

**FINAL 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 INTERIM 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 **Repealed text:** Shown as ~~Strikeout~~.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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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.

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

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.

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

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.

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

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*.

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

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*.

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 A17.4~~ 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.

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

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 A17.4~~ California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.

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.

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 ~~6.4.6~~ 21.4, 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.~~

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

**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*.

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

**CHAPTER 9
FIRE PROTECTION SYSTEMS**

903.3.1.1 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 elevator machine rooms and machinery spaces~~*Elevator hoistways, elevator machine rooms, elevator machinery spaces, elevator control spaces, or elevator control rooms 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.*

907.2.11.4 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.

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.

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

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 or mechanical smoke exhaust systems 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 Where required. Smoke and heat vents or mechanical smoke exhaust systems shall be installed in the roofs of one-story buildings or portions thereof occupied for the uses set forth in Sections 910.2.1 and 910.2.2.

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.

910.4 Mechanical smoke exhaust. ~~Where approved by the fire code official,~~ Engineered mechanical smoke exhaust systems shall be an acceptable alternative to smoke and heat vents.

910.4.1 Location. Exhaust fans shall be uniformly spaced ~~within each draft-protected area~~ and the maximum distance between fans shall not be greater than 100 feet (30480 mm).

910.4.2 Size. Fans shall have a maximum individual capacity of 30,000 cfm (14.2 m³/s). For sprinklered buildings, the aggregate capacity of smoke exhaust fans shall provide a minimum of two complete air changes per hour based on the volume of the building or portions thereof without deduction for any commodity storage. For nonsprinklered buildings, the aggregate capacity of smoke exhaust fans shall be determined by the equation:

$$C = A \times 300 \quad \text{(Equation 9-4)}$$

where:

C = Capacity of mechanical ventilation required, in cubic feet per minute (ft³/min).

A = Area of roof vents provided in square feet (m²) in accordance with Table 910.3.

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

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

| SINGLE FIRE AREA, SQUARE FEET | INTERNATIONAL CALIFORNIA BUILDING CODE TYPE OF CONSTRUCTION |
|----------------------------------|--|
|----------------------------------|--|

[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.

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

**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.

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"
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.

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

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

| OCCUPANCY | WITHOUT SPRINKLER SYSTEM (feet) | WITH SPRINKLER SYSTEM (feet) |
|------------------------------------|---------------------------------|------------------------------|
| 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.

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

~~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

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.

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

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.

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

**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 ~~International~~ California Mechanical Code or the ~~International Fuel Gas Code~~.

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

**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.*

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

**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 *International California Building Code* and not otherwise defined as a tent. See Chapter 31 of the *International California 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 *International California Building Code*.

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).*

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

**CHAPTER 27
HAZARDOUS MATERIALS—GENERAL PROVISIONS**

2703.10.2.2 Transportation of hazardous materials above the 10th story. *The handling and transportation of hazardous materials above the 10th story shall be limited to 5 percent of the maximum allowable quantities of Tables 2703.1(1) (2.) Quantities are permitted to be ~~increase~~increased 100 percent in buildings with an approved automatic sprinkler system in accordance with 903.3.1.1. Materials where Foot Note G applies shall not be increased.*

Notation:

Authority: Health and Safety Code Sections 13108, 13115, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2

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

**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 *International California Building Code* for high-hazard Group H occupancies.

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

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 ~~International~~California Building Code, and *horizontal assemblies* constructed in accordance with Section 712 of the ~~International~~California 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.

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

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 ~~International~~California 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.

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.

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 ~~International~~ *California 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.

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

**CHAPTER 47
 REFERENCED STANDARDS**

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

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

NFPA 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:*

8.15.5.7 The sprinkler required at the top and bottom of the elevator hoistway by 8.15.5.6 shall not be required where permitted by Chapter 30 of the California Building Code.

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.

| | | |
|-------|---|--|
| 72—10 | National Fire Alarm Code, as amended* | 508.1.5, Table 901.6.1, 903.4.1, 904.3.5, 907.2, 907.2.6, 907.2.11, 907.2.13.2, 907.3, 907.4.3, 907.4.4, 907.6.2.1.2, 907.6.2.2, 907.7, 907.7.1, 907.7.2, 907.7.5, 907.8, 907.8.1, 907.8.2, 907.9, 907.9.2, 907.9.5, I101.1, J103.1.4 |
|-------|---|--|

**NFPA 72, Amended Sections as follows:*

21.3.6 Smoke detectors shall not be installed in unsprinklered elevator hoistways unless they are installed to activate the elevator hoistway smoke relief equipment or where required by Chapter 30 of the California Building Code.

| | | |
|------------------------|---|--|
| 25— 0806 CA | <u>California NFPA 25 Edition (Based on the 2002 Edition)</u> Inspection, Testing and Maintenance of Water-based Fire Protection Systems | 507.5.3, Table 901.6.1, 904.7.1, 912.6, 913.5, I101.1 |
|------------------------|---|--|

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13100.1, 13108, 13115, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2

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

**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

**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 International California Fire Code pursuant to the provisions of Section 108 of the International California 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.

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

**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 International California 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 International California 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 | <u>International California Fire Code</u> | D101.5, D107.1 |
| UL 325-02 | Door, Drapery, Gate, Louver, and Window Operators and Systems, with revisions through February 2006 | D103.5 |

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

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 InternationalCalifornia 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 InternationalCalifornia 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 InternationalCalifornia Fire Code. Also see Section 104.7.2 of the InternationalCalifornia 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-ethylhexanolyperoxy)-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 | <u>International California Fire Code</u> | E101.1, E102.1.1, E102.1.8.1, E103.2 |

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

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 |

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

APPENDIX H HAZARDOUS MATERIALS MANAGEMENT PLANS AND HAZARDOUS MATERIALS INVENTORY STATEMENTS

H3.2.8 Employee training. A training program appropriate to the types of quantities of materials stored or used shall be conducted to prepare employees to ~~safetysafely~~ handle hazardous materials on a daily basis and during emergencies.

The training program shall include:

1. Instruction in safe storage and handling of hazardous materials, including maintenance of monitoring records;
2. Instruction in emergency procedures for leaks, spills, fires or explosions, including shutdown of operations and evacuation procedures; and
3. Record-keeping procedures for documenting training given to employees.

FIGURE H3 SAMPLE FORMAT HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) INSTRUCTIONS

SECTION I — FACILITY DESCRIPTION

1.3. Part C - Facility Storage Map (Confidential Information)

1. Provide a site plan on 8 1/2- by 11-inch (215 mm by 279 mm) paper, using letters on the top and bottom margins and numbers on the right and left side margins, with approximate scale and northern direction, showing the location of each storage area. Mark map clearly "Confidential -Do not disclose" for trade-secret information as specified by federal, state and local laws.
2. Identify each storage area with an identification number, letter, name or symbol.
3. Show the following:
 - 3.1. Accesses to each storage area
 - 3.2. Location of emergency equipment
 - 3.3. The general purpose of other areas within the facility
 - 3.4. Location of all above-ground and underground tanks to include, sumps, vaults, below-grade treatment systems, piping, etc.

4. Map key. Provide the following on the map or in a map key or legend for each storage area:
 - 4.1. A list of hazardous materials, including wastes
 - 4.2. Hazard class of each hazardous waste
 - 4.3. The maximum quantity for hazardous materials
 - 4.4. Include the contents and capacity limit of all tanks at each area and indicate whether they are above or below ground
 - 4.5. List separately any radioactives, cryogenics and compressed gases for each facility
 - 4.6. Trade-secret information shall be listed as specified by federal, state and local laws

SECTION II — HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS)

2.2. Part B - Inventory Statement

2.3. Inventory Statement Instructions:

| Column | Information Required |
|--------------------|--|
| 1... | |
| 2... | |
| 3... | |
| 4... | |
| 5... | |
| 6. | Provide the maximum aggregate quantity of each material handled at any one time by the business. For underground tanks, list the maximum volume [in gallons (liters)] of the tank. |
| 6.2.6.1 | Enter the estimated average daily amount on site during the past year. |

FIGURE H3 (Continued)

HAZARDOUS MATERIALS MANAGEMENT PLAN

**SECTION I: FACILITY DESCRIPTION
PART A - GENERAL INFORMATION**

**PART B - GENERAL FACILITY
DESCRIPTION/SITE PLAN**

(Use grid format above on the next page)

Special land uses within 1 mile (1,609 km): _____

SECTION VI: EMERGENCY RESPONSE PLAN

1. In the event of an emergency, the following shall be notified:

A. On-site Responders:

| Name | Title | Phone |
|-------------|--------------|--------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

B. Method of Notification to Responder:

_____ Automatic Alarm _____ Phone
 _____ Manual Alarms _____ Verbal
 _____ Other: _____

C. Agency Phone Number

Fire Department:
 State Office of Emergency:
 Services Cal EMA California Emergency Management Agency:
 Other:

2. Designated Local Emergency Medical Facility:

| Name | Address | Phone (24 hours) |
|------|---------|------------------|
|------|---------|------------------|

3. Mitigation Equipment:

A. Monitoring Devices:

_____ Toxic or flammable gas detection
 _____ Fluid detection
 _____ Other:

B. Spill Containment:

_____ Absorbents _____ Other: _____

C. Spill Control and Treatment:

_____ Vapor Scrubber _____ Mechanical Ventilation
 _____ Pumps/vacuums _____ Secondary Containment
 _____ Neutralizer _____ Other: _____

Notation:

Authority: Health and Safety Code Sections 13108, 13115, 13143, 13143.9, 13146, 13210, 13211, 17921, 18949.2
 References: Health and Safety Code Sections 13143, 13211, 18949.2

**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 | International California Fire Code | J103.2.2, J103.3.2 |
| NFPA 72— 07 10 | 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

[Revisions to pages I through xxvi relating to California Code of Regulations, Title 19, Division 1 provisions that have been reprinted into the CFC.]

The following revisions are to pages i through xxvi

On page vii existing text shown struck following the “sample chapter 2 matrix table” and insert new text and matrix table following the sample chapter 2 matrix table.

Adopts only those sections that are listed below:

If there is an “X” under a particular state agency's acronym on this row, it means that particular state agency is adopting only specific model code or state-amended sections within this chapter. There will be an “X” in the column under the agency's acronym, as well as an “X” by each section that the agency has adopted.

Example:

CHAPTER 2 – DEFINITIONS AND ABBREVIATIONS

| 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) | | | | | | | | | | | | | | | | | | | | | |
| Adopt only those sections that are listed below | | X | | | | | | | | | | | | | | | | | | | |
| Chapter2 | | | | | | | S | A | M | P | L | E | | | | | | | | | |
| 202 | | X | | | | | | | | | | | | | | | | | | | |
| 202 | | X | | | | | | | | | | | | | | | | | | | |
| 203 | | X | | | | | | | | | | | | | | | | | | | |
| 203 | | X | | | | | | | | | | | | | | | | | | | |

~~[BSC] This symbol within a section identifies which State agency(s), by its “acronym,” has amended a section of the model code.~~

~~Legend of Acronyms of Adopting State Agencies~~

- ~~BSC California Building Standards Commission~~
- ~~SFM Office of the State Fire Marshal~~
- ~~HCD Department of Housing and Community Development~~
- ~~DSA-AC Division of the State Architect-Access Compliance~~
- ~~DSA-SS Division of the State Architect-Structural Safety~~
- ~~DSA-SS/CC Division of the State Architect-Structural Safety/Community Colleges~~
- ~~OSHPD Office of Statewide Health Planning and Development~~
- ~~CSA Corrections Standards Authority~~
- ~~DPH Department of Public Health~~
- ~~AGR Department of Food and Agriculture~~
- ~~GEC California Energy Commission~~
- ~~CA Department of Consumer Affairs:~~
- ~~Board of Barbering and Cosmetology~~
- ~~Board of Veterinary Medicine Examiners~~
- ~~Board of Pharmacy~~
- ~~Acupuncture Board~~
- ~~Bureau of Home Furnishings~~

California Matrix Adoption Tables with California Code of Regulations, Title 19, Division 1

State Fire Marshal T-24 Column:

If there is an "X" in the T-24 column under SFM, refer to the California Matrix Adoption Tables explaining how to use the matrix adoption tables.

State Fire Marshal T-19 Column:

If there is an "X" in the T-19 column under SFM, this means that the corresponding section was reprinted from the California Code of Regulations (CCR), Title 19, Division 1 into the California Fire Code for the code user's convenience. The corresponding Title-19 sections were listed in the matrix adoption tables in the order that they appear in the California Fire Code. The scope, applicability and appeals procedures of CCR, Title 19, Division 1 has not changed. For information regarding the specific purpose and scope of CCR, Title 19, unless otherwise specified, refer to CCR, Title 19, Division 1, Chapter 1, Subchapter 1, Article 1, Sections 1.00 through 1.14.

Example:

CHAPTER 3 – GENERAL PRECAUTIONS AGAINST FIRE

| Adopting Agency | BSC | SFM | | HCD | | | DSA | | OSHPD | | | | CSA | DHS | AGR | DWR | CEC | CA | SL | SLC |
|---|-----|------|-------|-----|---|------|----------|----------|----------|----------|----------|----------|-----|-----|-----|-----|-----|----|----|-----|
| | | T-24 | T-19* | 1 | 2 | 1/AC | AC | SS | 1 | 2 | 3 | 4 | | | | | | | | |
| Adopt Entire Chapter | | | | | | | | | | | | | | | | | | | | |
| Adopt Entire Chapter as amended (amended sections listed below) | | | | | | | | | | | | | | | | | | | | |
| Adopt only those sections that are listed below | | X | | | | | | | | | | | | | | | | | | |
| [California Code of Regulations, Title 19, Division 1] | | | X | | | | | | | | | | | | | | | | | |
| Chapter / Section | | | | | | | <u>S</u> | <u>A</u> | <u>M</u> | <u>P</u> | <u>L</u> | <u>E</u> | | | | | | | | |
| 301 | | X | | | | | | | | | | | | | | | | | | |
| [T-19 §3.14] | | | X | | | | | | | | | | | | | | | | | |
| [T-19 §3.19 (a-g)] | | | X | | | | | | | | | | | | | | | | | |
| 304 | | X | | | | | | | | | | | | | | | | | | |
| [T-19 §3.07(a)] | | | X | | | | | | | | | | | | | | | | | |
| [T-19 §3.07(b)] | | | X | | | | | | | | | | | | | | | | | |

***The California Code of Regulations (CCR), Title 19, Division 1 provisions that are found in the California Fire Code are a reprint from the current CCR, Title 19, Division 1 text for the code user's convenience only. The scope, applicability and appeals procedures of CCR, Title 19, Division 1 remains the same.**

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[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."

1.11.10 Unsafe Buildings, Structures and Equipment. See Title 24, Part 2, California Building Code, Section 116.

[California Code of Regulations, Title 19, Division 1, §1.03] Scope.

(a) California Code of Regulations, Title 19, Division 1 regulations shall govern the use and maintenance of any building or structure used or intended for use as an asylum, jail, mental hospital, hospital, sanitarium, home for aged, children's home or institution, school or any similar occupancy of any capacity; and any theater, dance hall, skating rink, auditorium, assembly hall, meeting hall, night club, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education, and in any building or structure which is open to the public and is used or intended to be used for the showing of motion pictures when an admission fee is charged and when such building or structure has a capacity of 10 or more persons, and shall apply to both new and existing occupancies.

Exception:

(1) Buildings controlled by the Federal Government, provided they are not subject to the provisions of Section 15452, Education Code.

(2) Homes and institutions and day care facilities which provide nonmedical board, room, and care for 6 or fewer ambulatory children.

California Code of Regulations, Title 19, Division 1 regulations shall also apply to any building housing any occupancy when such building is used as an auxiliary or accessory structure to any of the occupancies specified herein. They do not apply to structural requirements not relating to fire and panic safety nor to matters dealing exclusively with health and sanitation.

(b) In accordance with Section 13108 of the Health and Safety Code, California Code of Regulations, Title 19, Division 1 regulations shall govern the design and construction relating to fire protection in any state institution and in any state-owned or state-occupied building. For purposes of California Code of Regulations, Title 19, Division 1 regulations, "state-occupied buildings" are defined as those portions of a building which are leased or rented by the state and shall include all required exits leading therefrom to a public way. Portions of state-occupied buildings which are not leased or rented by the state shall not fall within the scope of this subsection unless such portions present an exposure hazard to the state-occupied area.

(c) California Code of Regulations, Title 19, Division 1 regulations shall also govern the use and maintenance of "organized camps" as defined in Section 18897, Health and Safety Code.

(d) California Code of Regulations, Title 19, Division 1 regulations shall also govern the use and maintenance of any building or structure used or intended for the housing of any person of any age when such person is referred to or placed within such home or facility for protective social care and supervision services by any governmental agency.

(e) California Code of Regulations, Title 19, Division 1 regulations shall also govern the construction, use and maintenance of every building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet above the lowest floor level having building access. For the purpose of this subsection, "building access" shall mean an exterior door opening conforming to all of the following:

(1) Suitable and available for fire department use.

(2) Located not more than 2 feet above the adjacent ground level.

(3) Leading to a space, room or area having foot traffic communication capabilities with the remainder of the building.

(4) Designed to permit penetration through the use of fire department forcible entry tools and equipment unless other approved arrangements have been made with the fire authority having jurisdiction.

(f) California Code of Regulations, Title 19, Division 1 regulations shall also apply to vehicles, ships and boats or other mobile structures when fixed in a specific location and used for any occupancy within the scope of this section.

Note: Unless otherwise specified, Title 19 applies to all building occupancies, and related features and equipment throughout the state.

[California Code of Regulations, Title 19, Division 1, §1.09.1] Order of Precedence.

In the event of any differences between California Code of Regulations, Title 19, Division 1 regulations and the standard reference documents or standard fire prevention practices, the text of California Code of Regulations, Title 19, Division 1 regulations shall govern. Where a specific provision varies from a general provision, the specific provision shall apply.

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 ~~299~~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 ~~299~~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, grills, 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
