

**EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF THE STATE FIRE MARSHAL
REGARDING THE 2010 CALIFORNIA FIRE CODE
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 9
2010 ANNUAL RULEMAKING CYCLE**

The Office of the State Fire Marshal (SFM) proposes to make necessary changes to the 2010 edition of the California Fire Code (CFC), based on the 2009 International Fire Code (IFC). The SFM further proposes to:

- Adopt necessary amendments to the model code;
 - Repeal amendments to the model code that are no longer necessary.
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Legend for Express Terms:

1. **Existing California regulation or amendment brought forward without modification:** *All such language appears in Italics.*
 2. **Existing California regulation or amendment brought forward with modification:** *All such language appears in Italics, modified language is underlined.*
 3. **IFC language with new California amendment:** California amendments to IFC text appear underlined and in italics.
 4. **New California regulation or amendment:** California language appears underlined and in Italics.
 5. **Repealed text:** Shown as ~~Strikeout~~.
 6. **New California amendments that remove text:** Shown as ~~Strikeout~~.
 7. **Notation:** Authority and Reference citations are provided at the end of each chapter.
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[Item No. 1. New California regulation or amendment necessary to address limitations and/or inadequacies of the adopted reference model code and SFM regulations relating to exit access travel distance and fire fighter operations in Group F-1 and S-1 occupancies]

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

910.1 General. Where required by this code or otherwise installed, smoke and heat vents or mechanical smoke exhaust systems and draft curtains shall conform to the requirements of this section.

Exceptions:

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. ~~Where areas of buildings are equipped with early suppression fast response (ESFR) sprinklers, automatic smoke and heat vents shall not be required within these areas. This exception shall not apply to any state institution or other state-owned or state-occupied buildings and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal. Automatic smoke and heat vents are not required within areas of buildings equipped with early suppression fast-response (ESFR) sprinklers unless any of the following conditions exist:~~
 - 2.1. The building is a state institution,
 - 2.2. The building is a state-owned or state-occupied building,
 - 2.3. The building is any of the applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, or
 - 2.4. The area of a Group F-1 or S-1 occupancy protected with the early suppression fast-response (ESFR) sprinklers has an exit access travel distance of more than 250 feet (76 200 mm).

910.2.1 Group F-1 or S-1. Buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645 m²) of undivided area.

Exception: Group F-1 aircraft manufacturing buildings and Group S-1 aircraft repair hangars.

910.3.2.2 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed ~~to operate automatically~~ in accordance with Sections 910.3.2.2.1 through 910.3.2.2.3.

910.3.2.2.1 Automatic operation. Smoke and heat vents shall be designed to operate automatically.

910.3.2.2.2 Control mode sprinkler system. Smoke and heat vents installed in areas of buildings with a control mode sprinkler system shall have operating elements with a higher temperature classification than the automatic fire sprinklers in accordance with NFPA 13.

910.3.2.2.3 Early suppression fast-response (ESFR) sprinkler system. Smoke and heat vents installed in areas of buildings with early suppression fast-response (ESFR) sprinklers shall be equipped with a standard-response operating mechanism with a minimum temperature rating of 360°F (182°C) or 100°F (56°C) above the operating temperature of the sprinklers, whichever is higher.

**CHAPTER 10
MEANS OF EGRESS**

**TABLE 1016.1
EXIT ACCESS TRAVEL DISTANCE^a**

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
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A, E, F-1, M, R, S-1	200	250 ^b
B	200	300 ^c
F-2, S-2, U	300	400 ^c
H-1	Not Permitted	75 ^c
H-2	Not Permitted	100 ^c
H-3	Not Permitted	150 ^c
H-4	Not Permitted	175 ^c
H-5	Not Permitted	200 ^c
I-2, I-2.1, I-3 ^d , I-4	150	200 ^c
L	Not Permitted	200 ^c

For SI: 1 foot = 304.8 mm.

a. See the following sections for modifications to exit access travel distance requirements:

- Section 402.4: For the distance limitation in malls.
- Section 404.9: For the distance limitation through an atrium space.
- Section 407.4: For the distance limitation in Group I-2.
- Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.
- Section 411.4: For the distance limitation in Special Amusement Buildings.
- Section 1014.2.2: For the distance limitation in Group I-2 Hospital Suites.
- Section 1015.4: For the distance limitation in refrigeration machinery rooms.
- Section 1015.5: For the distance limitation in refrigerated rooms and spaces.
- Section 1016.3: For increased limitation in Groups F-1 and S-1.
- Section 1021.2: For buildings with one exit.
- Section 1028.7: For increased limitation in assembly seating.
- Section 1028.7: For increased limitation for assembly open-air seating.
- Section 3103.4: For temporary structures.
- Section 3104.9: For pedestrian walkways.

b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems in accordance with Section 903.3.1.2 are permitted.

c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1

d. Not permitted in non-sprinklered Group I-3 Occupancies.

1016.3 Group F-1 and S-1 increase. *The maximum exit access travel distance shall be 400 feet (122 m) in Group F-1 or S-1 occupancies where all of the following are met:*

1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height,
2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm),
and
3. The building is equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1.

CHAPTER 23 HIGH-PILED COMBUSTIBLE STORAGE

TABLE 2306.2 GENERAL FIRE PROTECTION AND LIFE SAFETY REQUIREMENTS

[Remainder of Table not show for clarity]

Amend Footnote J on Table 2306.2 j of the 2010 CFC as follows:

j. Not required when storage areas with an exit access travel distance of 250 feet (76 200 mm) or less are protected by early suppression fast-response (ESFR) sprinkler systems installed in accordance with ~~NFPA 13~~ Section 903.3.1.1. *This footnote shall not apply to any state institution or state-owned or state-occupied buildings or other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal.*

**CHAPTER 47
REFERENCED STANDARDS**



National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
13—10	Installation of Sprinkler Systems <i>as amended</i> *.	Table 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.7.3, 2301.1, 2304.2, Table 2306.2, 2306.9, 2307.2, 2307.2.1, 2308.2.2, 2308.2.2.1, 2308.4, 2310.1, 2501.1, 2804.1, 2806.5.7, 3404.3.3.9, Table 3404.3.6.3(7), 3404.3.7.5.1, 3404.3.8.4

***NFPA 13, Amended Sections as follows:**

12.1.1.2 Early suppression fast-response (ESFR) sprinklers shall not be used in buildings with automatic heat or smoke vents unless the vents use a ~~high-temperature rated~~, standard-response operating mechanism with a minimum temperature rating of 360°F (182°C) or 100°F (56°C) above the operating temperature of the sprinklers, whichever is higher.

Notation:

Authority: Health and Safety Code Sections 13100.1, 13108, 13143, 13143.9, 13146, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item No. 2. Antifreeze solutions in residential fire sprinkler systems – permanent emergency rulemaking]

**CHAPTER 47
REFERENCED STANDARDS**



National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
13—10	Installation of Sprinkler Systems <i>as amended</i> *.	Table 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.7.3, 2301.1, 2304.2, Table 2306.2, 2306.9, 2307.2, 2307.2.1, 2308.2.2, 2308.2.2.1, 2308.4, 2310.1, 2501.1, 2804.1, 2806.5.7, 3404.3.3.9, Table 3404.3.6.3(7), 3404.3.7.5.1, 3404.3.8.4

***NFPA 13, Amended Sections as follows:**

Revise Section 7.6.2.2 as follows:

~~7.6.2.2 Glycerine water and propylene glycol water mixtures shown in Table 7.6.2.2 shall be considered suitable for use. Antifreeze solutions exceeding 50% by volume of glycerine water or 40% by volume of propylene glycol water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.~~

Revise Section 7.6.2.3 as follows:

~~7.6.2.3 If potable water is not connected to sprinklers, the commercially available materials indicated in Table 7.6.2.3 shall be permitted for use in antifreeze solutions. Antifreeze solutions of diethylene glycol water or ethylene glycol water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.~~

Add new Section 7.6.2.5.1 as follows:

~~7.6.2.5.1 Antifreeze solutions shall be factory premix solutions within dwelling unit portions of the sprinkler system.~~

Add a new definition as 3.4.1.1 to read as follows:

3.4.1.1 Premixed Antifreeze Solution. A mixture of an antifreeze material with water that is prepared by the manufacturer with a quality control procedure in place that ensures that the antifreeze solution remains homogeneous.

Revise 7.6.1.5 to read as follows:

7.6.1.5 A placard shall be placed on the antifreeze system main valve that indicates the manufacture type and brand of the antifreeze solution, the concentration by volume of the antifreeze solution used, and the volume of the antifreeze solution used in the system.

Revise 7.6.2.1 to read as follows:

7.6.2.1* Antifreeze solutions shall be limited to premixed antifreeze solutions of glycerin (chemically pure or United States Pharmacopoeia 96.5%) at a maximum concentration of 50% by volume, or propylene glycol at a maximum concentration of 40% by volume.

Add a new 7.6.2.1.1 to read:

7.6.2.1.1 Premixed antifreeze solutions of propylene glycol exceeding 40% concentration by volume shall be permitted for use with ESFR sprinklers where the ESFR sprinklers are listed for such use in a specific application.

Add new 7.6.2.1.2 to read as follows:

7.6.2.1.2 Premixed antifreeze solutions other than those described in 7.6.2.1 that are listed for use in sprinkler systems shall be permitted to be used.

Add a new 7.6.2.1.3 to read as follows:

7.6.2.1.3 All premixed antifreeze solutions shall be provided with a certificate from the manufacturer indicating the type of antifreeze, concentration by volume, and freezing point.

Delete current Table 7.6.2.2 and replace it with the following table in the annex renumbered as Table A.7.6.2.1

A.7.6.2.1 See Table A.7.6.2.1.

Table A.7.6.2.1 Properties of Glycerin and Propylene Glycol

Material	Solution (by volume)	Specific Gravity at 77°F (25°C)	Freezing Point	
			°F	°C

<u>Glycerin (C.P. or U.S.P. grade)</u>	<u>0%</u>	<u>1.000</u>	<u>32</u>	<u>0</u>
	<u>5</u>	<u>1.014</u>	<u>31</u>	<u>-0.5</u>
	<u>10</u>	<u>1.029</u>	<u>28</u>	<u>-2.2</u>
	<u>15</u>	<u>1.043</u>	<u>25</u>	<u>-3.9</u>
	<u>20</u>	<u>1.059</u>	<u>20</u>	<u>-6.7</u>
	<u>25</u>	<u>1.071</u>	<u>16</u>	<u>-8.9</u>
	<u>30</u>	<u>1.087</u>	<u>10</u>	<u>-12</u>
	<u>35</u>	<u>1.100</u>	<u>4</u>	<u>-15.5</u>
	<u>40</u>	<u>1.114</u>	<u>-2</u>	<u>-19</u>
	<u>45</u>	<u>1.130</u>	<u>-11</u>	<u>-24</u>
	<u>50%</u>	<u>1.141</u>	<u>-19</u>	<u>-28</u>
<u>Propylene glycol</u>				
	<u>0</u>	<u>1.000</u>	<u>32</u>	<u>0</u>
	<u>5</u>	<u>1.004</u>	<u>26</u>	<u>-3</u>
	<u>10</u>	<u>1.008</u>	<u>25</u>	<u>-4</u>
	<u>15</u>	<u>1.012</u>	<u>22</u>	<u>-6</u>
	<u>20</u>	<u>1.016</u>	<u>19</u>	<u>-7</u>
	<u>25</u>	<u>1.020</u>	<u>15</u>	<u>-10</u>
	<u>30</u>	<u>1.024</u>	<u>11</u>	<u>-12</u>
	<u>35</u>	<u>1.028</u>	<u>2</u>	<u>-17</u>
	<u>40</u>	<u>1.032</u>	<u>-6</u>	<u>-21</u>

C.P.: Chemically Pure; U.S.P.: United States Pharmacopoeia 96.5%.

Delete 7.6.2.3 and Table 7.6.2.3.

Revise 7.6.2.4 to read as follows:

7.6.2.4 A premix antifreeze solution with a freezing point below the expected minimum temperature for the locality shall be provided.

Delete existing 7.6.2.5 as well as the Figures 7.6.2.5(a), 7.6.2.5(b), and 7.6.2.5(c) and Annex A.7.6.2.5.

Delete 7.6.2.6.

Add an asterisk to Section 7.6 and a new Annex A.7.6 to read as follows:

A.7.6 In cold climates and areas where the potential for freezing of pipes is a concern, options other than antifreeze are available. Such options include installing the pipe in warm spaces, tenting insulation over the piping (as illustrated in NFPA 13D), listed heat tracing, and the use of dry pipe systems and preaction systems.

In A.7.6.2, delete the second paragraph.

A.7.6.2 Listed CPVC sprinkler pipe and fittings should be protected from freezing with glycerine only. The use of diethylene, ethylene, or propylene glycols is specifically prohibited. Laboratory testing shows that glycol-based antifreeze

solutions present a chemical environment detrimental to CPVC.

Delete existing A.7.6.2.4 and Figure A.7.6.2.4.

13D—10

Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings
and Manufactured Homes *as amended** 903.3.1.3, 903.3.5.1.1

**NFPA 13D, Amended Sections as follows:*

Revise Section 8.3.3.2.3 as follows:

~~8.3.3.2.3 Percent solution by volume of glycerine-water and propylene glycol-water mixtures shall be in accordance with Table 8.3.3.2.3, Figure 8.3.3.2.3(a), and Figure 8.3.3.2.3(b). Antifreeze solutions exceeding 50% by volume of glycerine-water or 40% by volume of propylene glycol-water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.~~

Revise Section 8.3.3.2.5 as follows:

~~8.3.3.2.5 Percent solution by volume of diethylene glycol-water and ethylene glycol-water shall be in accordance with Table 8.3.3.2.5. Antifreeze solutions of diethylene glycol-water or ethylene glycol-water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.~~

Add new Section 8.3.3.2.7 as follows:

~~8.3.3.2.7.1 Antifreeze solutions shall be factory premix solutions~~

Add a new definition as 3.3.9.1.1 and related annex note to read as follows:

3.3.9.1.1* Premixed Antifreeze Solution. A mixture of an antifreeze material with water that is prepared and factory-mixed by the manufacturer with a quality control procedure in place that ensures that the antifreeze solution remains homogeneous.

A.3.3.9.1.1 Where a tank is used as the water supply for the sprinkler system, the tank is not permitted to be filled with antifreeze.

Revise 4.1.4 and related annex note to read as follows:

4.1.4* Antifreeze Systems.

A.4.1.4 Sampling from the top and bottom of the system helps to determine if the solution has settled. Antifreeze solutions are heavier than water. If the antifreeze compound is separating from the water due to poor mixing, it will exhibit a higher concentration in the lower portion of the system than in the upper portions of the system. If the concentration is acceptable near the top, but too low near the water connection, it may mean that the system is becoming diluted near the water supply. If the concentration is either too high or too low in both the samples, it may mean that the wrong concentration was added to the system.

On an annual basis, test samples should be drawn from test valve B as shown in Figure 8.3.3.2.1(1), especially if the water portion of the system has been drained for maintenance or repairs. A small hydrometer can be used so that a small sample is sufficient. Where water appears at valve B, or where the sample indicates that the solution has become weakened, the entire system should be emptied and refilled with acceptable solution as previously described.

Where systems are drained in order to be refilled, it is not typically necessary to drain drops that are less than 36 inches in length. Most systems with drops have insufficient volume to cause a problem, even if slightly higher concentration solutions collect in the drops. For long drops with significant volume, consideration should be given to draining drops if

there is evidence that unacceptably high concentrations of antifreeze have collected in these long drops.

When emptying and refilling antifreeze solutions, every attempt should be made to recycle the old solution with the antifreeze manufacturer rather than discarding it.

4.1.4.1 Annual Antifreeze Solution Test and Replacement Procedure.

4.1.4.1.1 Samples of antifreeze solution shall be collected by qualified individuals in accordance with 4.1.4.1.1.1 or 4.1.4.1.1.2 on an annual basis.

4.1.4.1.1.1 The system shall be drained to verify that (a) the solution is in compliance with 8.3.3, and (b) the solution provides the necessary freeze protection. Solution samples shall be taken near the beginning and near the end of the draining process.

4.1.4.1.1.2* Solution samples shall be taken at the highest practical elevation and the lowest practical elevation of the system.

A.4.1.4.1.1.2 If not already present, test connections (valves) for collection of solution samples should be installed at the highest and lowest practical locations of the system or portion of the system containing antifreeze solution.

4.1.4.1.2 The two samples collected in accordance with the procedures specified in 4.1.4.1.1.1 or 4.1.4.1.1.2 shall be tested to verify that the specific gravity of both samples is similar and that the solution is in compliance with 8.3.3. The specific gravity of each solution shall be checked using a hydrometer with a suitable scale or a refractometer having a scale calibrated for the antifreeze solution.

4.1.4.1.3* If concentrations of the two samples collected in accordance with the procedures above are similar and in compliance with 8.3.3, then (a) the solution drained in accordance with 4.1.4.1.1.1 can be used to refill the system, or (b) the existing undrained solution tested in accordance with 4.1.4.1.1.2 shall be permitted to continue to be used. If the two samples are not similar and not in compliance with 8.3.3, then a solution in compliance with 8.3.3 shall be used to refill the system.

A.4.1.4.1.3 In the past, for some existing systems subject to extremely low temperatures, antifreeze solutions with concentrations greater than what is now permitted by NFPA 13D were used. Such high concentrations of antifreeze are no longer permitted. In situations where extremely low temperatures are anticipated, refilling the fire sprinkler system with a concentration of antifreeze solution currently permitted by the standard might not provide sufficient freeze protection without additional measures. Such measures might include converting the antifreeze system to another type of sprinkler system.

4.1.4.1.4 A tag shall be attached to the riser indicating the date the antifreeze solution was tested. The tag shall also indicate the type and concentration of antifreeze solution (by volume) with which the system is filled, the date the antifreeze was replaced (if applicable), the name of the contractor that tested and/or replaced the antifreeze solution, the contractor's license number, a statement indicating if the entire system was drained and replaced with antifreeze, and a warning to test the concentration of the antifreeze solutions at yearly intervals per NFPA 13D.

Add an asterisk to 8.3.3 and add a new A.8.3.3 to read as follows:

8.3.3* Antifreeze Systems.

A.8.3.3 Where protection of pipes from freezing is a concern, options other than antifreeze are available. Such alternatives include running the piping in warm spaces, tenting insulation over pipe, dry-pipe systems, and preaction systems.

Revise 8.3.3.2.1 to read as follows:

8.3.3.2.1* Unless permitted by 8.3.3.2.1.1, antifreeze solutions shall be limited to premixed antifreeze solutions of glycerine (chemically pure or United States Pharmacopoeia 96.5%) at a maximum concentration of 50% by volume,

propylene glycol at a maximum concentration of 40% by volume, or other solutions listed specifically for use in fire protection systems.

Add a new 8.3.3.2.1.1 to read as follows:

8.3.3.2.1.1. For existing systems, antifreeze solutions shall be limited to premixed antifreeze solutions of glycerine (chemically pure or United States Pharmacopoeia 96.5%) at a maximum concentration of 50% by volume, propylene glycol at a maximum concentration of 40% by volume, or other solutions listed specifically for use in fire protection systems.

Delete 8.3.3.2.2 and 8.3.3.2.3 and related Annex material A.8.3.3.2.3.

Move Table 8.3.3.2.3 to the annex and renumber as Table A.8.3.3.2.1 while deleting the rows in the table dealing with glycerine and 40% water, glycerine and 30% water, propylene glycol and 50% water and propylene glycol and 40% water. Add an annex note so that the annex and Table would appear as follows:

A.8.3.3.2.1 See Table A.8.3.3.2.1.

Table A.8.3.3.2.1 Properties of Glycerine and Propylene Glycol

<u>Material</u>	<u>Solution (by volume)</u>	<u>Specific Gravity at 60°F (15.6°C)</u>	<u>Freezing Point</u>	
			<u>°F</u>	<u>°C</u>
<u>Glycerine (C.P. or U.S.P. grade)</u>	<u>50% water</u>	<u>1.145</u>	<u>-20.9</u>	<u>-29.4</u>
<u>Hydrometer scale 1.000 to 1.200</u>				
<u>Propylene glycol</u>	<u>60% water</u>	<u>1.034</u>	<u>-6</u>	<u>-21.1</u>
<u>Hydrometer scale 1.000 to 1.200 (subdivisions 0.002)</u>				

C.P.: Chemically Pure; U.S.P.: United States Pharmacopoeia 96.5%.

Renumber 8.3.3.2.3.1 to 8.3.3.2.2.

8.3.3.2.2 The concentration of antifreeze solutions shall be limited to the minimum necessary for the anticipated minimum temperature.

Delete 8.3.3.2.4, 8.3.3.2.5 and Table 8.3.3.2.5.

Renumber 8.3.3.2.6 as 8.3.3.2.3 and renumber A.8.3.3.2.6 as A.8.3.3.2.3. Also renumber Figure A.8.3.3.2.6 as Figure A.8.3.3.2.3.

8.3.3.2.3* An antifreeze solution with a freezing point below the expected minimum temperature for the locality shall be installed.

A.8.3.3.2.3 Beyond certain limits, an increased proportion of antifreeze does not lower the freezing point of the solution (see Figure A.8.3.3.2.3). Glycerine, diethylene glycol, ethylene glycol, and propylene glycol never should be used without mixing with water in the proper proportions, because these materials tend to thicken near 32°F (0°C).

Renumber 8.3.3.2.7 as 8.3.3.2.4 and revise to read as follows:

8.3.3.2.4 The specific gravity of the antifreeze shall be checked by a hydrometer with a scale having 0.002 subdivisions in accordance with Figure 8.3.3.2.4(a) and 8.3.3.2.4(b).

Renumber Figure 8.3.3.2.3(a) as Figure 8.3.3.2.4(a) and delete the 50% curve.

Renumber Figure 8.3.3.2.3(b) as Figure 8.3.3.2.4(b) and delete the 60% and 70% curves.

****NFPA 13R, Amended Sections as follows:***

Add new Section 5.4.2.1 as follows:

5.4.2.1 Antifreeze solutions exceeding 50% by volume of glycerine water or 40% by volume of propylene glycol water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.

Add new Section 5.4.2.2 as follows:

5.4.2.2 Antifreeze solutions of diethylene glycol water or ethylene glycol water mixtures shall not be permitted within dwelling unit portions of the sprinkler system.

Notation:

Authority: Health and Safety Code Sections 13100.1, 13108, 13143, 13210, 13211, 17921(b), 18928(a), 18949.2(b) and (c)

References: 13108, 13113, 13211, 17921(b) 18949.2(b) and (c)

[Item No. 3. Amendments for further clarification, correction and consistency with other SFM regulations]

**CHAPTER 24
TENTS AND OTHER MEMBRANE STRUCTURES**

2404.2 Flame propagation performance treatment. Before a permit is granted, the owner or agent shall file with the fire code official a certificate executed by an approved testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, are ~~composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.~~ *flame resistant in accordance with appropriate standards set forth in CCR, Title 19, Division 1, Chapter 8. Tops and sidewalls shall be made either from fabric which has been flame resistant treated with an approved exterior chemical process by an approved application concern, or from inherently flame resistant fabric approved and listed by the State Fire Marshal (see CCR, Title 19, Division 1, Chapter 8).*

**CHAPTER 47
REFERENCED STANDARDS**

NFPA National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13115, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2

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

[Item No. 4. Modifications that have no change in regulatory effect or repeal of amendments that are no longer necessary]

CHAPTER 9 FIRE PROTECTION SYSTEMS

907.2.11.4 Power source. In new construction ~~construction~~ and in newly classified Group R-3.1 occupancies, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery back-up shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system.

CHAPTER 10 MEANS OF EGRESS

1011.3 Tactile exit signage. ~~For the purposes of Section 1003.2.8.6, the term "tactile exit signs" shall mean those required signs that comply with Section 1117B.5.1 Item 1. Tactile exit signs shall be required at the following locations:~~

1. Each grade-level exterior exit door that is required to comply with Section 1011.1, shall be identified by a tactile exit sign with the word, "EXIT."
2. Each exit door that is required to comply with Section 1011.1, and that leads directly to a grade-level exterior exit by means of a stairway or ramp shall be identified by a tactile exit sign with the following words as appropriate:

A2.1. "EXIT STAIR DOWN"

B2.2. "EXIT RAMP DOWN"

C2.3. "EXIT STAIR UP"

D2.4. "EXIT RAMP UP"

Where the exit door leads both to a ramp and a stairway, the tactile sign shall read "EXIT RAMP/STAIR DOWN" or "EXIT RAMP/STAIR UP."

3. Each exit door that is required to comply with Section 1011.1, and that leads directly to a grade-level exterior exit by means of an exit enclosure or an exit passageway shall be identified by a tactile exit sign with the words, "EXIT ROUTE."
4. Each exit access door from an interior room or area to a corridor or hallway that is required to ~~have a visual exit sign~~ comply with Section 1011.1, shall be identified by a tactile exit sign with the words "EXIT ROUTE."
5. Each exit door through a horizontal exit that is required to comply with Section 1011.1, shall be identified by a sign with the words, "TO EXIT."

For the purposes of this Section "tactile exit signs" shall comply with Section 1117B.5.1 Item 1 of the California Building Code.

1011.7 Path marking. When exit signs are required by Chapter 10, in addition to approved floor-level exit signs, approved path marking shall be installed at floor level or no higher than 8 inches (203 mm) above the floor level in all interior rated exit corridors of unsprinklered Group A ~~occupancies~~, and Group R-1 and R-2 occupancies.

Such marking shall be continuous except as interrupted by door-ways, corridors or other such architectural features in order to provide a visible delineation along the path of travel.

Note: Pursuant to Health and Safety Code Section 13143, the California amendments of this section shall apply to all newly constructed buildings or structures subject to this section for which a building permit is issued (or construction commenced, where no building permit is issued) on or after January 1, 1989.

~~**1025.5 Ducts and air transfer openings.** Ducts and air transfer openings through fire walls or fire barriers, forming a horizontal exit, shall be designed and protected in accordance with Section 716 in order to afford safety from both fire and smoke in the refuge area. All ducts and air transfer openings shall be protected by listed combination fire/smoke dampers.~~

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

[Item No. 5. Statutory modification and/or correction of existing regulation]

**CHAPTER 2
DEFINITIONS**

BEDRIDDEN PERSON. A person, requiring assistance in turning and repositioning in bed, or being unable to independently transfer to and from bed, except in facilities with appropriate and sufficient care staff, mechanical devices if necessary, and safety precautions as determined in Title 22 regulations, by the Director of Social Services or his or her designated representative. Persons who are unable to independently transfer to and from bed, but who do not need assistance to turn or reposition in bed, shall be considered nonambulatory.

The Director of Social Services or his or her designated representative shall make the determination of the bedridden status of persons with developmental disabilities, in consultation with the Director of Developmental Services or his or her designated representative.

The Director of Social Services or his or her designated representative shall make the determination of the bedridden status of all other persons with disabilities who are not developmentally disabled.

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

[B] Group I-4, day-care facilities. This group shall include buildings and structures occupied by *persons* of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the *person* cared for. A facility such as the above with *six* or fewer *clients* shall be classified as Group R-3 or shall comply with the *California Residential Code*. Places of worship during religious functions are not included.

Adult day-care facility. A facility that provides accommodations for less than 24 hours for more than ~~five~~^{six} unrelated adults and provides supervision and personal care services shall be classified as Group I-4.

Child day-care facility. Child care facilities that provide supervision and personal care on less than a 24-hour basis for more than *six* children *under 2 years of age* shall be classified as Group I-4.

Exception: A child day care facility that provides care for more than *six* but no more than 100 children under 2 *years of age*, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

CHAPTER 46 CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

4603.7.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual *dwelling* or *sleeping unit*, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing *alterations*, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where *alterations* or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for interconnection without the removal of interior finishes.
3. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
4. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

4603.7.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where no construction is taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing *alterations* or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for building wiring without the removal of interior finishes.

4. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.

5. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

4603.7.5 Additional provisions for existing Group ~~R-3R~~ occupancies.

4603.7.5.1 Existing Buildings housing Group ~~R-3R~~ Occupancies established prior to the effective date of these regulations may have their use continued if they conform or are made to conform to provisions of these regulations to the extent that reasonable and adequate life safety against the hazards of fire, panic and explosion is substantially provided. Additional means of egress, the installation of automatic sprinkler systems, automatic fire alarm system or other life safety measures, may be required to provide reasonable and adequate safety.

Note: It is the intent of this sections that every existing occupancy need not mandatorily conform with the requirements for new construction. Reasonable judgment in the application of requirements must be exercised by the enforcing agency.

APPENDIX CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

425.3.2 Limitations six or less clients. Group R-3.1 occupancies where nonambulatory clients are housed above the first story, having more than two stories in height or having more than 3,000 square feet (279 m²) of floor area above the first story shall not be of less than one-hour fire-resistance-rated construction throughout.

In Group R-3.1 occupancies housing a bedridden client, the client sleeping room shall not be located above or below the first story.

Exception: Clients who become bedridden as a result of a temporary illness as defined in Health and Safety Code Sections 1566.45, 1568.0832 and 1569.72. A temporary illness is an illness, which persists for 14 days or less. A bedridden client may be retained in excess of the 14 days upon approval by the Department of Social Services and may continue to be housed on any story in a Group R-3.1 occupancy classified as a licensed residential facility.

Every licensee admitting or retaining a bedridden resident shall, within 48 hours of the resident's admission or retention in the facility, notify the local fire authority with jurisdiction of the estimated length of time the resident will retain his or her bedridden status in the facility.

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

[Item No. 6. Modifications for elevator standards and correlation with CCR, Title 8, Division 1, DOSH Elevator Safety Orders]

CHAPTER 5 FIRE SERVICE FEATURES

508.1.5 Required features. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *stairway* doors simultaneously.
8. Sprinkler valve and waterflow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress*, fire protection systems, fire-fighting equipment and fire department access and the location of *fire walls*, *fire barriers*, *fire partitions*, *smoke barriers* and smoke partitions.
13. Work table.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. Elevator fire recall switch in accordance with ~~ASME A17.1~~ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.
17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

Fire command centers shall not be used for the housing of any boiler, heating unit, generator, combustible storage, or similar hazardous equipment or storage.

CHAPTER 6 BUILDING SERVICES AND SYSTEMS

607.1 Emergency operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more shall comply with the requirements in Chapter 46. New elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ~~ASME A17.1~~ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.

607.5 Shunt trip. *Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, Section 6-4621.4, Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to the application of water. This means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply*

~~**607.5.1** Elevator power shunt trip shall not activate prior to the completion of elevator Phase I emergency recall operation to the recall floor.~~

~~**607.5.2** Elevator power shunt trip capability shall be disabled during Phase II emergency in-car operation.~~

~~**607.5.3** Audible and visual annunciation shall be provided at the fire alarm control unit indicating the disabling of elevator power shunt trip capability under Phase II operation.~~

~~**607.5.4** Audible and visual annunciation shall be provided at the fire alarm control unit indicating that the automatic sprinklers, smoke detectors or heat detectors in the elevator hoistway or elevator machine room have activated.~~

~~**607.5.5** Visual annunciation shall be provided inside all elevator cars indicating that the automatic sprinklers, smoke detectors or heat detectors in the elevator hoistway or elevator machine room have activated.~~

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

903.3.1.1.1 Exempt locations. *In other than Group I-2, I-2.1 and I-3 occupancies, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.*

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. ~~Fire service access e~~ Elevator machine rooms and machinery spaces in accordance with 3006.4.1 of the California Building Code.
4. *Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the California Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 712 of the California Building Code, or both.*

907.4.3 Elevator emergency operation. Automatic fire detectors installed for elevator emergency operation shall be installed in accordance with the provisions of ~~ASME A17.1~~ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders and NFPA 72.

**CHAPTER 10
MEANS OF EGRESS**

1007.4 Elevators. In order to be considered part of an *accessible means of egress*, an elevator shall comply with the emergency operation and signaling device requirements of ~~Section 2.27 of ASME A17.1~~ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders. Standby power shall be provided in accordance with Chapter 27 and Section 3003 of the *California Building Code*. The elevator shall be accessed from either an *area of refuge* complying with Section 1007.6 or a *horizontal exit*.

Exceptions:

1. Elevators are not required to be accessed from an *area of refuge* or *horizontal exit* in *open parking garages*.
2. Elevators are not required to be accessed from an *area of refuge* or *horizontal exit* in buildings and facilities equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.
3. Elevators not required to be located in a shaft in accordance with Section 708.2 of the *California Building Code* are not required to be accessed from an *area of refuge* or *horizontal exit*.
4. Elevators are not required to be accessed from an *area of refuge* or *horizontal exit* for smoke protected seating areas complying with Section 1028.6.2.

**CHAPTER 47
REFERENCED STANDARDS**



American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Standard reference number	Title	Referenced in code section number
A17.1/CSA B44—2007	Safety Code for Elevators and Escalators	508.1.5, 607.1, 907.4.3, 1007.4



National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02269-9101

Standard reference number	Title	Referenced in code section number
13—10	Installation of Sprinkler Systems <i>as amended</i> *	903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.7.3, 2301.1, 2304.2, Table 2306.2, 2306.9, 2307.2, 2307.2.1, 2308.2.2, 2308.2.2.1, 2308.4, 2310.1, 2501.1, 2804.1, 2806.5.7, 3404.3.3.9, Table 3404.3.6.3(7), 3404.3.7.5.1, 3404.3.8.4

*NFPA 13, Amended Sections as follows:

8.15.5.6 Sprinklers shall be installed at the top and bottom of elevators that utilize polyurethane-coated steel belts or other similar combustible belt material.

Exception: Elevator cables and belts, including counterweight cables that are limited-combustible (Material).

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

[Item No. 7. Editorial modification correcting code references to the appropriate California Code]

CHAPTER 1

**DIVISION II
 ADMINISTRATION**

102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code*. Subject to the approval of the *fire code official*, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code and the ~~International~~California *Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

102.4 Application of building code. The design and construction of new structures shall comply with the ~~International~~California *Building Code*, and any *alterations*, additions, changes in use or changes in structures required by this code, which are within the scope of the ~~International~~California *Building Code*, shall be made in accordance therewith.

102.5 Application of residential code. Where structures are designed and constructed in accordance with the ~~International~~California *Residential Code*, the provisions of this code shall apply as follows:

1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code shall also apply.
2. Administrative, operational and maintenance provisions: All such provisions of this code shall apply.

CHAPTER 3 GENERAL PRECAUTIONS AGAINST FIRE

304.1.3 Space underneath seats. Spaces underneath grandstand and bleacher seats shall be kept free from combustible and flammable materials. Except where enclosed in not less than 1-hour fire-resistance-rated construction in accordance with the *International California Building Code*, spaces underneath grandstand and bleacher seats shall not be occupied or utilized for purposes other than *means of egress*.

306.1 Motion picture projection rooms. Electric arc, xenon or other light source projection equipment which develops hazardous gases, dust or radiation and the projection of ribbon-type cellulose nitrate film, regardless of the light source used in projection, shall be operated within a motion picture projection room complying with Section 409 of the *International California Building Code*.

308.3 Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

Exceptions:

1. Open-flame devices are allowed to be used in the following situations, provided *approved* precautions are taken to prevent ignition of a combustible material or injury to occupants:
 - 1.1. Where necessary for ceremonial or religious purposes in accordance with Section 308.1.7.
 - 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.2.
 - 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected.
2. Heat-producing equipment complying with Chapter 6 and the *International California Mechanical Code*.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the *fire code official* are taken to prevent ignition of combustible materials.

311.1.1 Abandoned premises. Buildings, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized *persons* or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe and abated by demolition or rehabilitation in accordance with the *International Property Maintenance Code* and the *International California Building Code*.

311.3 Removal of combustibles. *Persons* owning, or in charge or control of, a vacant building or portion thereof, shall remove there from all accumulations of combustible materials, flammable or combustible waste or rubbish and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized *persons*. The premises shall be maintained clear of waste or hazardous materials.

Exceptions:

1. Buildings or portions of buildings undergoing additions, *alterations*, repairs or change of occupancy in accordance with the *International California Building Code*, where waste is controlled and removed as required by Section 304.
2. Seasonally occupied buildings.

313.1 General. Fueled equipment including, but not limited to, motorcycles, mopeds, lawn-care equipment, portable generators and portable cooking equipment, shall not be stored, operated or repaired within a building.

Exceptions:

1. Buildings or rooms constructed for such use in accordance with the International California Building Code.
2. Where allowed by Section 314.
3. Storage of equipment utilized for maintenance purposes is allowed in *approved* locations when the aggregate fuel capacity of the stored equipment does not exceed 10 gallons (38 L) and the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.

**CHAPTER 4
EMERGENCY PLANNING AND PREPAREDNESS**

408.7.2 Staffing. Group I-3 occupancies shall be provided with 24-hour staffing. Staff shall be within three floors or 300 feet (91 440 mm) horizontal distance of the access door of each resident housing area. In Use Conditions 3, 4 and 5, as defined in Chapter 2, the arrangement shall be such that the staff involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within 2 minutes of an alarm.

Exception: Staff shall not be required to be within three floors or 300 feet (9144 mm) in areas in which all locks are unlocked remotely and automatically in accordance with Section 408.4 of the International California Building Code.

**CHAPTER 5
FIRE SERVICE FEATURES**

504.1 Required access. Exterior doors and openings required by this code or the International California Building Code shall be maintained readily accessible for emergency access by the fire department. An *approved* access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the *fire code official*.

**CHAPTER 6
BUILDING SERVICES AND SYSTEMS**

607.3 Fire service access elevator lobbies. Where fire service access elevators are required by Section 3007 of the International California Building Code, fire service access elevator lobbies shall be maintained free of storage and furniture.

**CHAPTER 7
FIRE-RESISTANCE-RATED CONSTRUCTION**

704.1 Enclosure. Interior vertical shafts, including but not limited to *stairways*, elevator hoistways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected as required in Chapter 46. New floor openings in existing buildings shall comply with the International California Building Code.

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

**TABLE 914.8.2
HANGAR FIRE SUPPRESSION REQUIREMENTS a, b, c**

SINGLE FIRE AREA, SQUARE FEET	<u>INTERNATIONAL CALIFORNIA</u> BUILDING CODE TYPE OF CONSTRUCTION
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[Remainder of Table not show for clarity]

For SI: 1 square foot = 0.0929 m², 1 foot = 304.8 mm.

- a. Aircraft hangars with a door height greater than 28 feet shall be provided with fire suppression for a Group I hangar regardless of maximum fire area.
- b. Groups shall be as classified in accordance with NFPA 409.
- c. Membrane structures complying with Section 3102 of the International California Building Code shall be classified as a Group IV hangar.

CHAPTER 11 AVIATION FACILITIES

1104.6 Open flame. Repairing of aircraft requiring the use of open flames, spark-producing devices or the heating of parts above 500°F (260°C) shall only be done outdoors or in an area complying with the provisions of the International California Building Code for a Group F-1 occupancy.

1106.17 Fuel-transfer locations. Aircraft fuel-transfer operations shall be prohibited indoors.

Exception: In aircraft hangars built in accordance with the provisions of the International California Building Code for Group F-1 occupancies, aircraft fuel-transfer operations are allowed where:

1. Necessary to accomplish aircraft fuel-system maintenance operations. Such operations shall be performed in accordance with nationally recognized standards; or
2. The fuel being used has a *flash point* greater than 100°F (37.8°C).

1107.1 General. Helistops and heliports shall be maintained in accordance with Sections 1107.2 through 1107.8. Helistops and heliports on buildings shall be constructed in accordance with the International California Building Code.

1107.4 Exits. *Exits* and *stairways* shall be maintained in accordance with Section 412.7 of the International California Building Code.

CHAPTER 12 DRY CLEANING

1203.3 Design. The occupancy classification, design and construction of dry cleaning plants shall comply with the applicable requirements of the International California Building Code.

1204.2.1 Ventilation. Ventilation shall be provided in accordance with Section 502 of the International California Mechanical Code and DOL 29 CFR Part 1910.1000, where applicable.

1205.3 Type IV and V systems. Type IV and V dry cleaning systems shall be provided with an automatically activated exhaust ventilation system to maintain a minimum of 100 feet per minute (0.51 m/s) air velocity through the loading door when the door is opened. Such systems for dry cleaning equipment shall comply with the International California Mechanical Code.

1207.1 General equipment requirements. Dry cleaning systems, including dry cleaning units, washing machines, stills, drying cabinets, tumblers and their appurtenances, including pumps, piping, valves, filters and solvent coolers, shall be installed and maintained in accordance with NFPA 32. The construction of buildings in which such systems are located shall comply with the requirements of this section and the International California Building Code.

CHAPTER 16 FRUIT AND CROP RIPENING

1604.5 Heating. Heating shall be by indirect means utilizing low-pressure steam, hot water or warm air.

Exception: Electric or fuel-fired heaters *approved* for use in hazardous (classified) locations which are installed and operated in accordance with the applicable provisions of NFPA 70, the InternationalCalifornia Mechanical Code or the International Fuel Gas Code.

CHAPTER 24 TENTS, CANOPIES AND OTHER MEMBRANE STRUCTURES

2402.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

MEMBRANESTRUCTURE. An air-inflated, air-supported, cable or frame-covered structure as defined by the InternationalCalifornia Building Code and not otherwise defined as a tent. See Chapter 31 of the InternationalCalifornia Building Code.

2403.8.4 Membrane structures on buildings. Membrane structures that are erected on buildings, balconies, decks or other structures shall be regulated as permanent membrane structures in accordance with Section 3102 of the InternationalCalifornia Building Code.

CHAPTER 30 COMPRESSED GASES

3006.2 Interior supply location. Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the permit amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 3006.2.1, 3006.2.2 or 3006.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the *maximum allowable quantity per control area* as set forth in Section 2703.1 shall be in accordance with the InternationalCalifornia Building Code for high-hazard Group H occupancies.

CHAPTER 40 OXIDIZERS

4006.4 Maximum aggregate quantity. The maximum aggregate quantity of liquid oxygen allowed in storage and in use in each *dwelling unit* shall be 31.6 gallons (120 L).

Exceptions:

1. The maximum aggregate quantity of liquid oxygen allowed in Group I-4 occupancies shall be limited by the maximum allowable quantity set forth in Table 2703.1.1(1).
2. Where individual sleeping rooms are separated from the remainder of the *dwelling unit* by *fire barriers* constructed in accordance with Section 707 of the InternationalCalifornia Building Code, and *horizontal assemblies* constructed in accordance with Section 712 of the InternationalCalifornia Building Code, or both, having a minimum *fire-resistance rating* of 1 hour, the maximum aggregate quantity per *dwelling unit* shall be increased to allow a maximum of 31.6 gallons (120 L) of liquid oxygen per sleeping room.

CHAPTER 46 CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

4601.2 Intent. The intent of this chapter is to provide a minimum degree of fire and life safety to *persons* occupying existing buildings by providing for *alterations* to such buildings that do not comply with the minimum requirements of the InternationalCalifornia Building Code.

4601.3 Permits. Permits shall be required as set forth in Section 105.7 and the International California Building Code and this code.

4604.5 Illumination emergency power. The power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more *means of egress*:

1. Group A having 50 or more occupants.

Exception: Assembly occupancies used exclusively as a place of worship and having an *occupant load* of less than 300.

2. Group B buildings three or more stories in height, buildings with 100 or more occupants above or below a *level of exit discharge* serving the occupants or buildings with 1,000 or more total occupants.
3. Group E in interior stairs, *corridors*, windowless areas with student occupancy, shops and laboratories.
4. Group F having more than 100 occupants.

Exception: Buildings used only during daylight hours which are provided with windows for natural light in accordance with the International California Building Code.

5. Group I.
6. Group M.

Exception: Buildings less than 3,000 square feet (279m²) in gross sales area on one story only, excluding mezzanines.

7. Group R-1.

Exception: Where each *sleeping unit* has direct access to the outside of the building at grade.

8. Group R-2.

Exception: Where each *dwelling unit* or *sleeping unit* has direct access to the outside of the building at grade.

9. Group R-4.

Exception: Where each *sleeping unit* has direct access to the outside of the building at ground level.

4604.18 Corridors. *Corridors* serving an *occupant load* greater than 30 and the openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept closed or selfclosing.

Exceptions:

1. *Corridors* in occupancies other than in Group H, which are equipped throughout with an *approved automatic sprinkler system*.
2. Patient room doors in *corridors* in occupancies in Group I-2 where *smoke barriers* are provided in accordance with the International California Building Code.
3. *Corridors* in occupancies in Group E where each room utilized for instruction or assembly has at least one-half of the required *means of egress* doors opening directly to the exterior of the building at ground level.
4. *Corridors* that are in accordance with the International California Building Code.

4604.18.1 Corridor openings. Openings in *corridor* walls shall comply with the requirements of the International California Building Code.

Exceptions:

1. Where 20-minute fire door assemblies are required, solid wood doors at least 1.75 inches (44 mm) thick or insulated steel doors are allowed.
2. Openings protected with fixed wire glass set in steel frames.
3. Openings covered with 0.5-inch (12.7 mm) gypsum wallboard or 0.75-inch (19.1 mm) plywood on the room side.
4. Opening protection is not required when the building is equipped throughout with an *approved automatic sprinkler system*.

TABLE 4604.18.2

COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

[Table not show for clarity]

For SI: 1 foot = 304.8 mm.

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See Section 1028.9.5 for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy chapter.
- d. See the *InternationalCalifornia Building Code* for special requirements on spacing of doors in aircraft hangars.
- e. Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet (93m²) shall have at least two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.

NR = No requirements.

**APPENDIX A
BOARD OF APPEALS**

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of the *InternationalCalifornia Fire Code* pursuant to the provisions of Section 108 of the *InternationalCalifornia Fire Code*. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *fire code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

**APPENDIX D
FIRE APPARATUS ACCESS ROADS**

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *InternationalCalifornia Fire Code*.

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family *dwelling units* where the number of *dwelling units* exceeds 30 shall be provided with separate and *approved* fire apparatus access roads and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 30 *dwelling units* on a single public or private fire apparatus access road and all *dwelling units* are equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *InternationalCalifornia Fire Code*, access from two directions shall not be required.
2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the *fire code official*.

**D108
REFERENCED STANDARDS**

ASTM F 2200-05	Standard Specification for Automated Vehicular Gate Construction	D103.5
ICC IFC-09	International California Fire Code	D101.5, D107.1
UL 325-02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with revisions through February 2006	D103.5

APPENDIX E HAZARD CATEGORIES

E101.1 Scope. This appendix provides information, explanations and examples to illustrate and clarify the hazard categories contained in Chapter 27 of the ~~International~~California Fire Code. The hazard categories are based upon the DOL 29 CFR. Where numerical classifications are included, they are in accordance with nationally recognized standards. This appendix should not be used as the sole means of hazardous materials classification.

E102.1.1 Explosives and blasting agents. The current UN/DOT classification system recognized by international authorities, the Department of Defense and others classifies all *explosives* as Class 1 materials. They are then divided into six separate divisions to indicate their relative hazard. There is not a direct correlation between the designations used by the old DOT system and those used by the current system nor is there correlation with the system (high and low) established by the Bureau of Alcohol, Tobacco and Firearms (BATF). Table 3304.3 of the ~~International~~California Fire Code provides some guidance with regard to the current categories and their relationship to the old categories. Some items may appear in more than one division, depending on factors such as the degree of confinement or separation, by type of packaging, storage configuration or state of assembly.

In order to determine the level of hazard presented by *explosive materials*, testing to establish quantitatively their *explosive* nature is required. There are numerous test methods that have been used to establish the character of an *explosive material*. Standardized tests, required for finished goods containing *explosives* or *explosive materials* in a packaged form suitable for shipment or storage, have been established by UN/DOT and BATF. However, these tests do not consider key elements that should be examined in a manufacturing situation. In manufacturing operations, the condition and/or the state of a material may vary within the process. The in-process material classification and classification requirements for materials used in the manufacturing process may be different from the classification of the same material when found in finished goods depending on the stage of the process in which the material is found. A classification methodology must be used that recognizes the hazards commensurate with the application to the variable physical conditions as well as potential variations of physical character and type of *explosive* under consideration.

Test methods or guidelines for hazard classification of energetic materials used for in-process operations shall be *approved by the fire code official*. Test methods used shall be DOD, BATF, UN/DOT or other *approved* criteria. The results of such testing shall become a portion of the files of the jurisdiction and be included as an independent section of any Hazardous Materials Management Plan (HMMP) required by Section 3305.2.1 of the ~~International~~California Fire Code. Also see Section 104.7.2 of the ~~International~~California Fire Code.

Examples of materials in various Divisions are as follows:

1. Division 1.1 (High *Explosives*). Consists of *explosives* that have a mass explosion hazard. A mass explosion is one which affects almost the entire pile of material instantaneously. Includes substances that, when tested in accordance with *approved* methods, can be caused to detonate by means of a blasting cap when unconfined or will transition from *deflagration* to a *detonation* when confined or unconfined. Examples: dynamite, TNT, nitroglycerine, C-3, HMX, RDX, encased *explosives*, military ammunition.
2. Division 1.2 (Low *Explosives*). Consists of *explosives* that have a projection hazard, but not a mass explosion hazard. Examples: nondetonating encased *explosives*, military ammunition and the like.
3. Division 1.3 (Low *Explosives*). Consists of *explosives* that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. The major hazard is radiant heat or violent burning, or both. Can be deflagrated when confined. Examples: smokeless powder, propellant *explosives*, display fireworks.

4. Division 1.4. Consists of *explosives* that pose a minor explosion hazard. The *explosive* effects are largely confined to the package and no projection of fragments of appreciable size or range is expected. An internal fire must not cause virtually instantaneous explosion of almost the entire contents of the package. Examples: squibs (nondetonating igniters), *explosive* actuators, *explosive* trains (low-level detonating cord).

5. Division 1.5 (Blasting Agents). Consists of very insensitive *explosives*. This division is comprised of substances which have a mass explosion hazard, but are so insensitive that there is very little probability of initiation or of transition from burning to *detonation* under normal conditions of transport. Materials are not cap sensitive; however, they are mass detonating when provided with sufficient input. Examples: oxidizer and liquid fuel slurry mixtures and gels, ammonium nitrate combined with fuel oil.

6. Division 1.6. Consists of extremely insensitive articles which do not have a mass *explosive* hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation. Although this category of materials has been defined, the primary application is currently limited to military uses. Examples: Low vulnerability military weapons.

Explosives in each division are assigned a compatibility group letter by the Associate Administrator for Hazardous Materials Safety (DOT) based on criteria specified by DOTn 49 CFR. Compatibility group letters are used to specify the controls for the transportation and storage related to various materials to prevent an increase in hazard that might result if certain types of *explosives* were stored or transported together. Altogether, there are 35 possible classification codes for *explosives*, e.g., 1.1A, 1.3C, 1.4S, etc.

E102.1.8.1 Classification of organic peroxides according to hazard.

Unclassified: Unclassified organic peroxides are capable of *detonation* and are regulated in accordance with Chapter 33 of the ~~International~~ California Fire Code.

Class I: acetyl cyclohexane sulfonyl 60-65 percent concentration by weight, fulfonyl peroxide, benzoyl peroxide over 98 percent concentration, t-butyl hydroperoxide 90 percent, t-butyl peroxyacetate 75 percent, t-butyl peroxyisopropylcarbonate 92 percent, diisopropyl peroxydicarbonate 100 percent, di-n-propyl peroxydicarbonate 98 percent, and di-n-propyl peroxydicarbonate 85 percent.

Class II: acetyl peroxide 25 percent, t-butyl hydroperoxide 70 percent (with DTBP and t-BuOH diluents), t-butyl peroxybenzoate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyisobutyrate 75 percent, t-butyl peroxyisopropyl-carbonate 75 percent, t-butyl peroxy-pivalate 75 percent, dybenzoyl peroxydicarbonate 85 percent, di-sec-butyl peroxydicarbonate 98 percent, di-sec-butyl peroxydicarbonate 75 percent, 1,1-di- (t-butylperoxy)-3,5,5-trimethylcyclohexane 95 percent, di-(2-ethylhexyl) peroxydicarbonate 97 percent, 2,5-dimethyl-2,5 di (benzoylperoxy) hexane 92 percent, and peroxyacetic acid 43 percent.

Class III: acetyl cyclohexane sulfonal peroxide 29 percent, benzoyl peroxide 78 percent, benzoyl peroxide paste 55 percent, benzoyl peroxide paste 50 percent peroxide/50 percent butylbenzylphthalate diluent, cumene hydroperoxide 86 percent, di-(4-butylcyclohexyl) peroxydicarbonate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyneodecanoate 75 percent, decanoyl peroxide 98.5 percent, di-t-butyl peroxide 99 percent, 1,1-di-(t-butylperoxy)3,5,5-trimethylcyclohexane 75 percent, 2,4-dichlorobenzoyl peroxide 50 percent, diisopropyl peroxydicarbonate 30 percent, 2,-5-dimethyl-2,5-di-(2-ethylhexanolperoxy)-hexane 90 percent, 2,5-dimethyl-2,5-di-(t-butylperoxy) hexane 90 percent and methyl ethyl ketone peroxide 9 percent active oxygen diluted in dimethyl phthalate.

Class IV: benzoyl peroxide 70 percent, benzoyl peroxide paste 50 percent peroxide/15 percent water/35 percent butylphthalate diluent, benzoyl peroxide slurry 40 percent, benzoyl peroxide powder 35 percent, t-butyl hydroperoxide 70 percent, (with water diluent), t-butyl peroxy-2-ethylhexanoate 50 percent, decumyl peroxide 98 percent, di-(2-ethylhexal) peroxydicarbonate 40 percent, laurel peroxide 98 percent, p-methane hydroperoxide 52.5 percent, methyl ethyl ketone peroxide 5.5 percent active oxygen and methyl ethyl ketone peroxide 9 percent active oxygen diluted in water and glycols.

Class V: benzoyl peroxide 35 percent, 1,1-di-t-butyl peroxy 3,5,5-trimethylcyclohexane 40 percent, 2,5-di-(t-butyl peroxy) hexane 47 percent and 2,4-pentanedione peroxide 4 percent active oxygen.

E103.2 Evaluation questions. The following are sample evaluation questions:

1. What is the material? Correct identification is important; exact spelling is vital. Check labels, MSDS, ask responsible *persons*, etc.
2. What are the concentration and strength?
3. What is the physical form of the material? Liquids, gases and finely divided solids have differing requirements for spill and leak control and containment.
4. How much material is present? Consider in relation to permit amounts, *maximum allowable quantity per control area* (from Group H occupancy requirements), amounts which require detached storage and overall magnitude of the hazard.
5. What other materials (including furniture, equipment and building components) are close enough to interact with the material?
6. What are the likely reactions?
7. What is the activity involving the material?
8. How does the activity impact the hazardous characteristics of the material? Consider vapors released or hazards otherwise exposed.
9. What must the material be protected from? Consider other materials, temperature, shock, pressure, etc.
10. What effects of the material must people and the environment be protected from?
11. How can protection be accomplished? Consider:
 - 11.1. Proper containers and equipment.
 - 11.2. Separation by distance or construction.
 - 11.3. Enclosure in cabinets or rooms.
 - 11.4. Spill control, drainage and containment.
 - 11.5. Control systems—ventilation, special electrical, detection and alarm, extinguishment, explosion venting, limit controls, exhaust scrubbers and excess flow control.
 - 11.6. Administrative (operational) controls—signs, ignition source control, security, personnel training, established procedures, storage plans and emergency plans.

Evaluation of the hazard is a strongly subjective process; therefore, the *person* charged with this responsibility must gather as much relevant data as possible so that the decision will be objective and within the limits prescribed in laws, policies and standards.

It may be necessary to cause the responsible *persons* in charge to have tests made by qualified *persons* or testing laboratories to support contentions that a particular material or process is or is not hazardous. See Section 104.7.2 of the ~~International~~ California Fire Code.

E104 REFERENCED STANDARDS

CGA P-20 (2003)	Standard for Classification of Toxic Mixtures	E103.1.3.1
CGA P-23 (2003)	Standard for Categorizing Gas Mixtures Containing Flammable and Nonflammable Components	E102.1.2
ICC IFC-09	International <u>California Fire Code</u>	E101.1, E102.1.1, E102.1.8.1, E103.2

APPENDIX F HAZARD RANKING

F101.1 Scope. Assignment of levels of hazards to be applied to specific hazard classes as required by NFPA 704 shall be in accordance with this appendix. The appendix is based on application of the degrees of hazard as defined

in NFPA 704 arranged by hazard class as for specific categories defined in Chapter 2 of the International California Fire Code and used throughout.

**SECTION F102
REFERENCED STANDARDS**

ICC IFC-09	<u>International California Fire Code</u>	F101.1
NFPA 704-07	Identification of the Hazards of Materials for Emergency Response	F101.1, F101.2

**APPENDIX J
EMERGENCY RESPONDER RADIO COVERAGE**

J103.2.2 Permit required. A construction permit, as required by Section 105.7.5 of the International California Fire Code, shall be obtained prior to the installation of the emergency responder radio coverage system.

J103.3.2 Permit required. A construction permit, as required by Section 105.7.5 of the International California Fire Code, shall be obtained prior to the modification or alteration of the emergency responder radio coverage system.

**SECTION J104
REFERENCED STANDARDS**

FCC 47 CFR 90.219—2007	Private Land Mobile Radio Services—Use of Signal Boosters	J103.2.5
ICC IFC—09	<u>International California Fire Code</u>	J103.2.2, J103.3.2
NFPA 72— 07 <u>10</u>	National Fire Alarm Code	J103.1.4

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

[Item No. 8. Reprint and/or modification of various provisions of California Code of Regulations, Title 19, Division 1 provisions following the CFC Sections noted below.]

**CHAPTER 1
SCOPE AND ADMINISTRATION
DIVISION I
CALIFORNIA ADMINISTRATION**

1.11.2 Duties and powers of the enforcing agency.

1.11.2.1 Enforcement.

1.11.2.1.1 The responsibility for enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety and other regulations of the State Fire Marshal shall except as provided in Section 1.11.2.1.2 be as follows:

1. The city, county, or city and county with jurisdiction in the area affected by the standard or regulation shall delegate the enforcement of the building standards relating to fire and panic safety and other regulations of the State Fire Marshal as they relate to Group R-3 occupancies, as described in Section 310.1 of Part 2 of the California Building Standards Code, to either of the following:
 - 1.1. The chief of the fire authority of the city, county or city and county, or an authorized representative.
 - 1.2. The chief building official of the city, county, or city and county, or an authorized representative.
2. The chief of any city or county fire department or of any fire protection district, and authorized representatives, shall enforce within the jurisdiction the building standards and other regulations of the State Fire Marshal, except those described in Item 1 or 4.
3. The State Fire Marshal shall have authority to enforce the building standards and other regulations of the State Fire Marshal in areas outside of corporate cities and districts providing fire protection services.
4. The State Fire Marshal shall have authority to enforce the building standards and other regulations of the State Fire Marshal in corporate cities and districts providing fire protection services on request of the chief fire official or the governing body.
5. Any fee charged pursuant to the enforcement authority of this section shall not exceed the estimated reasonable cost of providing the service for which the fee is charged pursuant to Section 66014 of the Government Code.

[California Code of Regulations, Title 19, Division 1, §1.11] Enforcement of Regulations.

In most instances the application of California Code of Regulations, Title 19, Division 1 to existing occupancies will necessitate the granting of sufficient time to effect the necessary changes. The inspection authority must, therefore, exercise good judgment in authorizing sufficient time to complete the required changes, taking into consideration the degree of danger to life in event of fire while rectification is being carried out. The inspection authority may require immediate compliance with any or all of the regulations, or he may grant a reasonable length of time in which to conform.

[California Code of Regulations, Title 19, Division 1, §3.12] Enforcement Agency.

(a) The provisions of California Code of Regulations, Title 19, Division 1 regulations shall be enforced by the State Fire Marshal, the chief of any city or county fire department or fire protection district, and their authorized representatives, in their respective areas of jurisdiction.

(b) The division of authority for the enforcement of these regulations shall be in accordance with the following:

- (1) The chief of any city or county fire department or fire protection district, and their authorized representatives shall enforce the rules and regulations in their respective areas.
- (2) The State Fire Marshal shall have authority to enforce the rules and regulations in areas outside of corporate cities and county fire protection districts.
- (3) The State Fire Marshal shall have authority to enforce the rules and regulations in corporate cities and county fire protection districts upon request of the chief fire official or the governing body.

(c) Regardless of the provisions of subsections (a) and (b) above, these regulations shall be enforced in state institutions, state-owned and state-occupied buildings in accordance with the provisions of Section 13108, Health and Safety Code.

(d) Regardless of the above provisions of this section, these regulations shall be enforced only by the State Fire Marshal in every jail or place of detention for persons charged with or convicted of a crime, unless the chief of a city or county fire department or fire protection district, or such chief's authorized representative, indicates in writing to the State Fire Marshal that inspections of such jails or places of detention will be conducted by the chief or such person's authorized representative, in their respective area of jurisdiction. The inspections shall be made at least once every two years for the purpose of enforcing the regulations adopted by the State Fire Marshal, pursuant to Section 13143. Reports of inspection conducted pursuant to this subsection shall be on forms provided by the State Fire Marshal and shall be submitted to the official in charge of the facility, the local governing body, the State Fire Marshal and the Corrections Standards Authority within 30 days of the inspections.

1.11.2.2 Right of entry. The fire chief of any city, county or fire protection district, or such person's authorized representative, may enter any state institution or any other state-owned or state-occupied building for the purpose of preparing a fire suppression preplanning program or for the purpose of investigating any fire in a state-occupied building.

The State Fire Marshal, his or her deputies or salaried assistants, the chief of any city or county fire department or fire protection district and his or her authorized representatives may enter any building or premises not used for dwelling purposes at any reasonable hour for the purpose of enforcing this chapter. The owner, lessee, manager or operator of any such building or premises shall permit the State Fire Marshal, his or her deputies or salaried assistants and the chief of any city or county fire department or fire protection district and his or her authorized representatives to enter and inspect them at the time and for the purpose stated in this section.

[California Code of Regulations, Title 19, Division 1, §1.08] Report of Arrest.

Any inspection authority who, in the exercise of his authority as a Deputy State Fire Marshal, causes any legal complaints to be filed or any arrest to be made shall notify the State Fire Marshal immediately following such action.

[California Code of Regulations, Title 19, Division 1, §1.13] Penalty.

Section 13112 of the Health and Safety Code provides that:

(a) "Every person who violates any provision of this chapter, or any order, rule or regulation made pursuant to this chapter is guilty of a misdemeanor punishable by a fine of not less than one hundred dollars (\$100) or more than five hundred dollars (\$500), or by imprisonment for not more than six months, or by both."

(b) "A person is guilty of a separate offense each day during which he commits, continues, or permits a violation of any provision of, or any order, rule or regulation made pursuant to, this chapter."

CHAPTER 10 MEANS OF EGRESS

1014.4 Aisles. Aisles serving as a portion of the exit access in the means of egress system shall comply with the requirements of this section. Aisles shall be provided from all occupied portions of the exit access which contain seats, tables, furnishings, displays and similar fixtures or equipment. Aisles serving assembly areas, other than seating at tables, shall comply with Section 1025. Aisles serving reviewing stands, grandstands and bleachers shall also comply with Section 1025.

The required width of aisles shall be unobstructed.

Exception: Doors, when fully opened, and handrails shall not reduce the required width by more than 7 inches (178 mm). Doors in any position shall not reduce the required width by more than one-half. Other nonstructural projections such as trim and similar decorative features are permitted to project into the required width 1.5 inches (38 mm) for each side.

[California Code of Regulations, Title 19, Division 1, §3.06(a)] Bonding of Chairs and Spacing of Tables.

(a) *Bonding of chairs. In every Group A and Group E occupancy, all loose seats, folding chairs or similar seating facilities that are not fixed to the floor shall be bonded together in groups of not less than three.*

Exceptions:

- (1) *When not more than ~~200~~200 such seats, chairs or facilities are provided, bonding thereof may be deleted.*
- (2) *The bonding of chairs shall not be required when tables are provided as when the occupancy is used for dining or similar purposes.*
- (3) *Upon approval of the enforcing agency, the bonding of chairs shall not be required when the placement and location of such chairs do not obstruct any required exit or any line of egress toward required exits and do not constitute a fire hazard as defined in California Code of Regulations, Title 19, Division 1, Section 3.14.*

1028.12 Seat stability. In places of assembly, the seats shall be securely fastened to the floor.

Exceptions:

1. In places of assembly or portions thereof without ramped or tiered floors for seating and with 200 or fewer seats, the seats shall not be required to be fastened to the floor.
2. In places of assembly or portions thereof with seating at tables and without ramped or tiered floors for seating, the seats shall not be required to be fastened to the floor.
3. In places of assembly or portions thereof without ramped or tiered floors for seating and with greater than 200 seats, the seats shall be fastened together in groups of not less than three or the seats shall be securely fastened to the floor.
4. In places of assembly where flexibility of the seating arrangement is an integral part of the design and function of the space and seating is on tiered levels, a maximum of 200 seats shall not be required to be fastened to the floor. Plans showing seating, tiers and *aisles* shall be submitted for approval.
5. Groups of seats within a place of assembly separated from other seating by railings, *guards*, partial height walls or similar barriers with level floors and having no more than 14 seats per group shall not be required to be fastened to the floor.
6. Seats intended for musicians or other performers and separated by railings, *guards*, partial height walls or similar barriers shall not be required to be fastened to the floor.

[California Code of Regulations, Title 19, Division 1, §3.06(a)] Bonding of Chairs and Spacing of Tables.

(a) *Bonding of chairs. In every Group A and Group E occupancy, all loose seats, folding chairs or similar seating facilities that are not fixed to the floor shall be bonded together in groups of not less than three.*

Exceptions:

- (1) *When not more than ~~200~~200 such seats, chairs or facilities are provided, bonding thereof may be deleted.*
- (2) *The bonding of chairs shall not be required when tables are provided as when the occupancy is used for dining or similar purposes.*
- (3) *Upon approval of the enforcing agency, the bonding of chairs shall not be required when the placement and location of such chairs do not obstruct any required exit or any line of egress toward required exits and do not constitute a fire hazard as defined in California Code of Regulations, Title 19, Division 1, Section 3.14.*

1029.4 Operational constraints. Emergency escape and rescue openings *and any exit doors* shall be *maintained free of any obstructions other than those allowed by this section and shall be* operational from the inside of the room. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with Section 1029.2 and such devices shall be releasable or removable from the inside without the use of a key, tool, *special knowledge or effort* or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates or similar devices

are installed, smoke alarms shall be installed in accordance with Sections 907.2.11 regardless of the valuation of the alteration. *The release mechanism shall be maintained operable at all times.*

Such bars, grilles, grates or any similar devices shall be equipped with an approved exterior release device for use by the fire department only when required by the authority having jurisdiction.

Where security bars (burglar bars) are installed on emergency egress and rescue windows or doors, on or after July 1, 2000, such devices shall comply with California Building Standards Code, Part 12, Chapter 12-3 and other applicable provisions of Part 2.

Exception: *Group R1 occupancies provided with a monitored fire sprinkler system in accordance with section 903.2.8 and designed in accordance with NFPA 13 may have openable windows permanently restricted to a maximum 4-inch (102 mm) open position.*

[California Code of Regulations, Title 19, Division 1, §4.2] Labeling.

Burglar bars shall not be sold in California at wholesale or retail unless warning information as specified in California Code of Regulations, Title 19, Division 1, Section 4.3 is provided either on the packaging or provided inside the packaging along with the burglar bars.

[California Code of Regulations, Title 19, Division 1, §4.3(a) through (c)] Warning Information.

- (a) *Warning information located on or in burglar bar packaging shall contain the following information:*
- (1) *Warning that the burglar bars are intended to deter or delay intruders, they are not intended to prevent entry.*
 - (2) *A reprint of the following requirements from California Building Code, Part 2, Chapter 10:*

“Bars, grilles, grates or similar devices may be installed on emergency escape or rescue windows, doors or window wells, or any required exit door, provided:

- 1. The devices are equipped with approved release mechanisms which are openable from the inside without the use of a key or special knowledge or effort; and*
- 2. The building is equipped with smoke detectors alarms installed in accordance with ~~the 1995~~ California Building Code, Part 2, Section 907.*

Such bars, grilles, grates or similar devices shall be equipped with an approved release device for use by the fire department only on the exterior side for the purpose of fire department emergency access, when required by the authority having jurisdiction.”

- (3) *A statement regarding the necessity of installing early warning smoke alarms (as required by the California Building Code, Part 2, Section 907) and planning occupant's escape routes and meeting places.*
 - (4) *Contact the local building and fire official to determine if a local ordinance requires a building permit prior to installation and if the burglar bars are required to have a release mechanism on the outside for use by the fire department in the event of a fire emergency.*
 - (5) *Written directions and illustrations on the operation of the emergency escape release mechanisms. These directions shall include a warning that the mechanisms be tested on a monthly basis.*
- (b) *The textual information required by this section shall be printed in a minimum 12-point nondecorative lettering providing a sharp contrast to the background.*
- (c) *Graphical information required by this section shall be of sufficient size to clearly illustrate the intended actions.*

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

CALIFORNIA FIRE CODE – MATRIX ADOPTION TABLE

**CHAPTER 6
BUILDING SERVICES AND SYSTEMS**

Adopting Agency	BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																			
Adopt Entire Chapter as amended (amended sections listed below)		X																	
Adopt only those sections that are listed below																			
Chapter / Section																			
604.2.14		X																	
604.2.14.1.1		X																	
604.2.14.1.3		X																	
604.2.14.3		X																	
603.4		X																	
607.1		X																	
607.5 – 607.5.5		X																	

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

Adopting Agency	BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																			
Adopt Entire Chapter as amended (amended sections listed below)		X																	
Adopt only those sections that are listed below																			
Chapter / Section																			
901.4.1		X																	
901.4.2		X																	
901.6.1		X																	
Table 901.6.1		X																	
902.1		X																	
Fire Appliance		X																	
903.2		X																	
903.2.1.2		X																	
903.2.1.3		X																	
903.2.10		X																	
903.2.11.4		X																	
Table 903.2.11.6		X																	
903.2.13		X																	
903.2.14		X																	
903.2.14.1		X																	
903.2.14.2		X																	
903.2.15		X																	
903.2.15.1		X																	
903.2.16		X																	

1022.5		X																	
1022.6		X																	
1022.8		X																	
1022.8.1		X																	
1022.9		X																	
1022.9.1		X																	
1022.9.2		X																	
1023.2		X																	
1025.5		X																	
1026.2		X																	
1027.6		X																	
1028.1		X																	
1028.2		X																	
1028.3		X																	
1028.3.1		X																	
1028.6.1		X																	
1028.10		X																	
1028.6.4		X																	
1028.9.1		X																	
1029.4		X																	
1029.1		X																	

**CHAPTER 24
TENTS AND OTHER MEMBRANE STRUCTURES**

Adopting Agency	BSC	SFM	HCD			DSA		OSHPD				CSA	DHS	AGR	DWR	CEC	CA	SL	SLC
			1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																			
Adopt Entire Chapter as amended (amended sections listed below)		X																	
Adopt only those sections that are listed below																			
Chapter / Section																			
2401.1		X																	
2401.2		X																	
2401.3		X																	
2403.8.2		X																	
2404.2		X																	
2404.12		X																	
2404.23		X																	