

**15-DAY COMMENT PERIOD  
MODIFICATIONS TO EXPRESS TERMS  
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**

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**Legend for Express Terms:**

1. **Existing California regulations or amendments brought forward with modification:** *All such language appears in Italics, modified language is underlined.*
  2. **IBC language with new California amendment:** IBC language is shown in normal Arial 9-point. California amendments to IBC text appear *underlined and in italics*.
  3. **New California regulation or amendment:** *California language appears underlined and in Italics.*
  4. **Repealed Text:** Shown as ~~Strikeout~~.
  5. **Existing California amendments brought forward that remove IRC language:** Shown as ~~Strikeout~~.
  6. **New California amendments that remove IRC language:** Shown as ~~Strikeout~~.
  7. **Amended, adopted or repealed language for the 15-day public comment:** Amended, adopted, or repealed language will appear in double underline and ~~double strikeout~~.
  8. **Notation:** Authority and Reference citations are provided at the end of each chapter.
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**PROPOSED MODIFICATIONS:**

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**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.*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2

References: Health and Safety Code Sections 13143, 13211, 18949.2

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.

**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 2<sup>nd</sup> birthday, but has not reached their 3<sup>rd</sup> 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.

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**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 <del>R317.3</del> R302.4	< 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 from both sides</u>	<u>&lt;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>&lt; 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>&lt; 3 feet</u>
		<u>None required</u>	<u>3 feet</u>

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

**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.

**(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.

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2  
References: Health and Safety Code Sections 13143, 18949.2

**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.

**(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.

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2  
References: Health and Safety Code Sections 13143, 18949.2

**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  
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 <sup>1</sup>
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.~~

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2  
References: Health and Safety Code Sections 13143, 18949.2

**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.

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**R309.6 Fire Sprinklers.** *Private carports with habitable space above and attached garages shall be protected by an automatic residential fire sprinkler 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/ft<sup>2</sup> (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.*

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2  
References: Health and Safety Code Sections 13143, 18949.2

**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. This modification has no change in regulatory effect.

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**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 feet (46.45 m<sup>2</sup>) 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).*

**Notation:**

Authority: Health and Safety Code Sections 13108, 13113.9, 13114.1, 13114.2, 13143, 17921, 18949.2  
References: Health and Safety Code Sections 13143, 18949.2

**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.

**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.

**Notation:**

Authority: Health and Safety Code Sections 13108, 13143, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

**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.

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**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).*

**Notation:**

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2

References: Health and Safety Code Sections 13143, 13211, 18949.2

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.

**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.

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**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 1/16<sup>th</sup> inch (1.6 mm) and shall not exceed 1/8<sup>th</sup> 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.*

**Notation:**

Authority: Health and Safety Code Sections 13108, 13108.5, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2, Government Code Section 51189

References: Health and Safety Code Sections 13143, 18949.2, Government Code Sections 51176, 51177, 51178, 51179, Public Resources Code Sections 4201 through 4204

For the specific purpose and rationale 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.

**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.

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**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.

**Notation:**

Authority: Health and Safety Code Sections 13108, 13108.5, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2, Government Code Section 51189

References: Health and Safety Code Sections 13143, 18949.2, Government Code Sections 51176, 51177, 51178, 51179, Public Resources Code Sections 4201 through 4204

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.

**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.

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