [TABLE 1006.3.3(2)]

**Rationale:** Common Path of Travel for "L" Occupancies was not addressed in this Table. This needs to be changed in conjunction with proposed change to Table 1006.2.1.

#### [2702.2.17]

Rationale: Revised for compliance with CEC, and to correspond with proposed revision to Section 453.4.6.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 5. Higher Education]

The OSFM is proposing to remove Section 428 and all references to higher education laboratories in its entirety until it can be evaluated for its allowance of hazardous material in high-rises and how this affects the Group L occupancy. California currently has the Group L occupancies that addresses the issues of laboratories in high-rises and it does not restrict the occupancy to higher education. The adoption of Section 428 can create conflict in the regulations and terminology for Group L and Higher Education Laboratories. The fire service has voiced concern on how these new regulations will affect the state. The OSFM will create a taskforce to evaluate the impact of the regulations and to make recommendations to the Office of the State Fire Marshal.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

Table of Contents
202 [F] HIGHER EDUCATION LABORATORY.
307.1.1
414.2
Section 428
Index

### [Table of Contents]

Rationale: Remove for consistency in removing Section 428 from the code.

#### [202 Definitions]

Rationale: Remove for consistency in removing Section 428 from the code.

#### [307.1.1]

Rationale: Remove for consistency in removing Section 428 from the code.

#### **[SECTION 428]**

Rationale: The OSFM is proposing to remove Section 428 and all references to higher education laboratories in its entirety until it can be evaluated for its allowance of hazardous material in high-rises and how this affects the Group L occupancy. California currently has the Group L occupancies that addresses the issues of laboratories in high-rises and it does not restrict the occupancy to higher education. The adoption of Section 428 can create conflict in the regulations and terminology for Group L and Higher Education Laboratories. The fire service has voiced concern on how these new regulations will affect the state. The OSFM will create a taskforce to evaluate the impact of the regulations and to make recommendations to the Office of the State Fire Marshal.

#### [414.2]

Rationale: Remove for consistency in removing Section 428 from the code.

### **INDEX**

Rationale: Remove for consistency in removing Section 428 from the code.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### [Item 6. R-2.2 based on SB112]

This is to meet the requirements of the Legislature for SB 112 to create Community Correctional Reentry Centers - California Department of Corrections and Rehabilitation (CDCR) - community-located facilities that provide housing and

transitional rehabilitative or community-based programing services for ambulatory inmates. CDCR Program services assist with substance use disorder treatment, employment, education, family reunification, and social support. Program participants remain under the jurisdiction of CDCR, are monitored by CDCR staff and supervised by CDCR approved/contracted program providers 24/7. The facilities include residential living, food services, administrative and program functional spaces in a non-licensed 24 hr.

[from SB 112 approved by Governor, September 28, 2017. Filed with the Secretary of State September 28, 2017.] SEC. 7. Section 13143.7 is added to the Health and Safety Code, to read:

#### 13143 7

- (a) Except as provided in Section 18930, the State Fire Marshal, in consultation with the Department of Corrections and Rehabilitation, shall prepare and adopt regulations establishing minimum standards for the prevention of fire and for the protection of life and property against fire in any building or structure used or intended for use as a community correctional reentry facility, as defined in Section 6258 of the Penal Code. The State Fire Marshal shall adopt and submit building standards for approval pursuant to the provisions of Chapter 4 (commencing with Section 18935) of Part 2.5 of Division 13 for the purposes described in this section.
- (b) The regulations and building standards developed pursuant to subdivision (a) shall also address buildings and structures that provide residential housing for parolees under contract with the Department of Corrections and Rehabilitation.

#### Fire Protection enhanced features include:

- CDCR Reentry facilities are supervised and monitored by CDCR custody and program staff 24/7
- Daily operations include an onsite electronic surveillance (CCTV) system, cameras cover public areas within the building and its perimeter.
- Facility is protected with NFPA 13 automatic fire suppression system with quick response heads.
- There is an NFPA 72 compliant automatic fire alarm & smoke detection system reporting to a U.L. listed Central station. There is a manual pull station at the continuously manned Watch Office for non-fire emergencies.
- There are at least 2 smoke compartments on each story/floor area delineating sleeping unit/s areas.
- In older existing buildings; second means of egress to a public way utilizing an OSFM approved and inspected fire escape system.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

202 Definitions 310.3.2 310.4 Section 420 Title 420.1 420.4 420.5 420.6 420.6.1 420.6.2 420.11 **Table 504.3 Table 504.4 Table 506.2** 508.2.4 508.3.3 510.5 510.6 Table 706.4 708.4.2 **Table 803.13** 804.4.2 906.1

907.2.12.1.2

907.5.2.3.3

907.2.10.2

1005.7.1

Table 1006.2.1

Table 1006.3.3(2)

1008.2

1010.1.2

1011.11

1019.3

1020.4

1027.6

1030.1

3006.2

# [Chapter 2 Definitions] <u>Community Correctional Reentry Centers - California Department of Corrections and Rehabilitation (CDCR)</u>:

**Rationale:** OSFM to propose a new definition for a new occupancy classification based on the mandates from Health and Safety Code 13143.7.

#### [310.3.2]

#### Rationale:

OSFM to propose a new occupancy classification based on the mandates from Health and Safety Code 13143.7.

#### [310.4]

Rationale: Revised for addition of new occupancy group.

### [SECTION 420 Title]

Rationale: Revised for addition of new occupancy group.

#### [420.1]

Rationale: Revised for addition of new occupancy group.

#### [420.4]

Rationale: Revised for addition of new occupancy group.

#### [420.5]

Rationale: Revised for addition of new occupancy group with additional requirements.

#### [420.6]

Rationale: Modify section number.

#### [420.6.1]

Rationale: Added for new occupancy group requirements.

### [420.6.2]

Rationale: Modify section number.

#### [420.11]

Rationale: Added for new occupancy group requirements.

### [TABLE 504.3]

Rationale: Added for new occupancy group requirements and ease for code user.

# [TABLE 504.4]

Rationale: Added for new occupancy group requirements and ease for code user.

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[TABLE 506.2]

Rationale: Added for new occupancy group requirements and ease for code user.

[508.2.4]

Rationale: Revised for addition of new occupancy group.

Rationale: Revised for addition of new occupancy group.

[510.5]

Rationale: Revised for addition of new occupancy group.

Rationale: Revised for addition of new occupancy group.

[TABLE 706.4] Rationale: Revised for addition of new occupancy group.

Rationale: Revised for addition of new occupancy group.

[3006.2]

Rationale: Revised for addition of new occupancy group.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### [Item 7. Stairway Capacity]

The OSFM is proposing to remove California amendment exception #5.

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

1005.3.1

1005.3.2

### [1005.3.1, 1005.3.2]

Rationale: The SFM amendment in this section dates to 2001. The Initial Statement of Reasons for the amendment states that intent of the regulations is to require a .3 inch per person factor for the stairways and .2 for other egress components. This does not allow the exemption for sprinklers which are already required for assembly occupancies. There have been editorial changes to correlate with the changes in the model code. The current California amendment references section 1029. The model code removed the reference to stairs for section 1029, so the amendment is confusing. The removal of California amendment in exception #5 and adding "A" in exception #1 in both sections provides consistency with the intent of the amendment and provides clarity.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 8. Balcony and Elevated Walking Surfaces]

Following the Berkeley balcony collapse of 2015, the California Building Standards Commission (CBSC) formed an ad hoc subcommittee comprised of two members (Commissioners Kent Sasaki and Steven Winkel). The purpose of this subcommittee is to review reports and other information regarding failures of this type and to possibly make regulatory or statutory recommendations to the CBSC and/or state agencies that have authority to amend the California Building Standards Code (Cal. Code Regs., Title 24).

Legislative Mandate

On September 15, 2016, Governor Edmond G. Brown Jr. approved Senate Bill No. 465 Hill (Chapter 372, Statutes of 2016).

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

### 705.2.3.2

### [705.2.3.2]

**Rationale:** The new section meets the intent of the work group's purpose. The proposal allows vent is combustible exterior element such as balconies, but maintains the fire integrity of the exterior wall. If the building is in a WUI area the vents must meet the Chapter 7A requirements to protect against embers from a wildland fire. The reference to 903.3.1.1, 903.3.1.2 and the standard is a pointer for the requirement of fire sprinkler protection of balconies of Type V construction.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### [Item 9. Secondary Attachments to steel]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

### 704.6.1

# [704.6.1]

Rationale: Primary structural frame members shall comply with Table 601 for fire resistance rating. Secondary (nonstructural) steel tubes provide support for a building's exterior curtain wall and are thereby considered to be unrated members that do not require any fire protection. The connection of non-structural tubes to primary structural members has potentially adverse thermal effects on the required fire resistance rating of the primary steel frame members. Building attachments for miscellaneous non-structural items (hangers, braces, framing tracks, erection lifting lugs, wall supports, etc.) are typically not required to be individually fire protected. In addition, fire resistance rated assemblies are tested without attachments, and with a homogeneous and continuous protection system or material. Thus, rated assemblies are explicitly limited to only the tested or approved components given in the published listing, which does not include bare steel attachments or discontinuous member protection. If such secondary steel attachments are connected to a fire resistance rated steel assembly, they may jeopardize the assembly's rating and protection system by the introduction of "thermal shorts", which can cause unexpected and excessive heat conduction, convection, or radiation through the attachment or its connection to the primary assembly. The proposal to require a 12-inch extension of fireproofing on all non-structural attachments is based on a general industry practice as described in ANSI/UL 263 BXUV (exhibit C). Moreover, in cases where an open tubular steel connection is utilized it is vital that the interior surfaces of the tube walls are fireproofed and the bottom ends of the tubes are closed. Without this protection, this condition results in bare (unprotected) steel areas at the attachment that could be directly exposed to radiant and convective heat from a fire source. A modeling analysis of a high-rise project in Stockton, CA prepared by Jensen Hughes Senior Engineers Nestor Iwankiw and Thomas Forsythe further supports the proposed code change that would require fire proofing of secondary non-structural attachments. Under the current code, fire-proofing requirements for non-structural attachments and their connections remain ambiguous. This lack of clarity makes fire protection enforcement difficult due to increased construction costs for contractors, builders and owners. Furthermore, special inspectors, fire and building officials are not taught to look for these

deficiencies, resulting in numerous buildings with unprotected steel that can potentially have serious implications on public safety and welfare. The proposal establishes a legal basis for requiring the additional fire protection as described herein.



Figure 2: Photos of Incompletely Protected and Open Steel Tube Attachments to Primary Beams

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 10. Carbon Monoxide]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

915.1 915.2.3 915.4.2

#### [915.1, 915.2.3, 915.4.2]

**Rationale:** The proposals are to provide clarity and enact the regulations that are consistent with the statute found in Education Code 32080. UL 2034 is a standard for residential detectors and this provides clarity.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 11. Class A Wiring in High Rise Buildings]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

#### [907.6.1.1]

Rationale: SFM is modifying #1 in this existing amendment based on recommendations from the OSFM Fire Alarm Advisory Committee.

This modification will now only require Class A circuits for fire alarm "riser circuits" in high-rise buildings, and not fire alarm circuits on floors throughout the building. SFM feels that the existing provisions of the amendment requiring Class A fire alarm circuits throughout all floors of high-rise buildings is overly restrictive when combined with the circuit and pathway requirements contained in the 2016 Edition of NFPA 72 National Fire Alarm and Signaling Code. "Class X Circuits" are being added to the existing amendment as a design option, where the fire alarm designer and building owner would like to use circuit isolators for the riser circuits installed in accordance with NFPA 72. Class X fire alarm circuits meet all the requirements of Class A circuits.

CFC 907.6.1.1 / CBC 907.6.1.1 SFM is modifying this section in this existing amendment.

This modification will now only require Class A or Class X circuits for fire alarm network communication circuits between multiple control units in high-rise buildings.

SFM feels that the existing provisions of the amendment requiring Class A fire alarm circuits throughout all floors of high-rise buildings is overly restrictive when combined with the circuit and pathway survivability requirements contained in the 2016 Edition of NFPA 72 *National Fire Alarm and Signaling Code*. "Class X Circuits" are being added to the existing amendment as a design option, where the fire alarm designer and building owner would like to use circuit isolation for network communication circuits between multiple control units. Class X fire alarm circuits meet all the requirements of Class A circuits. Exceptions 1 & 2 are being deleted for correlation to the revisions of 907.6.1.1.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# [Item 12. Fire Command Center]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

# [911.1.2]

Rationale: The model code lowered the fire protection of the fire command center to one hour. The proposal is to maintain the existing standard of two-hour protection to preserve a safe level of protection for the fire service and equipment during a fire event.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### [Item 13. NFPA 13 Waterflow test]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

### [NFPA 13-2016 23.2.1.1\*]

**Rationale:** The OSFM is proposing to amend NFPA 13 to require the waterflow test for designing a fire sprinkler system to be conducted within 6 months of plan review. New construction can affect the water flow supply by adding additional demands. A longer time that a flow test is valid does not capture other new project that have been built in the last year as the current regulation require. This change will provide more accurate design supply information for fire suppression systems. This will also correlate to many fire department current practices.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# [Item 14. Business Areas]

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

# [1004.5]

Rationale: The model code has increased the occupant load factor for business use areas from 100 gross to 150 gross. This increase allows for less occupants per square footage, which in turn reduces the amount of required exits from a space. The proposed change to keep the current occupant load factor for business use in buildings will maintain the required exits. In addition, the new design requirements will greatly limit the available use of conference room areas or assembly use spaces in existing buildings. The SFM would recommend not adopting the model code provision for all business use areas. Maintaining the 100-gross occupant load factor for all business use areas in buildings and structures within the state ensures fire, life and panic safety pursuant to Health and Safety Code 13110.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# [Item 15. OSHPD I-2 and I-2.1

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

### 202

#### [CARE SUITE]

Rationale: The SFM is clarifying that care suites occur in both Group I-2 and I-2.1 occupancies. The proposed SFM language coordinates with a SFM proposed change to CFC Section 202. There is no change in regulatory effect.

# [NON-PATIENT-CARE SUITE]

**Rationale:** The SFM is providing a definition for suites in Group I-2 or I-2.1 occupancies used for administrative, business and professional offices. This definition accommodates SFM proposed requirements for these suites in Chapter 4. The proposed SFM language coordinates with a SFM proposed change to CFC Section 202.

# CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

#### [407.2.1]

Rationale: The SFM is proposing to delete language identifying Group I-2 and I-2.1 public-use areas and group meeting rooms open to corridors as spaces similar to waiting rooms and reinstating language allowing similar spaces.

Public-use areas do not indicate a use or function. Group meeting rooms are regulated in Section 407.2.3. Spaces similar to waiting areas are identified in Chapter 10, Section 1020.6. This proposed amendment eliminates ambiguity and has no change in regulatory effect.

#### [407.4.2.1]

**Rationale:** The SFM is proposing to relocate language requiring two exits from rooms in Group I-2 and I-2.1 occupancies to a new subsection. The current location for this requirement regulates care suites. The new language coordinates California Building Code requirements with the requirements of Chapter 18 of NFPA 101-2012. There is no change in regulatory effect.

#### [407.4.4]

**Rationale:** The SFM is proposing to correct and correlate a missing occupancy classification designation for Group I-2.1 occupancies in the title of this subsection. Confusion as to whether or not the base Group I-2 provisions should apply to Group I-2.1 occupancies exists in the title of this subsection. This proposal specifically adds the Group I-2.1 classification to the title of this subsection. There is no change in regulatory effect.

#### [407.4.4.5.2]

**Rationale:** The SFM is proposing to delete means of egress requirements for a Group I-2 sleeping room from the means of egress requirements for a care suite containing sleeping rooms. The requirement for means of egress from a sleeping room is relocated to a new subsection 407.4.2.1 proposed by SFM. There is no change in regulatory effect.

#### [407.4.5, 407.4.5.1, 407.4.5.2, 407.4.5.3]

Rationale: The SFM is proposing language permitting non-patient-care suites located in Group I-2 and I-2.1 occupancies. Non-patient-care suites are to be limited to administrative, business and professional offices that support health care facilities. They require a 1-hour fire-resistance rated fire barrier separation, are limited to 10,000 sq. ft. and must be protected by an automatic fire sprinkler system. A similar configuration was used successfully when the Uniform Building Code served as the basis for the California Building Code. Non-patient-care suites are permitted in Chapter 18 of NFPA 101-2012. Permitting non-patient-care suites will allow for non-patient office functions in Group I-2 and I-2.1 that comply with the less restrictive Group B means of egress requirements.

### [407.5.1, Exceptions]

Rationale: The SFM is proposing to delete exceptions permitting larger floor areas for Group I-2 smoke compartments. The deletion of the exceptions coordinates the requirements of the CBC with the requirements of Chapter 18 of NFPA 101-2012. The proposed language accommodates reformatting of the IBC. There is no change in regulatory effect.

# CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

### ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE

### [TABLE 504.3]

**Rationale:** The SFM is proposing amendments to Table 504.3 that delete footnote reference e for Group I-2 and I-2.1 occupancies and designate Type III-B and Type V-B types of construction as not permitted for Group I-2 and I-2.1 occupancies. Footnote e is applicable to Group I-3 occupancies. Type III-B and V-B construction of Group I-2 and I-2.1 is not permitted. The proposed changes coordinate Table 504.3 information with Table 504.4 and Table 506.2. The change corrects errors in the table. There is no change to regulatory effect.

# CHAPTER 7 FIRE AND SMOKE PROTECTION FEATURES

# [709.5.1]

**Rationale:** The SFM is proposing language that clarifies that pairs of smoke barrier doors installed across a corridor in a Group I-2 occupancy must be opposite swinging.

Sections 709.5, Exception 1 and 709.5.1 require that where a pair of opposite swinging doors are installed, they shall be in compliance with provisions identified in Section 709.5.1. There is, however; no location in the 2018 IBC where a pair of opposite swinging doors are required when such doors are installed across a corridor in a Group I-2. The

specific requirement for installing opposite swinging doors in a Group I-2 (Group I Division 1.1 at the time) across corridors at smoke barrier walls last appeared in the 1997 UBC/2001 CBC, Section 308.2.2.1.

SFM proposed language includes Group I-2.1 and R-2.1 occupancies in the title and requirements of the subsection. These occupancy groups are included in the corresponding Section 909.5.3.1. This corrects an error of omission.

NFPA 101-2012, Section 18.3.7.6(3) requires that in health care occupancies, smoke barrier doors installed across corridors shall be arranged so that each door swings in a direction opposite from the other.

Revising Section 709.5.1 to state that opposite swinging doors are required across corridors at smoke barrier walls in Group I-2 occupancies eliminates any confusion in this regard and is consistent with the requirements of NFPA 101-2012. This revision coordinates with a proposed SFM amendment to Section 909.5.3.1.

This revision has a no cost impact. Opposite swinging doors are provided as a provision of NFPA 101 and have been provided as a continuation of the requirement as it was more clearly stated in the 2001 CBC. Omitting Group I-2.1. R-2.1 and ambulatory care facilities from the revised language results in a cost savings where pairs of opposite swinging doors are not required.

The SFM proposed language coordinates California Building Code requirements with Chapter 18 of NFPA 101-2012 and SFM proposed language in Section 909.5.3.1. There is no change in regulatory effect.

### [716.5.3, Exception 2]

Rationale: The SFM is proposing language that clarifies that only corridors in Group I-2 and I-2.1 that are located in fully sprinklered buildings are permitted to have nonrated doors. Section 407.3.1 permits a corridor door to be an effective barrier to limit the transfer of smoke only when the building is fully sprinklered. The proposed language coordinates with the requirements of Section 407.3.1. There is no change in regulatory effect.

Rationale: The SFM is proposing language amending SFM language clarifying that corridors with walls constructed as fire partitions in Group I-2 and I-2.1 occupancies require smoke dampers at duct penetrations serving a corridor. In accordance with Section 407.3.1 and Table 1020.1, a corridor in a Group I-2 or I-2.1 is required to be a 1-hour fireresistance rated fire partition. Section 407.3.1 permits a corridor door in a Group I-2 or I-2.1 to be an effective barrier to limit the transfer of smoke when the building is fully sprinklered. The door provisions of Section 407.3.1 do not affect the requirement that a corridor shall be constructed as a 1-hour fire-resistance rated fire partition. This amendment clarifies that a smoke damper is required in a corridor constructed as a fire partition in a Group I-2 or I-2.1.

Section 407.3.1 and Table 1020.1 require that corridors in a Group I-2 or I-2.1 be constructed as fire partitions. This amendment is consistent with the requirement for a smoke damper provided at each point a duct or air transfer opening penetrates a fire-resistance rated corridor enclosure. This section and the referenced Section 716.2.2.1 have been a source of confusion. Providing further direction that smoke dampers are required at fire-resistance rated corridors constructed in accordance with Section 407.3.1 and Table 1020.1 clarifies the intent of the State Fire Marshal amendments to Section 407.3.1 and Table 1020.1 that require corridors in Group I-2 and I-2.1 be constructed as fire partitions.

Misunderstanding of this requirement has resulted in costly delays related to the review and approval of construction. This amendment coordinates Section 717.5.4.1 with the fire partition requirements of Section 407.3.1 and Table 1020.1. The language clarifies the intent is to provide corridors in Group I-2 and I-2.1 constructed as fire partitions with duct openings protected by fire-smoke dampers when required.

# **CHAPTER 9** FIRE PROTECTION AND LIFE SAFETY SYSTEMS

#### [907.5.1]

Rationale: The SFM is proposing language that prohibits the use of a fire alarm pre-signal feature in a Group I-2, I-2.1 or R-2.1 occupancy. Pre-signal, while not defined in the CFC or in NFPA 72, is described in NFPA 72, Sec. 23.8.1.1.2. A pre-signal feature is permitted to delay an alarm for a period of more than 1 minute or fail to activate an alarm without human action. Delaying activation of an alarm or failing to automatically activate an alarm in a Group I-2, I-2.1 or R-2.1 is unacceptable. The SFM proposed language is also proposed for CFC Section 907.5.1.

### [907.5.2.2, Exception]

**Rationale:** The SFM is proposing language that requires a general occupant notification broadcast over a public-address system in Group I-2 and I-2.1 occupancies more than 75 feet above the lowest level of fire department access when audible fire alarms are not provided. The new language clarifies when notification using a public-address system is required and deletes Group R-2.1 occupancies from the exception. The SFM proposed language is also proposed for CFC Section 907.5.2.2, Exception.

#### [907.5.2.5]

**Rationale:** The SFM is proposing language that requires in Group I-2 and I-2.1 occupancies, an occupant notification broadcast over the public-address system in areas of Group I-2 or I-2.1 occupancies where audible fire alarms are not provided. The SFM proposed language is also proposed for CFC Section 907.5.2.5.

#### [909.5.3]

Rationale: The SFM is proposing to delete the description of smoke barrier opening protection as self-closing devices and automatic-closing devices. This eliminates confusion and aligns CBC requirements with IBC and IFC requirements for the protection of openings in smoke barriers. The openings addressed in the language include duct penetrations and transfer openings. Such devices are automatic-closing. The second sentence of Section 909.5.3 addresses doors separately. The proposed SFM change coordinates with a SFM proposed change to CFC Section 909.5.3. There is no change in regulatory effect.

#### [909.5.3.1]

**Rationale:** The SFM is proposing language that clarifies that pairs of smoke barrier doors installed across a corridor in a Group I-2 occupancy must be opposite swinging.

Sections 909.5.3, Exception 3 and 909.5.3.1 require that where a pair of opposite swinging doors are installed, they shall be in compliance with provisions identified in Section 909.5.3.1. There is, however; no location in the 2018 IBC where a pair of opposite swinging doors are required when such doors are installed across a corridor in a Group I-2. The specific requirement for installing opposite swinging doors in a Group I-2 (Group I Division 1.1 at the time) across corridors at smoke barrier walls last appeared in the 1997 UBC/2001 CBC, Section 308.2.2.1.

NFPA 101-2012, Section 18.3.7.6(3) requires that in health care occupancies, smoke barrier doors installed across corridors shall be arranged so that each door swings in a direction opposite from the other.

Revising Section 909.5.3.1 to state that opposite swinging doors are required across corridors at smoke barrier walls eliminates any confusion in this regard and is consistent with the requirements of NFPA 101-2012. This revision coordinates with a proposed SFM amendment to Section 709.5.1.

SFM proposes to revise an incorrect reference to Section 716.2.6.5 to read Section 716.2.6.6.

This revision has a no cost impact. Opposite swinging doors are provided as a provision of NFPA 101 and have been provided as a continuation of the requirement as it was more clearly stated in the 2001 CBC. Omitting Group I-2.1, R-2.1 and ambulatory care facilities from the revised language results in a cost savings where pairs of opposite swinging doors are not required.

The SFM proposed language coordinates California Building Code requirements with Chapter 18 of NFPA 101-2012 and SFM proposed language in Section 709.5.1 and CFC Section 909.5.3.1. There is no change in regulatory effect.

### CHAPTER 10 MEANS OF EGRESS

# [1006.2.1, Exception 2]

Rationale: The SFM is proposing to amend language to clarify that two means of egress are required from Group I-2 sleeping rooms over 1,000 sq. ft. and other rooms over 2,500 sq. ft. as well as from care suites. The scope of the exception is revised to also include Group I-2.1 occupancies. This exception is a reference to means of egress requirements in Section 407.4. The proposed SFM change coordinates with a SFM proposed change to CFC Section 1006.2.1, Exception. There is no change in regulatory effect.

#### [Table 1006.2.1, Note d]

Rationale: The SFM is proposing to amend language to note d of Table 1006.2.1 to clarify that Section 407.4

requirements for number of exits or exit accesses from rooms or spaces in Group I-2 and I-2.1 occupancies includes additional provisions unrelated to travel distance. The proposed SFM change coordinates with a SFM proposed change to CFC Table 1006.2.1, Note d. There is no change to regulatory effect.

#### [1008.3.2]

Rationale: SFM proposes language to coordinate requirements for emergency lighting for a Group I-2 or I-2.1 exit discharge with the requirements of NFPA 101-2012.

Compliance with the provisions of NFPA 101-2012 is a requirement for licensing and accreditation of health facilities regulated or accredited by the Centers for Medicare & Medicaid Services (CMS), The Joint Commission (TJC) and the California Department of Public Health (CDPH), Licensing and Certification Program (L&C).

NFPA 101-2012, Section 7.9.1.1 and Section 7.9.1.2 require emergency lighting for the exit discharge only for designated stairs, ramps, aisles, walkways, and escalators leading to a public way. Additional information in the NFPA 101-2012, Annex Sec. A-7.9.1.1 further clarifies that emergency lighting provided outside the building may extend to either a public way or a distance away from the building that is considered safe; whichever is closest to the building being evacuated.

The proposed SFM change coordinates with a SFM proposed change to CFC Section 1008.3.2.

SFM proposed language requires emergency lighting for Group I-2 and I-2.1 exit discharge stairways, ramps, aisles, walkways and escalators leading to a public way or to a safe dispersal area. This language coordinates with NFPA 101-2012 requirements allowing for compliance during project design.

#### [1010.1.1.1]

Rationale: The SFM proposes language to include exception 2 in Section 1010.1.1.1 prohibiting projections into the clear door width of doors in Group I-2 and I-2.1 occupancies used for bed and stretcher patients. Exception 2 was unintentionally omitted from the 2016 CBC. Exception 2 was published in the 2016 CFC Section 1010.1.1.1. Including the proposed language corrects an error and coordinates the requirements of the CBC and CFC. There is no change in regulatory effect.

#### [1020.1]

Rationale: The SFM is proposing to amend exception 6 to add non-patient-care suites to suites in a Group I-2 or I-2.1 where a fire-resistance rated corridor is not required. This coordinates exception 6 with SFM proposed language permitting non-patient-care suites in Section 407.4.5. The proposed SFM change coordinates with a SFM proposed change to CFC Section 1020.1.

#### [1024.6]

**Rationale:** The SFM is proposing language amending item 1 to permit exit passageway penetrations for independent ventilation. This is consistent with similar provisions for interior exit stairways and ramps and is in accordance with Section 1024.7. The proposed SFM change coordinates with a SFM proposed change to CFC Section 1024.6.

# CHAPTER 35 REFERENCED STANDARDS

# [NFPA 72-2016 23.8.1.2.1.1]

# NFPA 72-2016

#### 23.8.1.2.1.1

**Rationale:** The SFM is proposing language that prohibits the use of a positive alarm sequence for a patient room smoke detector in a Group I-2 or R-2.1 occupancy. A positive alarm sequence permits intervention within 15 seconds of an alarm and an additional 180 seconds to evaluate a condition and reset the system without activating an alarm. Delaying activation of an alarm activated in a Group I-2 or R-2.1 patient room is unacceptable.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# [Item 16. R-2.1 Emergency Escape and Rescue Openings

The specific purpose and rationale of each adoption, amendment, or repeal is as follows:

# [1030.1]

Rationale: The Office of the State Fire Marshall is proposing modifications to the 2019 California Building Code, Section 1030.1 to meet the intent of the Health and Safety Code, Section 1531.15, which allows a secure perimeter to be maintained for Residential Care Facilities for the Elderly (RCFEs) housing residents with Alzheimer's Disease or other dementia. The 2019 California Building Code, Section 1030.1. is intended to define operational constraints for emergency egress openings required by Section 1030.1. However, in an RCFE, R-2.1 Occupancy Group serving residents with Alzheimer's Disease or other dementia, safety is being compromised because of the emergency egress openings required by CBC Section 1030.1. Emergency egress openings in the form of operable windows significantly elevates the risk to the safety and security of memory care residents living in an RCFE.

CBC, Section 1030.1. requires that resident sleeping room windows remain operable and completely openable, so residents may exit the building through the windows and at their own accord in the case of an emergency. Though appropriate for R-2 occupancies, this strategy relies on the resident or occupant being cognitively intact and possessing the judgment to act in an emergency. Non-ambulatory and/or Bedridden residents allowed to occupy an R-2.1 occupancy group are considered by the Code to not have the cognitive capacity and judgment to exit the building without assistance. The Code requires fire and life safety upgrades in R-2.1 Occupancies to protect non-ambulatory and bedridden residents, who reside within. Additionally, The Health and Safety Code, Section 1531.15 allows a secure perimeter to be maintained for memory care residents. Emergency egress openings provide a breach in the secured perimeter.

Emergency egress openings required by CBC, Section 1030.1. are inappropriate for an RCFE serving memory impaired residents and should be revised to exclude the specific application to licensed RCFEs housing or serving residents with Alzheimer's Disease or other dementia. The current Code does not fully consider the implications caused by allowing a breach in the secure perimeter legislated to protect mentally frail residents living in an RCFE.

An operational constraint, which restricts the window opening in sleeping rooms is allowable in R-1 Occupancy Groups irrespective of construction type. The fire and life safety requirements for R-1 Occupancy Groups and building standards are less stringent than those required by R-2.1.

Section 1030.1 should be revised to specifically include the application to licensed residential care buildings housing residents with Alzheimer's Disease or other dementia. The Code has failed to fully consider the implications caused by allowing a breach in the secure perimeter protecting mentally frail residents living in a residential care facility. Allowing the window openings to be limited to 4" will significantly reduce the risk of elopement or fall related injury to RCFE residents.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### [Item 17. Flammability Standards for Building Insulation Materials]

1809.5

2603.2.1

2603.3

2603.4.1

2603.4.1.15

Rational: Legislation was passed in 2013 that added Section 13108.1 to the Health and Safety Code (AB 127, Skinner Fire safety: fire retardants: building insulation), that requires the State Fire Marshal, in consultation with the Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation, to review the flammability standards for building insulation materials, including whether the flammability standards for some insulation materials can only be met with the addition of chemical flame retardants. The State Fire Marshal convened a working group to assist in the review and provide recommendations regarding the flammability standards for building insulation materials. The recommendation of the workgroup was that more testing of the material was needed to make a determination. The report can be found at: http://osfm.fire.ca.gov/codedevelopment/wgfsbim

The Office of the State Fire Marshal completed Phase II by working with Oklahoma State University(OSU) to evaluate the suitable of non-fire retardant treated polystyrene foam insulation in a subgrade installation. The CAL Fire / OSU Phase II Working Group was formed to determine the testing criteria and evaluate the results. The OSU conduct fire tests for built environment and storage that would be found at construction sites.

The Working Group reviewed the test results and developed the proposals in the California Building Code, California Residential Code, California Fire Code and California Referenced Standard Code. The final report can be found at: <a href="http://osfm.fire.ca.gov/codedevelopment/pdf/CalFire-OSU\_Phase\_II\_Working\_Group\_Final\_Report.pdf">http://osfm.fire.ca.gov/codedevelopment/pdf/CalFire-OSU\_Phase\_II\_Working\_Group\_Final\_Report.pdf</a>

The proposals would allow the use of non-fire retardant treated polystyrene foam insulation in the subgrade application directly under the foundation.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### \*\*PART 2\*\*

# CHAPTER 1 SCOPE AND ADMINISTRATION

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 1 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# DIVISION II SCOPE AND ADMINISTRATION

The SFM proposes to maintain the Division II designation for the IBC Chapter 1 Administrative provisions - Sections 101 through 114.

The SFM proposes to only adopt Sections 105.2.1 - 105.2.2, 105.3 - 105.3.1, 105.4, 105.6 - 105.7, 106.1, 106.2 - 106.3, 107.1 - 107.3, 107.4, 107.5, 108.1 - 108.4, 110.1 - 110.3, 110.3.4 - 110.3.6, 110.3.8 - 110.3.10, 110.4 - 110.6, 111.1, 111.2, 111.3 - 111.4, 112, 114.1 - 114.2, 115 and 116 contained in Chapter 1, Division II pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 2 DEFINITIONS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 2 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 3 USE AND OCCUPANCY CLASSIFICATIONS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 3 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 4 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 5 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 6 TYPES OF CONSTRUCTION

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 6 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 7 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 7A MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE [SFM]

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 7A without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 8 INTERIOR FINISHES

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 8 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 9 FIRE PROTECTION SYSTEMS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 9 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 10 MEANS OF EGRESS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 10 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 11 ACCESSIBILITY

The SFM proposes to not adopt Chapter 11.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 11A HOUSING ACCESSIBILITY

The SFM proposes to not adopt Chapter 11A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# **CHAPTER 11B**

ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS, COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING

The SFM proposes to <u>not</u> adopt Chapter 11B.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 12 INTERIOR ENVIRONMENT

The SFM proposes to only adopt Sections 1202.5.2,1202.6, 1205, 1207 and 1208 of Chapter 12 without modification.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 12 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 13 **ENERGY EFFICIENCY**

The SFM proposes to not adopt Chapter 13.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 14 **EXTERIOR WALLS**

The SFM proposes to only adopt Sections 1401, 1402.4, 1402.5, 1403, 1404, 1405, 1406 and 1407, 1408 of Chapter 14 without amendment.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 14 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# **CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES**

The SFM proposes to only adopt Sections 1501, 1505, 1506, 1507, 1509, 1510 and 1512 of Chapter 15 with amendment.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 15 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 16 STRUCTURAL DESIGN

The SFM proposes to not adopt Chapter 16.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 16A STRUCTURAL DESIGN

The SFM proposes to not adopt Chapter 16A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

The SFM proposes to only adopt Sections 1705.1, 1705.1.1 and 1705.14 through 1705.18.2, 1709.6 of Chapter 17 without amendment.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 17 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

CHAPTER 18 SOILS AND FOUNDATIONS

CHAPTER 19 CONCRETE

CHAPTER 20 ALUMINUM

The SFM proposes to <u>not</u> adopt Chapters 18 through 20.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 21 MASONRY

The SFM proposes to only adopt Sections 2113.9.2 of Chapter 21 without modification.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 21 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 21A MASONRY

The SFM proposes to only adopt Sections 2113A.9.2 of Chapter 21A without modification.

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 21A without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 22 STEEL

# CHAPTER 22A STEEL

The SFM proposes to not adopt Chapter 22 and 22A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 23 WOOD

The SFM proposes to only adopt Sections 2303.2 - 2303.2.9 of Chapter 23 without amendment

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 23 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 24 GLASS AND GLAZING

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 24 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 25 GYPSUM BOARD AND PLASTER

The SFM proposes to not adopt Chapter 25.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 26 PLASTIC

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 26 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 27 ELECTRICAL

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 27 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 28 MECHANICAL SYSTEMS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 28 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 29 PLUMBING SYSTEMS

The SFM proposes to not adopt Chapter 29.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 30 ELEVATORS AND CONVEYING SYSTEMS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 30 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 31 SPECIAL CONSTRUCTION

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 31 without modification.

(Note: See Part 1 of this document for California amendments with editorial updates and errata for adoption into the 2019 California Building Code.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 32 ENCROACHMENT INTO PUBLIC RIGHT-OF-WAY

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 32 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 33 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# CHAPTER 34 RESERVED

# CHAPTER 35 REFERENCED STANDARDS

The SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 35 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX A EMPLOYEE QUALIFICATIONS

# APPENDIX B BOARD OF APPEALS

The SFM proposes to not adopt Appendix A and B.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX C GROUP U – AGRICULTURAL BUILDINGS

The SFM is maintaining the adoption of those existing California amendments or building standards in Appendix without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

APPENDIX D FIRE DISTRICTS

APPENDIX E
SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS

APPENDIX F
RODENT PROOFING

# **APPENDIX G** FLOOD RESISTANT CONSTRUCTION

# APPENDIX H SIGNS

The SFM proposes to not adopt Appendix D through H.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### APPENDIX I **PATIO COVERS**

The SFM proposes to only adopt Sections 1101, I102, and I103 of Appendix I without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX J **GRADING**

The SFM proposes to not adopt Appendix J.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX K **Administrative Provisions**

The SFM proposes to not adopt Appendix K.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX L **Earthquake Recording Instrumentation**

The SFM proposes to not adopt Appendix L.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX M Tsunami-Generated Flood Hazard

The SFM proposes to not adopt Appendix M.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

# APPENDIX N Replicable Buildings

The SFM proposes to not adopt Appendix N.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13110, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

### TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:

(Government Code Section 11346.2(b)(3)) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

The SFM did not rely on any technical, theoretical, and empirical study, report, or similar documents outside of those contained in this rulemaking in proposing that CBSC adopt said model code as a reference standard for the placement of existing SFM regulatory amendments for the California Building Standards Codes.

#### STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS:

(Government Code Section 11346.2(b)(1)) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.)

The SFM believes that the amendments to the model code any additional building standards proposed are offered in typically both a prescriptive and performance base. The nature and format of the model code adopted by reference afford for both methods, the following is a general overview of the model codes proposed to be adopted by reference as well as state modifications:

This comprehensive fire code establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new system designs.

This code is founded on principles intended to establish provisions consistent with the scope of a building and fire code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of

construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

The International Building, Residential and Fire Code provisions provide many benefits, among which is the model code development process that offers an international forum for building and fire safety professionals to discuss performance and prescriptive code requirements. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

### **CONSIDERATION OF REASONABLE ALTERNATIVES**

(Government Code Section 11346.2(b)(4)(A)) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

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 and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

# REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.

(Government Code Section 11346.2(b)(4)(B)) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.)

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 and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

# FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.

(Government Code Section 11346.2(b)(5)(A)) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business)

The SFM has made a determination that this proposed action will not have a significant adverse economic impact on business. Health and Safety Code Section 18928 requires the SFM, when proposing the adoption of a model code, national standard, or specification shall reference the most recent edition of the applicable model code, national standard, or specification. Therefore, there are no other facts, evidence, documents, testimony, or other evidence on which the SFM relies to support this rulemaking.

# ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

(Government Code Sections 11346.3(b)(1) and 11346.5(a)(10))

The [STATE AGENCY NAME] has assessed whether or not and to what extent this proposal will affect the following:

X The creation or elimination of jobs within the State of California.

These regulations will not affect the creation, or cause the elimination, of jobs within the State of California.

X The creation of new businesses or the elimination of existing businesses within the State of California.

These regulations will not affect the creation or the elimination of existing business within the State of California.

- X The expansion of businesses currently doing business with the State of California.
  - These regulations will not affect the expansion of businesses currently doing business within the State of California.
- X The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

These regulations will update and improve minimum existing building standards, which will provide increased protection of public health and safety, worker safety and the environment.

# ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

(Government Code Section 11346.2(b)(5)(B)(i)) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.)

- No increased cost of compliance for those regulations that make only technical and non-substantive changes.
- The potential benefits provide recognition and appropriate use of new technologies and materials, clarity for the code users and local enforcement agencies, and may increase business due to the adoption of new building standards.
- Protection of life and property against fire and panic.

#### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

(Government Code Section 11346.2(b)(6)) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.)

The SFM has determined that this proposed rulemaking action does not unnecessary duplicate or conflict with federal regulations contained in the Code of Federal Regulations that address the same issues as this proposed rulemaking.