

**FINAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF THE STATE FIRE MARSHAL (SFM)
REGARDING THE ADOPTION BY REFERENCE OF THE
2009 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (IRC)
WITH AMENDMENTS INTO THE 2010 CALIFORNIA RESIDENTIAL CODE (CRC)
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 2.5**

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

INTRODUCTION TO FINAL STATEMENT OF REASONS

California's first partnership with the International Residential Code is almost complete. During this past year, the State Fire Marshal (SFM) has been working to bring you the best set of building, residential and fire code proposals possible. Several key things are important to remember:

- The SFM is committed to adoption and believes strongly in the value of the ICC code process and the overall quality of the I-Codes.
- The SFM has taken extraordinary measures to ensure that this package represents the best in fire and life safety considerations, stakeholder involvement and economic considerations.
- Both Fire and Building Code professionals have worked in concert under consensus-based guidelines to develop this package which has wide support.

The adoption of an entire new set of building and fire codes is a complex task. The SFM, along with the other state agencies, the Building Standards Commission and its Committees, and stakeholders have worked together this past year to produce this package. These documents demonstrate that the SFM proposals are necessary, reasonable, and deserve your support.

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 regards 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 2009 International Residential Code and be published as the 2010 California Residential Code.

The general purpose of this proposed action is principally intended to adopt by reference amend and codify a new Part to the California Building Standards Code creating California Code of Regulations, Title 24, Part 2.5 based upon the current edition of a model code the International Residential Code. The current California Building Code in effect for one- and two- family dwellings is the 2007 California Building Code which is based upon the 2006 International Building Code of the International Code Council. This proposed action:

- Adopt by reference the 2009 International Residential Code for application and effectiveness in the 2010 California Residential Code.
- Adopt new building standards or necessary amendments to the 2009 International Residential Code that address inadequacies of the 2009 International Residential 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 2007 California Building Standards Code.
- Codify non-substantive editorial and formatting amendments from the format based upon the 2006 International Building Code to the format of the 2009 International Residential Code.

Health and Safety Code Section 18930 is part of the Building Standards Law that includes a nine-point written analysis that is required to be submitted by the Office of the State Fire Marshal for approval by the California Building Standards Commission prior to the adoption of building standards submitted by the Office of the State Fire Marshal. Under subpart (d) the Commission must give great weight to the determinations and analysis of the Office of the State Fire Marshal for each of the nine-point criteria submitted. Any factual determination used in the nine-point analysis by the Office of the State Fire Marshal shall be considered conclusive by the Commission unless the Commission specifically finds and sets forth in its reasoning in writing that the factual determination is arbitrary and capricious or substantially unsupported by the evidence considered by the Office of the State Fire Marshal.

Automatic Fire Sprinkler Systems for One- and Two Family Dwellings. California is a leader in the fire and life safety professions. Our fire and building officials are some of the nation's best and speak with considerable experience. We strongly believe the SFM proposals continue this reputation and allow for change and overall improvement of our building community while at the same time, taking a more conservative approach than the model code in the high risk occupancies.

In October 2008 and again in April 2009 the office of the State Fire Marshal convened representatives from various disciplines to study issues concerning the water supply of residential sprinklers and the installation of residential sprinklers. The purpose of the two task groups was to provide information, recommendations, and suggested strategies for solutions to the State Fire Marshal. This was in preparation for a statewide residential fire sprinkler requirement for new construction scheduled for implementation January 1, 2011.

Stakeholders from across the State of California participated in this monumental task which included; California Fire Service, Building Industry, Building Officials, Water Purveyors, Public Health Officials, Fire Sprinkler Associations, League of California Cities and State Agencies.

The Task Groups identified the following primary issues that would essentially be broken into sub-groups for intense review and recommendations:

- Fees
- Connection Configuration
- Laws and Regulations
- Process Efficiencies & Cost Impacts
- Installation
- Cost Offsets/Incentives
- Local AHJ Issues

In July 2009 the final phase of the residential sprinkler task force was formed to address and implement a strategy to educate stakeholders of "Best Practice" recommendations from the water supply and installation task groups. The Education and Training Task Group has been charged with developing a coordinated training program for the implementation of residential fire sprinklers in new construction statewide and make recommendations to the State Fire Marshal.

Reasons supporting this recommendation are numerous.

- Vulnerable and special need populations are growing and require higher levels of protection than we commonly think of with able-bodied, English-speaking adults.
- Sprinkler fire protection systems are the best, first defense against life and property loss but are not infallible. Layered fire protection is the appropriate risk mitigation approach.
- Our life loss history In California continues to need improvement as does firefighter safety. Too many people still die in preventable, mitigable fires.
- The State Fire Marshal is charged with setting the fire and panic standards for California and has done so with an open, participative, researched and professional process for this adoption.
- The impact of our amendments is not far-reaching or overly restrictive. They are reasonable, focused, limited to those buildings with the greatest risk of life loss, and economically neutral.

The SFM has placed the final reports and recommendations of the Phase I Residential Fire Sprinkler/Water Purveyor Task Force and the Phase II Residential Fire Sprinkler Installation Task Force on the Office of the State Fire Marshal's web page and can be viewed at <http://osfm.fire.ca.gov>.

The State Fire Marshal thanks everyone involved for your extraordinary commitment of time to this goal.

UPDATES TO THE INITIAL STATEMENT OF REASONS

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

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

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

The SFM has determined that the proposed regulatory action WOULD NOT impose a mandate on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S)

(Government Code Section 11346.9(a)(3)) [List a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the actions or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group]

The following is the Office of the State Fire Marshal's summary of and response to comments specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the actions or reasons for making no change:

COMMENTS RECEIVED DURING THE 45-DAY COMMENT PERIOD.

Pursuant to the requirements of Government Code Section 11346.8 (c), and Section 44 of Title 1 of the California Code of Regulations, the California Building Standards Commission provided a notice of proposed adoption by reference of the 2009 edition of the International Residential Code with California Amendments into the California Code of Regulations Title 24, Part 2.5 which were the subject of a Notice of Proposed Action (Register 2009, Volume No. 40-Z, notice File No. Z-2009-0922-28).

The text with the modifications clearly indicated, were made available to the public for a 45-day written public comment period from October 2, 2009 to November 16, 2009.

[Part 2.5 R202 Ch 12-43]

Name/Organization: Martin D. Cooper, City of Foster City

Comments: The commenter states those chapters that are not adopted by the State within the CRC are an expensive use of natural resources and burden to local jurisdictions to purchase in down cycles of the economy. Identifies Health and Safety Code Section 18942 mandate to purchase these texts. The commenter suggests that definitions and chapters not adopted in California should not be published in the 2010 California Residential Code.

Response: The SFM appreciates and acknowledges the commenter's suggestions. The commenter is addressing a publication matter to be addressed by the Department of Housing and Community Development (HCD) as the provisions contained in such chapters are either adopted or not adopted by HCD and beyond the scope of the SFM rulemaking and scope of authority.

[Section R202]

Name/Organization: Larry G. Williams, FPO, Ventura County Fire Protection District

Comments: Commenter states 2 years of age implies somewhere between a persons 2nd and 3rd birthday. Commenter identified the age for children should begin at 2 years of age and older to clarify exactly what the cut off is between an infant and a child. Commenter has identified variations of subjective language exists in other sections of the CBC, CFC and IRC as well. The commenter identifies clarifying language to the term infant to mean any child under 2 years of age and correlates definition with other statutes and CCR Title 22 regulations.

Response: The SFM agrees with the commenter and made the following modifications as shown below and made available for comment during the 15-day comment period from November 25, 2009 to December 9, 2009:

OSFM change to accommodate as follows:

Section R202 Definitions

(310.2 CBC)

INFANT, for the purpose of these regulations, shall mean any child who because of age only, is unable to walk and requires the aid of another person to evacuate the building. In no case shall the term “infant” mean a child ~~beyond two years of age~~ 2 years of age or older.

Rational for modification (from Part 2): The SFM is proposing modification to Sections 305.2, 308.3.1, 308.5.1, 308.5.2 and 310.2 definitions that revise age limitations based on other statutory definitions of infant and to correlate with CCR Title 22 regulations for child care and infants. However, the use of “age 2” or “2 years of age” does not meet the intent of the SFM. Age 2 or 2 years of age means a child who is somewhere between their 2nd birthday, but has not reached their 3rd birthday. Title 22 Sec 101152 defines “Infant as a child under 2 years of age”. This is also born out by the definition of child with in the Building Code and Title 22: “Child or children is a person under 18 years of age”. A person, who is 17 years, 11 months, 29 days is a “child”. As such, a person who is 2 years, 11 months, 29 days would still be “age 2”. The same reasoning should be used for determining whether a code requirement applies to a child or infant. Additional code amendments are being proposed for other sections of the CBC, CFC and IRC that contain the same issue and are also proposed for revision to the definition of “infant” to correlate with Title 22. This modification has no change in regulatory effect.

Additional modifications to Sections 308.5.1 and 308.5.2 are proposed by adding the word “day” to the title of these sections clarifies that it is applicable to day care. The term “child care facility” is already defined in Section 308.3.1 as facilities that provide care on a 24-hour basis. The intent of Section 308.5.1 and 308.5.2 is for less than 24 hour care facilities. This modification has no change in regulatory effect.

For the specific purpose and rational for each section containing California regulation, modification, amendment or repeal see the Statement of Reasons for Part 2 California Building Code (CBC). The SFM is correlating amendments for Part 2.5 California Residential Code (CRC) which are derived from the amendments proposed to the CBC. The SFM is following the format of the code in these instances; where the primary code is the CBC or CFC and SFM is proposing amendments to the section, those same amendments are correlated into the CRC as amendments.

[Tables R302.1(1), R302.1(2)]

Name/Organization: State Fire Marshal

Comment: The SFM proposed editorial modification.

**TABLE R302.1(1)
EXTERIOR WALLS – DWELLINGS AND ACCESSORY BUILDINGS
WITHOUT AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION**

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure form both sides	<5 feet
	(Not fire-resistance rated)	0 hours	≥5 feet
Projections	(Fire-resistance rated)	1 hour on the underside	≥ 2 feet to 5 feet
	(Not fire-resistance rated)	0	5 feet
Openings in walls	Not allowed	N/A	< 3 feet
	25% Maximum of Wall Area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R317.3 <u>R302.4</u>	< 5 feet

		None required	5 feet
--	--	---------------	--------

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable

TABLE R302.1(2)
EXTERIOR WALLS – DWELLINGS AND ACCESSORY BUILDINGS
WITH AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION

<u>Exterior Wall Element</u>		<u>Minimum Fire-Resistance Rating</u>	<u>Minimum Fire Separation Distance</u>
<u>Walls</u>	<u>(Fire-resistance rated)</u>	<u>1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure form both sides</u>	<u><3 feet</u>
	<u>(Not fire-resistance rated)</u>	<u>0 hours</u>	<u>≥3 feet</u>
<u>Projections</u>	<u>(Fire-resistance rated)</u>	<u>1 hour on the underside</u>	<u>≥ 2 feet to 3 feet</u>
	<u>(Not fire-resistance rated)</u>	<u>0</u>	<u>3 feet</u>
<u>Openings in walls</u>	<u>Not allowed</u>	<u>N/A</u>	<u>< 3 feet</u>
	<u>Unlimited</u>	<u>0 hours</u>	<u>3 feet</u>
<u>Penetrations</u>	<u>All</u>	<u>Comply with Section R302.4</u>	<u>< 3 feet</u>
		<u>None required</u>	<u>3 feet</u>

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable

Rational for modification: The SFM is proposing editorial modifications to the title of these tables to correlate with Section R302.1 which references these table. This modification has no change in regulatory effect.

[Section R302.5.1]

Name/Organization: State Fire Marshal

Comment: The SFM proposed editorial modification.

(406.1.4 item 1 CBC)

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors shall be self-closing and self-latching.

Exception: Where the residence and the private garage ~~is~~ are protected by an automatic residential fire sprinklers in accordance with Section R309.6 and R313, other door openings between the private garage and the residence need only be self-closing and self-latching. This exception shall not apply to rooms used for sleeping purposes.

Rational for modification: The SFM is proposing editorial modifications correcting terminology consistent with other provisions of the IRC. This modification has no change in regulatory effect.

[Section R302.6]

Name/Organization: State Fire Marshal

Comment: The SFM proposed editorial modification.

(406.1.4 item 3 CBC)

R302.6 Dwelling/garage and/or carport fire separation. The garage and/or carport shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. A separation is not required between the

dwelling and carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

Rational for modification: The SFM is proposing editorial modifications to the Section heading consistent with the provisions of the Section and clarifying the sentence structure. This modification has no change in regulatory effect.

[Table R302.6]

Name/Organization: Rick Thornberry, PE, The Code Consortium, Inc. on behalf of the California Fire Safety Advisory Council (CFSAC)

Comment: (Part 2.5 R302.6 Table Ftnt1) The commenter identifies the addition of Footnote 1 to Table R302.6 Dwelling/Garage Separation reduces the required level of fire-resistive separation between a garage or carport and the habitable rooms located above from 5/8-inch thick Type X gypsum wallboard or equivalent to 1/2-inch regular gypsum wallboard or equivalent when both the dwelling and the garage or carport are protected by automatic residential fire sprinklers. The ISOR did not substantiate the significant reduction in the level of fire-resistive protection provided for the dwelling unit from the garage or carport, nor indicate any significant reduction in cost that can justify sprinklers as a trade-off for the fire-resistive protection.

Response: The SFM agrees with the commenter and made the following modifications as shown below and made available for comment during the 15-day comment period from November 25, 2009 to December 9, 2009:

OSFM change to accommodate as follows:

**TABLE R302.6
DWELLING/GARAGE AND/OR CARPORT SEPARATION**

SEPARATION	MATERIAL
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage <u>or carport</u>	Not less than 5/8-inch Type X gypsum board or equivalent ¹
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

~~1. Not less than 1/2 inch gypsum board or equivalent shall be permitted where the dwelling and the private garage or carport is protected by fire sprinklers.~~

Rational for modification: The SFM received comment during the 45 day comment period that identified several issues regarding the proposed footnote to Table R302.6. Concerns raised include; a lack of justification in the original ISOR, similar proposals to the IRC at the 2009/2010 ICC code hearings were disapproved by committee. The SFM concurs and is removing this footnote for further study as a result. Additional modifications to the title of the table are proposed to correlate with Section R302.6 which references this table. This modification has no change in regulatory effect.

[Section R309.6]

Name/Organization: State Fire Marshal

Comment: The SFM proposed editorial modification.

R309.6 Fire Sprinklers. *Private carports with habitable space above and attached garages shall be protected by an automatic residential fire sprinklers in accordance with this Section. Residential fire sprinklers shall be connected to, and installed in accordance with, a fire sprinkler system that complies with Section R313 or NFPA 13D. Fire sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft²*

(2.04 mm/min) over the area of the garage or carport, but not to exceed two sprinklers for hydraulic calculation purposes. Garage doors shall not be considered obstructions with respect to sprinkler placement.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports or garages that do not have an automatic residential fire sprinkler system installed.

Rational for modification: The SFM is proposing editorial modifications to clarify the intent for the sprinkler system design in garages and not the maximum number of heads in a garage. This modification has no change in regulatory effect.

[Section R311.4]

Name/Organization: State Fire Marshal

Comment: The SFM has been made aware of concerns that the original proposed text is confusing and inconsistent with the California Building Code regarding the trigger for an additional stair or ramp from the third floor above or below grade.

Response: OSFM change to accommodate as follows:

R311.4 Vertical egress. Egress from habitable levels including habitable attics and basements not provided with an egress door in accordance with Section R311.2 shall be by ~~a~~ one or more ramps in accordance with Section R311.8 or ~~a~~ one or more stairways in accordance with Section R311.7 or both. ~~Habitable levels larger than 500 square foot (46.45 m²) located more than one story above or more than one story below an egress door shall be provided with not less than two means of egress. For habitable levels or basements located more than one story above or more than one story below an egress door, the maximum travel distance from any occupied point to a stairway or ramp that provides egress from such habitable level or basement, shall not exceed 50 feet (15 240 mm).~~

Rational for modification: The SFM has been made aware of concerns that the original proposed text is confusing and inconsistent with the California Building Code. The SFM proposed modification eliminates a 500 square foot trigger for a second stairway or ramp from a 3 floor above or below grade and utilizes a similar method from the building code based on a 50 foot distance trigger. The SFM contends that this modification is consistent with the intent of the original statement of reasons as such revisions are for clarity.

[Section R314.1]

Name/Organization: State Fire Marshal

Comment: The SFM proposed editorial modification.

R314.1 Smoke detection and notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72. Systems and components shall be California State Fire Marshal listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose for which they are installed.

Rational for modification: The SFM is proposing this editorial modification to Section R314.1 that correlates with provisions contained in Title 24, Part 2 (CBC) Section 907.1.3 and Health and Safety Code Section 13114. This modification has no change in regulatory effect.

[Section R325.6.3.3]

Name/Organization: Larry G. Williams, FPO, Ventura County Fire Protection District

Comments: The commenter suggests editorial modification for additional language that clarifies this section is only applicable to R-3.1 occupancies without automatic fire sprinklers per Section 903.

Response: The SFM agrees with the commenter and made the following modifications as shown below and made available for comment during the 15-day comment period from November 25, 2009 to December 9, 2009:

OSFM change to accommodate as follows:

R325.6.3.3 Group R-3.1 occupancies housing only one bedridden clients. *In Group R-3.1 occupancies housing a bedridden client and not provided with an approved automatic fire sprinkler system, all of the following shall apply:*

- 1. In Group R-3.1 Occupancies housing a bedridden client, a direct exit to the exterior of the residence shall be provided from the client sleeping room.*
- 2. Doors to a bedridden client's sleeping room shall be of a self-closing, positive latching 1-3/8 inch solid wood door. Such doors shall be provided with a gasket so installed as to provide a seal where the door meets the jam on both sides and across the top. Doors shall be maintained self-closing or shall be automatic closing by actuation of a smoke alarm in accordance with Section 715.4.7 of the California Building Code.*
- 3. Group R-3.1 Occupancies housing a bedridden client, shall not have a night latch, dead bolt, security chain or any similar locking device installed on any interior door leading from a bedridden client's sleeping room to any interior area such as a corridor, hallway and or general use areas of the residence in accordance with Chapter 10 of the California Building Code.*
- 4. The exterior exit door to a bedridden client's sleeping room shall be operable from both the interior and exterior of the residence.*
- 5. Every required exit doorway from a bedridden client sleeping room shall be of a size as to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height. When installed in exit doorways, exit doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exit way is not less than 32 inches (813 mm).*

Note: *A sliding glass door can be used as an exterior exit doorway as long as it is operable from the inside and outside and the clear width of the exit way is not less than 32 inches (813mm).*

Rational for modification (from Part 2): The additional language clarifies that this section is only applicable to R-3.1 occupancies without automatic fire sprinklers per Section 903. This modification has no change in regulatory effect.

For the specific purpose and rational for each section containing California regulation, modification, amendment or repeal see the Statement of Reasons for Part 2 California Building Code (CBC). The SFM is correlating amendments for Part 2.5 California Residential Code (CRC) which are derived from the amendments proposed to the CBC. SFM is following the format of the code in these instances; where the primary code is the CBC or CFC and SFM is proposing amendments to the section, those same amendments are correlated into the CRC as amendments.

[Sections R327.6.2, R327.6.3]

Comment: For the specific comments and responses to the comments made to Part 2 California Building Code Chapter 7A or provisions in Section R327 see the Final Statement of Reasons for Part 2 California Building Code.

Modification: The SFM made the following modifications as shown below and made available for comment during the 15-day comment period from November 25, 2009 to December 9, 2009 in part as outlined above in the response to comments:

OSFM change to accommodate as follows:

R327.6.2 Requirements. *Ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials, or other devices that meet the following requirements:*

- 1. The dimensions of the openings therein shall be a minimum of 1/16th inch (1.6 mm) and shall not exceed 1/8th inch (3.2mm).*
- 2. The materials used shall be noncombustible.*

Exception: *Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.*

- 3. The materials used shall be corrosion resistant.*

R327.6.3 Ventilation openings on the Underside of Eaves and Cornices: *Vents shall not be installed on the underside of eaves and cornices.*

Exceptions:

1. The enforcing agency may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
2. Vents complying with the requirements of Section R327.6.2 may be installed on the underside of eaves and cornices in accordance with either one of the following conditions:
 - 2.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the California Building Code or,
 - 2.2. The exterior wall covering and exposed underside of the eave are of noncombustible material, or ignition-resistant materials as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the vent is located more than 12 feet from the ground or walking surface of a deck, porch, patio, or similar surface.

Rationale for modifications: The SFM received comments during the 45 day comment period expressing concern that Exception 2.2 of Section 706A.3 for ventilation openings on eaves and cornices does not provide adequate protection from wildfire protection. The SFM proposed modification to Exception 2.2 further limits the application of this exception to eave vents located more than 12 feet from potential wildfire exposure originating from the ground or other walking surfaces. The SFM contends that eave vents (on buildings with ignition resistant wall coverings) located more than 12 feet from the ground have not been shown to be significantly more hazardous than other attic vents, such as gable vents, and should be permitted to have protection similar to that of other ventilation openings. The SFM further contends that the proposed wildfire protection requirements for attic ventilation openings in Section 706A.2 provide adequate protection considering the entire building, provide increased protection overall from the requirements contained in the 2007 California Building Code, and are as strict, or stricter, than those found in National Fire Protection Association standards, International Code Council model codes, and similar recommendations. SFM also contends that the extent of building construction specified by the code to mitigate a particular wildfire exposure hazard, such as ventilation openings in eaves, should be proportional and relative to all of the hazard elements of the entire building, and be consistent with the purpose of the regulations (see Section 701A.2) to help reduce, not eliminate, disastrous conflagration losses. For example, perfecting protection from potential ember ignition through eave vents will not contribute to a reduction in disastrous wildfire losses if the embers are igniting the building at more hazardous construction elements, such as exterior trim, decks, and window frames.

Comments received during the 45 day comment period have also made SFM aware that most ridge vents are constructed of plastic that could be made to comply with the requirements for attic ventilation openings in Section 706A.2 except for the non-combustibility requirement in proposed Section 706A.2.2. It is not clear what impact eliminating plastic ridge vents might have on the ability of the building industry to provide adequate exhaust ventilation for attics. The modification proposed by SFM (see new exception to Section 706A.2.2) to permit combustible vents at the ridge of roofs is based on fire loss patterns and expected fire exposure. The SFM is not aware of fire loss data or a well substantiated fire exposure scenario that indicates plastic vents installed at the ridge of a roof are a significant hazard for flame intrusion.

The SFM contends that the extent of minimum state building construction requirements for wildfire protection in the California Building Standards Code should be based on reasonable property owner compliance with the vegetation management requirements prescribed by law and this code (see Section 701A.5). Direct flame contact at the ridge top of a roof is unlikely given such vegetation management. Furthermore, wildfire exposure resulting in flame contact at the ridge top would also likely result in extreme exposure to other building construction elements, such as windows, that would fail before flame intrusion at ridge vents became a significant issue.

For the specific purpose and rational for each section containing California regulation, modification, amendment or repeal see the Statement of Reasons for Part 2 California Building Code (CBC). The SFM is correlating amendments for Part 2.5 California Residential Code (CRC) which are derived from the amendments proposed to the CBC. The SFM is following the format of the code in these instances; where the primary code is the CBC or CFC and SFM is proposing amendments to the section, those same amendments are correlated into the CRC as amendments.

[Section R327.8.3]

Comment: For the specific comments and responses to the comments made to Part 2 California Building Code Chapter 7A or provisions in Section R327 see the Final Statement of Reasons for Part 2 California Building Code.

Modification: The SFM made the following modifications as shown below and made available for comment during the 15-day comment period from November 25, 2009 to December 9, 2009 in part as outlined above in the response to comments:

OSFM change to accommodate as follows:

R327.8.3 Exterior doors. *Exterior doors shall comply with one of the following:*

- 1. The exterior surface or cladding shall be of noncombustible or Ignition-resistant material, or*
- 2. Shall be constructed of solid core wood ~~having stiles and rails not less than 1 3/8 inches thick with interior field panel thickness no less than 1 1/4 inches thick, that comply with the following requirements:~~*
 - 2.1. Stiles and rails shall not be less than 1 3/8 inches thick*
 - 2.2. Raised panels shall not be less than 1 1/4 inches thick, except for the exterior perimeter of the raised panel that may taper to a tongue not less than 3/8 inch thick.*
- 3. Shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.*

~~**Exception:** Solid doors having a fire-resistance rating of not less than 20 minutes may have untested glazing that complies with Section 708A.2.~~
- 4. Shall be tested to meet the performance requirements of SFM Standard 12-7A-1.*

Rational for modification (from Part 2): The SFM has been made aware that the provisions on the thickness of wooden doors in proposed Section 708A.3.2 are confusing and have been enforced inconsistently. The SFM received comments during the 45 day comment period suggesting clarifying language which the SFM used for the proposed modification which codifies the original intent of the SFM, that a raised panel may have a tapered tongue around exterior perimeter less than 1 1/4 inches thick where it fits into the stiles and rails.

The SFM received comments during the 45 day comment period expressing concern that the exception to proposed Section 708A.3.3 could be inconsistent with requirements and/or standards (NFPA 252) referenced in the California Building Code. The modification proposed by the SFM deletes the exception and eliminates any potential inconsistency.

The SFM received additional comments during the 45 day comment period suggesting editorial changes to clarify Section 708A.3.3. SFM contends that, other than the above modifications, the provisions of Section 708A.3.3 clearly specify the requirements as written and should not be changed.

For the specific purpose and rational for each section containing California regulation, modification, amendment or repeal see the Statement of Reasons for Part 2 California Building Code (CBC). The SFM is correlating amendments for Part 2.5 California Residential Code (CRC) which are derived from the amendments proposed to the CBC. The SFM is following the format of the code in these instances; where the primary code is the CBC or CFC and SFM is proposing amendments to the section, those same amendments are correlated into the CRC as amendments.

COMMENTS RECEIVED DURING THE 15-DAY COMMENT PERIOD.

Subsequent to the original public comment period, text with the modifications clearly indicated, was made available to the public for a 15-day public written comment period from November 25, 2009 to December 9, 2009.

None.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

(Government Code Section 11346.9(a)(4))

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 adopted regulation.

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

(Government Code Section 11346.9(a)(5))

No proposed alternatives were received by SFM.

COMMENTS MADE BY THE OFFICE OF SMALL BUSINESS ADVOCATE

(Government Code Section 11347.6) [List each comment by the Trade and Commerce Agency directed at the proposed regulation or at the procedures followed by the Agency in proposing or adopting the regulation, and a response to each comment, including the basis why a comment was rejected, if applicable.]

No comments were received from the Office of Small Business Advocate.

COMMENTS MADE BY THE TRADE AND COMMERCE AGENCY

(Government Code Section 11347.6) [List each comment by the Trade and Commerce Agency directed at the proposed regulation or at the procedures followed by the Agency in proposing or adopting the regulation, and a response to each comment, including the basis why a comment was rejected, if applicable.]

No comments were received from the Trade and Commerce Agency.