

**EXPRESS TERMS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
OFFICE OF THE STATE FIRE MARSHAL  
REGARDING THE ADOPTION BY REFERENCE OF THE  
2006 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)  
WITH AMENDMENTS INTO THE 2007 CALIFORNIA BUILDING CODE  
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 2.**

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**Legend for Express Terms:**

1. California amendments brought forward without modification: *All such language appears in Italics.*
  2. California amendments brought forward with modification: *All such language appears in Italics, modified language is underlined.*
  3. New IBC language with new California amendment: IBC language is shown in normal Arial 9 pt. California amendments to IBC text appear *underlined and in italics*.
  4. New California amendment: *California language appears underlined and in Italics.*
  5. Repealed Text: Shown as ~~*Strikeout*~~.
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**REPEAL OF EXISTING AMENDMENTS AND/OR CALIFORNIA BUILDING STANDARDS NOT ADDRESSED BY MODEL CODES THAT ARE NO LONGER NECESSARY AS FOLLOWS:**

**REPEALED AMENDMENTS:**

**Chapter 1**

~~**101.13 [For SFM] Annual Report.** For clarification purposes, the applicable subsection of the Health and Safety Code section is repeated.~~

~~**Section 17958.5** Except as provided in Section 17922.6, in adopting the ordinances or regulations pursuant to Section 17958, a city or county may make such changes or modifications in the requirements contained in the provisions published in the California Building Standards Code and the other regulations adopted pursuant to Section 17922, as it determines, pursuant to the provisions of Section 17958.7, are reasonable necessary because of local climatic, geological, or topographical conditions.~~

~~For purposes of this subdivision, a city or county may make reasonably necessary modification to the requirements, adopted pursuant to Section 17922, contained in the provisions of the code and regulations on the basis of local conditions~~

~~**Vesting Authority.** When adopted by a state agency, the provisions of this Code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state legislature. Following is a list of the state agencies that adopt building standards, the specific scope of application of the agency responsible for enforcement, and the specific statutory authority of each agency to adopt and enforce such provisions of building standards of this Code, unless otherwise stated.~~

~~105.1.1 [For SFM] Right to Appeal. For clarification purposes, the applicable subsection of the Health and Safety Code section is repeated.~~

~~Section 18945. (a) Any person adversely affected by any regulation, rules, omission, interpretation, decision or practice of any state agency, respecting the administration of any building standard may appeal the issue for resolution to the Commission.~~

~~(b) If any local agency having authority to enforce a state building standard and any person adversely affected by any regulation, rule, omission, interpretation, decision or practice of such agency respecting such building standard both wish to appeal the issue for resolution to the commission, then both parties may appeal to the commission. The commission may accept such appeal only if the commission determines that the issues involved in such appeal have statewide significance.~~

~~106.2 Work Exempt from Permit. A building permit shall not be required for the following:~~

- ~~1. One-story detached accessory buildings used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 square feet (11.15 m<sup>2</sup>).~~
- ~~2. Fences not over 6 feet (1829 mm) high.~~
- ~~3. Oil derricks.~~
- ~~4. Movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) high.~~
- ~~5. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III A liquids.~~
- ~~6. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2:1.~~
- ~~7. Platforms, walks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below.~~
- ~~8. Painting, papering and similar finish work.~~
- ~~9. Temporary motion picture, television and theater stage sets and scenery.~~
- ~~10. Window awnings supported by an exterior wall of Group R, Division 3, and Group U Occupancies when projecting not more than 54 inches (1372 mm).~~
- ~~11. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade and if the capacity does not exceed 5,000 gallons (18 927 L).~~
- ~~12. [For SFM] State-owned buildings under the jurisdiction of the state fire marshal.~~

~~Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.~~

~~Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.~~

~~106.4.1 Issuance. The application, plans, specifications, computations and other data filed by an applicant for a permit shall be reviewed by the building official. Such plans may [for SFM] shall be reviewed by other departments of this jurisdiction in accordance with state law, Health and Safety Code Section 13146, in occupancies regulated by the State Fire Marshal in order to verify compliance with any applicable laws under their jurisdiction. If the building official finds that the work described in an application for a permit and the plans, specifications and other data filed there with conform to the requirements of this code and other pertinent laws and ordinances, and that the fees specified in Section 107 have been paid, the building official shall issue a permit therefor to the applicant.~~

~~When the building official issues the permit where plans are required, the building official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specifications shall not be changed, modified or altered without authorizations from the building official, and all work regulated by this code shall be done in accordance with the approved plans. The building official may issue a permit for the construction of part of a building or structure before the entire plans and specifications for the whole building or structure have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holder of a partial permit shall proceed without assurance that the permit for the entire building or structure will be granted.~~

## Chapter 2

~~[For SFM] C.C.R. means the California Code of Regulations.~~

~~*[For SFM] FINISH RATING is the time at which the combustible material behind the finish reaches an average temperature rise of 250\_F (121\_C) above ambient or an individual temperature rise of 325\_F (163\_C) above ambient as measured on the plane of the combustible material nearest the fire when tested in accordance with UBC Standard 7-1.*~~

~~*[For SFM] REMODELING. See alter or alteration.*~~

~~*[For SFM] STAIRWAY. Two or more risers shall constitute a stairway.*~~

~~*[For SFM] UBC shall mean the most recently adopted edition of the Uniform Building Code as published by the International Conference of Building Officials.*~~

~~*[For SFM] UBC STANDARDS are those standards published in Volume 3 of the Uniform Building Code promulgated by the International Conference of Building Officials, as adopted by this jurisdiction. (See Chapter 35.)*~~

## Chapter 3

~~**302.4 Fire Ratings for Occupancy Separations.** Occupancy separations shall be provided between the various groups and divisions of occupancies as set forth in Table 3-B. For required separation of specific uses in Group I, Division 1 hospitals and nursing homes, see Table 3-C. See also Section 504.6.1.~~

~~**EXCEPTIONS:** 1. A three-hour occupancy separation may be used between a Group A, Division 1 and a Group S, Division 3 Occupancy used exclusively for the parking or storage of private or pleasure type motor vehicles provided no repair or fueling is done. A two-hour occupancy separation may be used between a Group A, Division 2, 2.1, 3 or 4 or E or I Occupancy and a Group S, Division 3 Occupancy used exclusively for the parking or storage of private or pleasure type motor vehicles provided no repair or fueling is done.~~

~~2. Unless required by Section 311.2.2, the three-hour occupancy separation between a Group R, Division 1 Occupancy and a Group S, Division 3 Occupancy used only for the parking or storage of private or pleasure type motor vehicles with no repair or fueling may be reduced to two hours. Such occupancy separation may be further reduced to one hour where the area of such Group S, Division 3 Occupancy does not exceed 3,000 square feet (279 m<sup>2</sup>).~~

~~3. In the one-hour occupancy separation between Group R, Divisions *[for SFM]* 2.1, 2.2, 2.2.1 and 3 and Group U Occupancies, the separation may be limited to the installation of materials approved for one-hour fire resistive construction on the garage side and a self-closing, tightfitting solid wood door 13/8 inches (35 mm) in thickness, or a self-closing, tightfitting door having a fire protection rating of not less than 20 minutes when tested in accordance with Part II of UBC Standard 7-2, which is a part of this code, is permitted in lieu of a one-hour fire assembly. Fire dampers need not be installed in air ducts passing through the wall, floor or ceiling separating a Group R, Divisions *[for SFM]* 2.1, 2.2, 2.2.1 and 3 Occupancy from a Group U Occupancy, provided such ducts within the Group U Occupancy are constructed of steel having a thickness not less than 0.019 inch (0.48 mm) (No. 26 galvanized sheet gage) and have no openings into the Group U Occupancy.~~

~~4. Group H, Division 2 and Group H, Division 3 Occupancies need not be separated from Group H, Division 7 Occupancies when such occupancies also comply with the requirements for a Group H, Division 7 Occupancy.~~

~~**303.2.2.1 Division 2.1 provisions.** Division 2.1 Occupancies with an occupant load of 1,000 or more shall be of Type I, Type II F.R., Type II One hour, Type III One hour or Type IV construction, except that the roof framing system for one-story portions of buildings of Type II One hour or Type III One hour construction may be of unprotected construction when such roof framing system is open to the assembly area and does not contain concealed spaces. *[For SFM]* In addition to the requirements for Division 2.1 Occupancies, motion picture production studios, sound stages and approved production facilities, with live audience stages shall be in accordance with the California Fire Code.~~

~~**303.2.2.2 Division 3 provisions.** Division 3 Occupancies located in a basement or above the first floor shall not be of less than one-hour fire resistive construction. Division 3 Occupancies with an occupant load of 50 or more which are located over usable space shall be separated from such space by not less than one-hour fire resistive construction. For Division 3 Occupancies with a Group S, Division 3 parking garage in the basement or first floor, see Section 311.2.2. *[For SFM]* In addition to the requirements for Division 3 Occupancies, motion picture production studios, sound stages and approved production facilities, with live audience stages shall be in accordance with the California Fire Code.~~

*The following California sections replace the corresponding model code section for applications specified by law for the Office of the State Fire Marshal.*

**305.1 Group E Occupancies Defined.** ~~Group E Occupancies shall be:~~

**Division 1.** Any building used for educational purposes through the 12th grade by 50 or more persons for more than 12 hours per week or four hours in any one day.

**Division 2.** Any building used for educational purposes through the 12th grade by less than 50 persons for more than 12 hours per week or four hours in any one day.

**EXCEPTION [For SFM]:** ~~A residence used as a home school for the children who normally reside at the residence. Such residences shall remain classified as Group R, Division 1 or 3 Occupancies.~~

**Division 3 [For SFM].** ~~Any nonresidential building or portion thereof used for day care purposes for more than six children/persons. Any residential building used for day care purposes for more than 14 persons. Licensing categories that may use this category include: Adult Day Care Facilities, Family Day Care Homes, Day Care Centers, Adult Day Support Center, Day Care Center for Mildly Ill Children, Infant Care Center, School Age Child Day Care Centers.~~

~~For occupancy separations, see Table 3-B. [For SFM] For occupant load, see Section 1002.~~

**305.9.1 [For SFM] Fire Alarm Systems.** ~~A State Fire Marshal-approved and listed alarm system conforming to the California Electrical Code shall be provided for all Group E Occupancies with an occupant load of 50 or more persons or containing more than one classroom.~~

**305.9.2 [For SFM]** ~~When more than one fire alarm control unit is used at the school campus, they shall be interconnected and shall operate all indicating devices.~~

**EXCEPTION:** ~~Interconnection of fire alarm control units is not required when:~~

- ~~1. Buildings that are separated a minimum of 20 feet (6096 mm) and in accordance with Chapter 5; and~~
- ~~2. There is a method of communication between each classroom and the school administrative office approved by the fire authority having jurisdiction. In buildings containing Group E Occupancies provided with an automatic extinguishing system or detection system, the operation of such system shall automatically activate the building alarm system. An alarm notification appliance shall be mounted on the exterior of the building. See Chapter 10 for smoke detection requirements. For installation requirements, see the California Fire Code.~~

**305.9.3 School Fire Alarms.** ~~Except as provided in Section 305.9.1, every building used for educational purposes, regardless of occupancy classification, shall be provided with an approved fire alarm system conforming to the California Electrical Code. This provision shall apply to, but shall not necessarily be limited to, every elementary school, high school, community college, college and university.~~

**EXCEPTION:** ~~Privately owned trade or vocation schools or any firm or company that provides educational facilities and instructions for its employees.~~

**306.2.2.1 [For SFM] Group F, Division 2 roof framing.** ~~In Division 2 Occupancies, the roof framing system may be of unprotected construction.~~

**306.8 Special Hazards.** ~~For special hazards of Group F Occupancies, see Section 304.8. Storage and use of flammable and combustible liquids shall be in accordance with the Fire Code. Buildings erected or converted to house high piled combustible stock or aerosols shall comply with the Fire Code. Equipment, machinery or appliances that generate finely divided combustible waste or that use finely divided combustible material shall be equipped with an approved method of collection and removal. [For SFM] In addition to the requirements for Group F Occupancies, motion picture production studios, sound stages and approved production facilities shall be in accordance with the California Fire Code.~~

**307.1.1 General.** ~~Group H Occupancies shall include buildings or structures, or portions thereof, that involve the manufacturing, processing, generation or storage of materials that constitute a high fire, explosion or health hazard. For definitions, identification and control of hazardous materials and pesticides, and the display of nonflammable solid and nonflammable and noncombustible liquid hazardous materials in Group B, F, M or S Occupancies, see the Fire Code. For hazardous materials used as refrigerants or lubricants within closed cycle refrigeration systems and the~~

areas served by them, see Chapter 28 of this code, the Mechanical Code and the Fire Code. For the application and use of control areas, see Footnote 1 of Tables 3-D and 3-E. Group H Occupancies shall be:

**Division 3.** Occupancies where flammable solids, other than combustible dust, are manufactured, used or generated ~~[For SFM] in quantities in excess of the exempt amounts listed in Table 3-D.~~ Division 3 Occupancies also include uses in which the quantity of material in the building in excess of those listed in Table 3-D presents a high physical hazard, including, but not limited to:

1. Class II, III or IV organic peroxides.
2. Class 1 or 2 oxidizers.
3. Class 1, II or III A flammable or combustible liquids that are used or stored in normally closed containers or systems and containers or systems pressurized at 15 psi (103.4 kPa) gage or less, and aerosols.
4. Class III-B combustible liquids.
5. Pyrophoric liquids or solids.
6. Class 1 or 2 water reactive materials.
7. Flammable solids in storage.
8. Flammable or oxidizing cryogenic fluids (other than inert).
9. Class 1 unstable (reactive) gas or Class 2 unstable (reactive) materials.
10. Storage of Class 1.4G (Class C, Common) fireworks. ~~[For SFM] See Title 19, Chapter 6, Article 8, Section 989.~~

**310.1 Group R Occupancies Defined.** Group R Occupancies shall be:

**Division 1.** Hotels and apartment houses. Congregate residences (each accommodating more than 10 persons).

**Division 2.** Not used.

~~[For SFM] Division 2.1. Residentially-based, licensed facilities accommodating more than six nonambulatory clients. This division may include ambulatory clients. Licensing categories that may use this classification include, but are not limited to: Adult Residential Facilities, Congregate Living Health Facilities, Residential Care Facilities for the Elderly, Group Homes and Residential Care Facilities for the Chronically III.~~

~~[For SFM] Division 2.1.1. Residentially-based, licensed facilities accommodating six or less nonambulatory clients. This division may include ambulatory clients. Licensing categories that may use this classification include, but are not limited to:~~

~~Adult Residential Facilities, Congregate Living Health Facilities, Foster Family Homes, Intermediate Care Facilities for the Developmentally Disabled Habilitative, Intermediate Care Facilities for the Developmentally Disabled Nursing, nurseries for the full-time care of children under the age of six, but not including infants as defined in Section 210; Residential Care Facilities for the Elderly, Small Family Homes and Residential Care Facilities for the Chronically III.~~

~~[For SFM] Division 2.2. Residentially-based, licensed facilities accommodating more than six ambulatory clients. This division may include nonambulatory clients and shall not exceed six nonambulatory clients. Licensing categories that may use this classification include, but are limited to:~~

~~Adult Residential Facilities, Residential Care Facilities for the Elderly, Group Homes, Community Treatment Facilities and Social Rehabilitation Facilities.~~

~~[For SFM] Division 2.2.1. Residentially based, licensed facilities accommodating six or less ambulatory clients. This division may include a maximum of two nonambulatory clients. Licensing categories that may use this classification include, but are not limited to:~~

~~Adult Residential Facilities, Intermediate Care Facilities for the Developmentally Disabled Habilitative, Intermediate Care Facilities for the Developmentally Disabled Nursing, Nursing Homes, Residential Care Facilities for the Elderly, Foster Family Homes, Group Homes, Small Family Homes, Community Treatment Facilities and Social Rehabilitation Facilities.~~

~~[For SFM] Division 2.3. Residentially-based, licensed facilities providing hospice care throughout accommodating more than six bedridden clients. Licensing categories that may use this classification are limited to: Congregate Living Health Facilities for the Terminally III and Residential Care Facilities for the Chronically III.~~

~~[For SFM] Division 2.3.1. Residentially based facilities providing hospice care throughout accommodating six or less bedridden clients. Licensing categories that may use this classification are limited to: Congregate Living Health Facilities for the Terminally III and Residential Care Facilities for the Chronically III.~~

**Division 3.** ~~[For HCD, SFM] Dwellings and those dwellings used for large family day care homes (as defined in Chapter 2, Section 205) and lodging houses. Licensing categories that may use this classification include, but are not limited to: Adult Daycare Facilities, Family Day care Homes, Adult Day support Center, Day care Center for Mildly III Children, Infant Care Center and School Age Child Day care Center. Congregate residences (each accommodating 10 persons or less).~~

For occupancy separations, see Table 3-B. A complete code for construction of detached one and two family dwellings is in Appendix Chapter 3, Division III, of this code. When adopted, as set forth in Section 101.3, it will take precedence over the other requirements set forth in this code.

**Division 6 Occupancies** shall be residential group care facilities, which provide care and/or supervisory services. Restraint shall not be practiced in these facilities. Such residential group care facilities are limited to halfway houses

~~such as community correctional centers, community correction reentry centers, community treatment programs, work furlough programs, and alcoholism or drug abuse recovery or treatment facilities.~~

~~Group R, Division 6.1; with more than six nonambulatory residents.~~

~~Group R, Division 6.2; with more than six ambulatory residents.~~

~~Group R, Division 6.1.1; with six or less nonambulatory residents.~~

~~Group R, Division 6.2.1; with six or less ambulatory residents.~~

~~310.1.1 [For SFM] Special Provisions for Group R, Division 2 Occupancies. Clients who become temporarily bedridden as defined in Health and Safety Code Section 1569.72, as enforced by the Department of Social Services, may continue to be housed on any story in Group R, Division 2 Occupancies classified as Residential care Facilities for the Elderly (RCFE). Every Residential care Facility for the Elderly (RCFE) 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.~~

~~310.1.2 [For SFM] In Group R, Division 2 Occupancies classified as Residential Facilities (RF), bedridden clients shall not be located above the first story.~~

~~310.1.3 [For SFM] Restraint shall not be practiced in Group R, Division 2 Occupancies.~~

~~EXCEPTION: Group R, Division 2 Occupancies which meet all the construction requirements for a Group I, Division 3 Occupancy.~~

~~310.1.4 [For SFM] Pursuant to Health and Safety Code Section 13143, facilities licensed by the Department of Social Services which provide nonmedical board, room and care for six or fewer ambulatory children or children two years of age or younger, and which do not have any nonambulatory clients shall not be subject to regulations pertaining to Group R, Division 2 Occupancies. With respect to these exempted facilities, no city, county, or public district shall adopt or enforce any requirement for the prevention of fire or for the protection of life and property against fire and panic unless the requirement would be applicable to a structure regardless of the special occupancy. Nothing shall restrict the application of state or local housing standards to such facilities if the standards are applicable to residential occupancies and are not based on the use of the structure as a facility for ambulatory children. For the purpose of this exception, ambulatory children does not include relatives of the licensee or the licensee's spouse.~~

~~310.1.5 [For SFM] Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Group R, Division 2 Occupancies classified as Residential Facilities (RF) and Residential care Facilities for the Elderly (RCFE) shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is inconsistent with these regulations. A city, county, city and county, including a charter city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential care Facilities for the Elderly.~~

~~310.1.6 [For SFM] Existing Residential Facilities and Residential care Facilities for the Elderly which were originally classified as Group I Occupancies under pre 1991 codes may be reinspected as a Group I Occupancy under the appropriate previous code provided there is no change in the use which would place the facility in a different division or occupancy group. (See Section 3403.1.)~~

### **310.9 Smoke Alarms and Sprinkler Systems.**

#### **310.9.1 Smoke Alarms.**

~~310.9.1.1 General. Dwelling units, congregate residences and hotel or lodging house guest rooms [for SFM] and residential care facilities classified as Group R, Divisions 2.1.1, 2.2.1, 2.3.1 and Group R, Division 6 Occupancies that are used for sleeping purposes shall be provided with smoke alarms or multiple station smoke alarms. Smoke alarms shall be installed in accordance with this code and the approved manufacturer's instructions.~~

~~EXCEPTION: A fire alarm system with smoke detectors located in accordance with Sections 310.9.1.4 and 310.9.1.5 may be installed in lieu of smoke alarms. Upon actuation of the detector, only those notification appliances in the dwelling unit or guest room shall activate.~~

~~310.9.1.2 Additions, alterations or repairs to Group R Occupancies. When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000 and a permit is required, or when one or more sleeping rooms are~~

~~added or created in existing Group R Occupancies, smoke alarms shall be installed in accordance with Sections 310.9.1.3, 310.9.1.4 and 310.9.1.5 of this section.~~

~~**EXCEPTION:** Repairs to the exterior surfaces of a Group R Occupancy are exempt from the requirements of this section.~~

~~**310.9.1.3 Power source.** In new construction, required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. The smoke alarm shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than those required for over current protection. Smoke alarms may be solely battery operated when installed in existing buildings; or in buildings without commercial power; or in buildings which undergo alterations, repairs or additions regulated by Section 310.9.1.2.~~

~~**310.9.1.4 Location within dwelling units.** In dwelling units, a smoke alarm shall be installed in each sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a smoke alarm shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke alarm shall be installed on the upper level, except that when the lower level contains a sleeping area, a smoke alarm shall be installed on each level. When sleeping rooms are on an upper level, the smoke alarms shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches (610 mm) or more, smoke alarms shall be installed in the hallway and in the adjacent room. Smoke alarms shall sound an alarm audible in all sleeping areas of the dwelling unit in which they are located.~~

~~**310.9.1.5 Location in efficiency dwelling units, congregate residences and hotels.** In efficiency dwelling units, hotel suites and in hotel ~~for SFM] motel or lodging house~~ and congregate residence and residential care and group care facility sleeping rooms, smoke alarms shall be located on the ceiling or wall of the main room or each sleeping room. When sleeping rooms within an efficiency dwelling unit or hotel suite are on an upper level, the smoke alarms shall be placed at the ceiling of the upper level in close proximity to the stairway. When actuated, the smoke alarms shall sound an alarm audible within the sleeping area of the dwelling unit or congregate residence, hotel suite, or sleeping room in which it is located.~~

~~**310.9.1.6. Single and multiple station smoke alarms and smoke detectors installed within dwelling units, congregate residences and hotel rooms shall not be connected to the building fire alarm system.**~~

~~**EXCEPTION:** Connection of such devices for annunciation only. Buildings containing Group R, Division 2-1 Occupancies shall be provided with an approved manual and automatic fire alarm system in accordance with Chapters 3, 9 and 35 and the California Fire Code.~~

~~**EXCEPTION:** Buildings housing nonambulatory clients on the first story only, and which are protected throughout by the following:~~

- ~~1. An approved and supervised automatic sprinkler system, as specified in Chapter 9, which upon activation will initiate the fire alarm system to notify all occupants.~~
- ~~2. A manual fire alarm system in accordance with Chapters 9 and 35.~~
- ~~3. Smoke alarms required by Section 310.9.1.~~

~~**311.2.2.1 Group S, Division 3 with Group A, Division 3; Group B; Group M or R, Division 1 [for SFM] or 2 Occupancy above.** Other provisions of this code notwithstanding, a basement or first story of a building may be considered as a separate and distinct building for the purpose of area limitations, limitation of number of stories and type of construction, when all of the following conditions are met:~~

- ~~1. The basement or first story is of Type I construction and is separated from the building above with a three-hour occupancy separation. See Section 302.3.~~
- ~~2. The building above the three-hour occupancy separation contains only Group A, Division 3; Group B; or Group M or R, Division 1 [for SFM] or 2 Occupancies.~~
- ~~3. The building below the three-hour occupancy separation is a Group S, Division 3 Occupancy used exclusively for the parking and storage of private or pleasure type motor vehicles.~~

~~**EXCEPTIONS:** 1. Entry lobbies, mechanical rooms and similar uses incidental to the operation of the building.  
2. Group A, Division 3 and Group B office, drinking and dining establishments and Group M retail occupancies in addition to those uses incidental to the operation of the building (including storage areas), provided that the entire structure below the three-hour occupancy separation is protected throughout by an automatic sprinkler system.~~

4. The maximum building height in feet shall not exceed the limits set forth in Table 5-B for the least type of construction involved.

~~311.2.3.6 [For SFM] Electric vehicle charging. In parking garages with an area used for charging electric vehicles, equipment shall be installed in accordance with the California Electrical Code. Ventilation, if required by Section 1202.2.7.1, shall be provided.~~

~~312.8 [For SFM] In private garages used for charging electric vehicles, equipment shall be installed in accordance with the California Electrical Code. Ventilation, if required by Section 1206, shall be provided.~~

#### **TABLE 3-A.DESCRPTION OF OCCUPANCIES BY GROUP AND DIVISION**

~~R-2.1 Residential care facilities for the elderly (each accommodating more than six nonambulatory clients).~~

~~R-2.2 Residential care facilities for the elderly (each accommodating more than six ambulatory clients).~~

~~R-2.1.1 Residential care facilities for the elderly (each accommodating six or less nonambulatory clients).~~

~~R-2.2.1 Residential care facilities for the elderly (each accommodating six or less ambulatory clients).~~

~~R-2.3 Residential based licensed facilities providing hospice care throughout, accommodating more than six bedridden clients.~~

~~R-2.3.1 Residential based facilities providing hospice care throughout, accommodating six or less bedridden clients.~~

#### **TABLE 3-D.1 [For SFM].EXEMPT AMOUNTS OF HAZARDOUS MATERIALS, LIQUIDS AND CHEMICALS PRESENTING A PHYSICAL HAZARD BASIC QUANTITIES PER LABORATORY SUITE**

#### **TABLE 3-I [For SFM].EXEMPT AMOUNTS OF HAZARDOUS MATERIALS, LIQUIDS AND CHEMICALS PRESENTING A HEALTH HAZARD MAXIMUM QUANTITIES PER LABORATORY SUITE**

### Chapter 4

~~403.1 Scope. This section applies to all Group B office buildings [For SFM] Group H, Division 8, and Group R, Division 1 Occupancies, each having floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access. Such buildings shall be of Type I or II F.R. construction and shall be provided with an approved automatic sprinkler system in accordance with Section 403.2.~~

~~403.1.1 [For SFM] In addition to other applicable requirements of these regulations, the provisions of this section shall apply to every new building of any type of construction or occupancy having floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest floor level having building access.~~

~~EXCEPTIONS: 1. Hospitals as defined in Section 1250 of the Health and Safety Code.~~

~~2. The following structures, while classified as high rise buildings, shall not be subject to the provisions of this section, but shall conform to all other applicable provisions of these regulations.~~

~~2.1 Buildings used exclusively as open parking garages.~~

~~2.2 Buildings where all floors above the 75-foot (22 860 mm) level are used exclusively as open parking garages.~~

~~2.3 Floors of buildings used exclusively as open parking garages and located above all other floors used for human occupancy.~~

~~2.4 Buildings such as power plants, lookout towers, steeples, grain houses and similar structures with non continuous human occupancy, when so determined by the enforcing agency.~~

~~2.5 Buildings used exclusively for jails and prisons.~~

~~403.2.1 System design. [For SFM] When provided as required in Section 403.1, the automatic sprinkler system shall be provided throughout the building as specified by UBC Standard 9-1, and shall be designed in accordance with that standard and the following:~~

~~[For SFM] Every high rise building shall be protected by an automatic fire extinguishing system installed in conformance to NFPA 13 and the provisions of this subsection.~~

~~EXCEPTION [For SFM]: Automatic sprinklers may be omitted in rooms or areas in accordance with Sections 904.1.2 and 904.4.~~

~~1. Shutoff valves and a water flow device shall be provided for each floor. The sprinkler riser may be combined with the standpipe riser.~~

~~**[For SFM]** Sprinkler control valves, shutoff valves and a water flow detecting device shall be provided at the lateral connection to the riser for each floor. Such valves and devices shall be electrically supervised to automatically sound an appropriate signal transmitted to locations in accordance with Section 403.5.~~

~~2. In Seismic Zones 2, 3 and 4, in addition to the main water supply, a secondary on-site supply of water equal to the hydraulically calculated sprinkler design demand plus 100 gallons per minute (378.5 L/m) additional for the total standpipe system shall be provided. This supply shall be automatically available if the principal supply fails and shall have a duration of 30 minutes.~~

~~**403.6.1 General.** A central control station room for fire department operations shall be provided. The location and accessibility of the central control station room shall be approved by the fire department. The central control station room shall be separated from the remainder of the building by not less than a one-hour fire-resistive occupancy separation. The room shall be a minimum of 96 square feet (9m<sup>2</sup>) with a minimum dimension of 8 feet (2438 mm). It shall contain the following as a minimum:~~

- ~~1. The voice alarm and public address system panels.~~
- ~~2. The fire department communications panel.~~
- ~~3. Fire detection and **[For SFM]** fire alarm system annunciator panels.~~
- ~~4. Annunciator visually indicating the location of the elevators and whether they are operational.~~
- ~~5. Status indicators and controls for air handling systems.~~
- ~~6. Controls for unlocking all stairway doors simultaneously.~~
- ~~7. Sprinkler valve and water flow detector display panels.~~
- ~~8. Emergency and standby power status indicators.~~
- ~~9. A telephone for fire department use with controlled access to the public telephone system.~~
- ~~10. Fire pump status indicators.~~
- ~~11. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, firefighting equipment and fire department access.~~
- ~~12. Work table.~~
- ~~13. **[For SFM]** Elevator control switches for switching of emergency power.~~
- ~~14. **[For SFM]** Other fire protection equipment and systems controls as required by the enforcing agency having jurisdiction.~~

#### ~~**403.15 [For SFM] Vertical Shafts.**~~

## **Chapter 5**

~~**505.3 Automatic Sprinkler Systems.** The areas specified in Table 5-B and Section 504.2 may be tripled in one-story buildings and doubled in buildings of more than one story if the building is provided with an approved automatic sprinkler system throughout. The area increases permitted in this section may be compounded with that specified in Section 505.1.1, 505.1.2 or 505.1.3. The increases permitted in this section shall not apply when automatic sprinkler systems are installed under the following provisions:~~

- ~~1. Section 506 for an increase in allowable number of stories.~~
- ~~2. Section 904.2.6.1 for Group H, Divisions 1 and 2 **[For SFM]** and 8 Occupancies.~~
- ~~3. Substitution for one-hour fire-resistive construction pursuant to Section 508.~~
- ~~4. Section 402, Atria.~~

~~**SECTION 506 . MAXIMUM HEIGHT OF BUILDINGS AND INCREASES** The maximum height and number of stories of buildings shall be dependent on the character of the occupancy and the type of construction and shall not exceed the limits set forth in Table 5-B, except as provided in this section and as specified in Section 302.1 for mixed occupancy buildings.~~

~~**EXCEPTIONS:** 1. Towers, spires and steeples erected as a part of a building and not used for habitation or storage are limited as to height only by structural design if completely of noncombustible materials, or may extend not to exceed 20 feet (6096 mm) above the height limit in Table 5-B if of combustible materials.~~

~~2. The height of one-story aircraft hangars and buildings used for manufacture of aircraft shall not be limited if the building is provided with automatic sprinkler systems throughout as specified in Chapter 9 and is entirely surrounded by public ways or yards not less in width than one and one-half times the height of the building. The story limits set forth in Table 5-B may be increased by one story if the building is provided with an approved automatic sprinkler system throughout. The increase in the number of stories for automatic sprinkler systems shall not apply when the automatic sprinkler systems throughout are installed under the following provisions:~~

1. Section 904.2.6 for Group H, Divisions 1, 2, 3, 6 and 7 **[For SFM]** and 8 Occupancies.
  2. Section 505 for an increase in allowable area.
  3. Substitution for one-hour fire-resistive construction pursuant to Section 508.
  4. Section 402, Atria.
  5. Section 904.2.7 for Group I, Divisions 1.1 and 1.2 Occupancies used as hospitals, nursing homes or health care centers in Type II One-hour, Type III One-hour, Type IV or Type V One-hour construction.
  6. **[For SFM]** Section 904.2.9 for Group R, Division 2 Occupancies.
- See Chapters 3 and 4 for special occupancy provisions.

## **SECTION 511 NOT USED**

## **TABLE 5-B.BASIC ALLOWABLE BUILDING HEIGHTS AND BASIC ALLOWABLE FLOOR AREA FOR BUILDINGS ONE STORY IN HEIGHT**

### **Chapter 6**

#### **601.5.2.2 Hotels and apartments **[For SFM]** and Group R, Divisions 2.1.1, 2.2, 2.2.1 and 2.3.1 Occupancies.**

Interior nonload-bearing partitions within individual dwelling units in apartment houses **[For SFM]**; Group R, Divisions 2.1.1, 2.2, 2.2.1, 2.3 and 2.3.1 Occupancies, and guest rooms or suites in hotels when such dwelling units, guest rooms or suites are separated from each other and from corridors by not less than one-hour fire-resistive construction may be constructed of:

1. Noncombustible materials or fire-retardant-treated wood in buildings of any type of construction; or
2. Combustible framing with noncombustible materials applied to the framing in buildings of Type III or V construction. Openings to such corridors shall be equipped with doors conforming to Section 1004.3.4.3.2 regardless of the occupant load served. For use of plastics in partitions, see Section 2603.10.

### **Chapter 7**

## **SECTION 702 . DEFINITIONS**

**FIRE-RESISTIVE JOINT SYSTEM** is an assemblage of specific materials or products that are designed, tested and fire resistant **[For SFM]** rated in accordance with UBC Standard 7-1 to resist, for a prescribed period of time, the passage of fire through joints.

**703.4 Standards of Quality.** In addition to all the other requirements of this code, fire-resistive materials shall meet the requirements for fire-resistive construction given in this chapter. The standards listed below labeled a UBC standard are also listed in Chapter 35, Part II, and are part of this code. The standards listed below labeled an Adopted Standard are also listed in Chapter 35, Part III, and are part of this code. The other standards listed below are recognized standards. (See Sections 3503 and 3504.) **[For SFM]** In addition to the standards listed below, other national standards adopted by the State Fire Marshal are listed in Chapter 35.

**706.2 Fire-resistive Joint Systems.** Fire-resistive joint systems shall be tested in accordance with UBC Standard 7-1 **[For SFM]** or UL 2079, 1997 edition, under the following conditions:

1. Joint systems shall be installed full height in wall assemblies and full length in floor and roof assemblies.
2. Floor and roof assemblies shall be tested with a minimum positive pressure differential of 0.01 inch of water column (2.5 Pa).
3. Wall assemblies shall be tested with a minimum positive pressure differential of 0.01 inch of water column (2.5 Pa) measured at the mid height of the wall assembly.
4. Joint systems shall contain a splice. For wall assemblies, the splice shall be located above the mid height of the wall assembly.
5. Joint systems shall be tested at the maximum joint width for which they are designed. Joint systems designed to accommodate movement shall be expanded to the maximum joint opening width for which they are intended to function.
6. Joint systems designed to be load-bearing shall be loaded to the maximum design load in accordance with their intended application.
7. Joint systems designed to accommodate movement shall be preconditioned by cycling between the minimum and the maximum joint opening width for which they are intended to function for the number of cycles specified in Table 7-D.

8. Nonsymmetrical wall joint systems shall be tested in accordance with Sections 706 and 709.5.

~~709.6.1 General.~~ Through penetrations of walls *where openings are required to be protected* shall comply with Section 709.6.2 or 709.6.3.

~~EXCEPTION:~~ Where the penetrating items are steel, ferrous or copper pipes or steel conduits, the annular space shall be permitted to be protected as follows:

- ~~1. In concrete or masonry walls where the penetrating items are a maximum 6-inch (152 mm) nominal diameter and the opening is a maximum 144 square inches (92 903 mm<sup>2</sup>) concrete, grout or mortar shall be permitted when installed the full thickness of the wall or the thickness required to maintain the fire rating, or~~
- ~~2. The material used to fill the annular space shall prevent the passage of flame and hot gases sufficient to ignite cotton waste when subjected to UBC Standard 7-1 time temperature fire conditions under a minimum positive pressure differential of 0.01 inch of water column (2.5 Pa) at the location of the penetration for the time period equivalent to the fire rating of the construction penetrated.~~

~~709.7 Membrane Penetrations.~~ Membrane penetrations of walls *where openings are required to be protected* shall comply with Section 709.6.

~~EXCEPTIONS:~~ 1. Steel electrical boxes that do not exceed 16 square inches (10 323 mm<sup>2</sup>) in area, provided that the area of such openings does not exceed 100 square inches for any 100 square feet (694 mm<sup>2</sup>/m<sup>2</sup>) of wall area. Outlet boxes on opposite sides of the wall shall be separated by a horizontal distance of not less than 24 inches (610 mm). Membrane penetrations for electrical outlet boxes of any material are permitted, provided that such boxes are tested for use in fire-resistive assemblies and installed in accordance with the tested assembly.

~~2. The annular space created by the penetration of a fire sprinkler shall be permitted to be unprotected, provided such space is covered by a metal escutcheon plate. Noncombustible penetrating items shall not be connected to combustible materials on both sides of the membrane unless it can be confirmed that the fire-resistive integrity of the wall is maintained in accordance with UBC Standard 7-1.~~

~~709.8 Joints.~~ The protection of joints ~~[For SFM] in fire-resistive walls and partitions~~ shall comply with the requirements of Section 706.

~~713.10.1 Required locations.~~ Not less than Class II, 250°F (121°C) smoke dampers complying with approved recognized standards (see Chapter 35, Part IV) shall be installed and be accessible for inspection and servicing in the following ducted or un-ducted air openings at:

- ~~1. Penetrations of area or occupancy separation walls.~~
- ~~2. Penetrations of the fire-resistive construction of horizontal exit walls or corridors serving as a means of egress.~~

~~EXCEPTION:~~ Openings for steel ducts penetrating the required fire-resistive construction of corridors are not required to have smoke dampers when such ducts are of not less than 0.019 inch (0.48 mm) thickness (No. 26 galvanized sheet steel gage) and have no openings serving the corridor.

- ~~3. Penetrations of shaft enclosures.~~

~~EXCEPTION:~~ Exhaust only openings serving continuously operating fans and protected using the provisions of Chapter 9.

- ~~4. Penetrations of smoke barriers.~~
- ~~5. Penetrations of elevator lobbies required by Section 403.7 or 1004.3.4.5.~~
- ~~6. Penetrations of areas of refuge.~~

~~EXCEPTION:~~ Ventilation systems specifically designed and protected to supply outside air to these areas during an emergency. A smoke damper need not be provided when it can be demonstrated that the smoke damper is not essential to limit the passage of smoke under passive conditions and the proper function of a smoke control system complying with Chapter 9 does not depend on the operation of the damper. Smoke dampers may be omitted at openings that must be maintained open for proper operation of a mechanical smoke control system, provided that adequate protection against smoke migration, in the event of system failure, has been provided.

~~713.10.2 Methods of activation.~~ Smoke dampers shall be closed by actuation of a smoke detector installed in accordance with the *California Fire Code* and one of the following applicable methods:

1. Where a damper is installed within a duct, a smoke detector shall be installed in the duct within 5 feet (1524 mm) of the damper with no air outlets or inlets between the detector and the damper. The detector shall be listed for the air velocity, temperature and humidity anticipated at the point where it is installed.
2. Where a damper is installed within an unducted opening in a wall, a spot type detector listed for releasing service shall be installed within 5 feet (1524 mm) horizontally of the damper.
3. Where a damper is installed in a ceiling, a spot type detector listed for releasing service shall be installed on the ceiling within 5 feet (1524 mm) of the damper.
4. Where a damper is installed in a corridor wall or ceiling, the damper may be controlled by a smoke detection system installed in the corridor.
5. When a total coverage smoke detection system is provided within all areas served by an HVAC system, dampers may be controlled by the smoke detection system.

**713.11 Fire Dampers.** Fire dampers complying with the requirements of approved recognized standards (see Chapter 35, Part IV) shall be installed and be accessible for inspection and servicing in the following ducted and unducted air openings at:

1. Penetrations through ~~[For SFM] smoke barriers of Group 1, Division 1.1 Occupancies~~, area separation walls or occupancy separations.
2. Penetrations of the fire resistive construction of horizontal exit walls or corridors serving as a means of egress.

**EXCEPTION:** Openings for steel ducts penetrating the required fire resistive construction of corridors are not required to have dampers when such ducts are of not less than 0.019-inch (0.48mm) thickness (No. 26 galvanized sheet steel gage) and have no openings serving the corridor.

3. Penetrations of shaft enclosures.

**EXCEPTIONS:** 1. Duct penetrations by steel exhaust air subducts extending vertically upward at least 22 inches (559 mm) above the top of the opening in a vented shaft where the airflow is upward.

2. Penetrations of a fire resistive floor forming the base of a shaft enclosure may be protected by fire dampers listed for installation in the horizontal position.

4. Penetrations of the ceiling of fire resistive floor-ceiling or roof-ceiling assemblies.

5. Penetrations of an atrium enclosure element.

6. Penetrations of the building exterior required to have protected openings by Section 503.

7. Penetrations of areas of refuge.

**EXCEPTION:** Ventilation systems specifically designed and protected to supply outside air to these areas during an emergency. A fire damper is not required where fire tests have demonstrated that fire dampers are not required to maintain the fire resistance of the construction. The operating temperature of the fire damper actuating device shall be approximately 50°F (10°C) above the normal temperature within the duct system, but not less than 160°F (71°C). The operating temperature of the actuating device may be increased to not more than 286°F (141°C) when located in a smoke control system complying with Chapter 9.

#### **TABLE 7-D. PRECONDITIONING CYCLES FOR FIRE RESISTIVE JOINT SYSTEMS**

~~1[For SFM] Cycling rate shall not be less than 1 cycle per minute.~~

### **Chapter 9**

**SECTION 901 . SCOPE** This chapter applies to the design and installation of fire extinguishing systems, smoke control systems and smoke and heat venting systems. For requirements on fire alarm systems, see the following: SECTION SUBJECT 303.9 Group A, Divisions 1 and 2 Occupancies 305.2.3, 305.9 Group E Occupancies 307.9 Group H Occupancies 308.9 Group I Occupancies 310.10 Group R Occupancies

~~[For SFM] 310.14.12 Existing Apartment Houses 403.5 High rise buildings 408.5 Amusement buildings 307.11.5.5 Group H, Division 6 Occupancies For smoke detectors in Group R Occupancies, see Section 310.9.~~

### **SECTION 903.**

#### **DEFINITIONS**

~~[For SFM, SL] SPRINKLER ALARM is a local alarm unit assembly or apparatus approved for the service and so constructed and installed that any flow of water from a sprinkler system equal to or greater than that from a single automatic sprinkler will result in an audible alarm signal on the premises.~~

~~[For SFM, SL] SPRINKLER SYSTEM, for fire protection purposes, is an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The installation includes a water supply, such as a gravity tank, fire pump, reservoir or pressure tank and/or connection by underground piping to a city main. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and a device for actuating alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area.~~

~~[For SFM, SL] Class I is a dry standpipe system without a directly connected water supply and equipped with 2 1/2-inch (63.5 mm) outlets for use by the fire department or trained personnel.~~

~~[For SFM, SL] Class II is a wet standpipe system directly connected to a water supply and equipped with 1 1/2-inch (38.1 mm) outlets and hose intended for use by the building occupants.~~

~~[For SFM, SL] Class III is a combination standpipe system directly connected to a water supply and equipped with both 1 1/2-inch (38.1 mm) outlets for use by the building occupants and 2 1/2-inch (63.5 mm) outlets for use by the fire department or trained personnel, or 2 1/2-inch (63.5 mm) and 1 1/2-inch (38.1 mm) outlets when a 1 1/2-inch (38.1 mm) hose is required. Hose connections for Class III systems may be made through 2 1/2-inch (63.5 mm) hose valves with easily removable 2 1/2-inch by 1 1/2-inch (63.5 mm by 38.1 mm) reducers.~~

~~**EXCEPTION:** Outlets for use by the fire authorities shall be of the size determined by the fire authority having jurisdiction.~~

**904.1.2 Standards.** Fire extinguishing systems shall comply with UBC Standards 9-1 and 9-2.

~~[For SFM] The following standards shall be utilized: NFPA 11-1994 Foam Extinguishing Systems; NFPA 11A-1994, Medium and High-Expansion Foam Systems; NFPA 12-1997, Carbon Dioxide Fire Extinguishing Systems; NFPA 12A, 1992, Halon 1301 Systems; NFPA 2001-1996, Clean Agent Fire Extinguishing Systems; NFPA 13-1999 as amended, Installation of Sprinkler Systems; NFPA 13D-1999, Installation of Sprinkler Systems in One and Two-Family Dwellings and Mobile Homes (Installed in Congregate Living Health Facilities); NFPA 13R-1999, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height; NFPA 14-2000, Standpipe and Hose Systems; NFPA 15-1996, Water Spray Fixed Systems; NFPA 16A-1994, Closed-head Foam-water Sprinkler Systems; NFPA 17-1994, Dry Chemical Extinguishing Systems; NFPA 17A-1994, Wet Chemical Extinguishing Systems; NFPA 20-1996, Centrifugal Fire Pumps; NFPA 22-1996, Water Tanks for Private Fire Protection; NFPA 24-1995, Private Fire Service Mains (Except as noted in Section 904.1.2, Exception 2).~~

~~**EXCEPTIONS:** 1. Automatic fire extinguishing systems not covered by UBC Standard 9-1 or 9-2 shall be approved and installed in accordance with approved standards.~~

~~2. Automatic sprinkler systems may be connected to the domestic water supply main when approved by the building official, provided the domestic water supply is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements. In such case, the sprinkler system connection shall be made between the public water main or meter and the building shutoff valve, and there shall not be intervening valves or connections. The fire department connection may be omitted when approved by the fire department.~~

~~3. Automatic sprinkler systems in Group R Occupancies four stories or less may be in accordance with UBC Standard 9-3.~~

~~4. [For SFM] Group I Occupancies housed in existing single family dwellings may utilize the following deviations from NFPA 13, provided the floor area and height of any single or multiple story building does not exceed those allowed by Table 5-B, and further provided the system is hydraulically calculated in accordance with light hazard requirements without allowance for hose. Water supply mains may be reduced to 2 inches (51 mm) provided the system has provisions for a minimum 30-minute water supply at the required fire flow, but in no case shall such flow be less than 150 gallons per minute (9.5 L/s). The 2-inch (51 mm) mains shall not be used for any purpose other than fire-extinguishing systems.~~

~~4.1 [For SFM] A single source of water of adequate capacity may be used. Where public mains are not available, pressure tanks, storage tanks, swimming pools constructed of concrete, cementitious material or equivalent construction, private wells and adjacent natural water bodies shall be acceptable. Such sources shall be maintained in accordance with the requirements of the enforcing agency.~~

~~4.2 [For SFM] Electric-driven fire pumps installed in occupancies located in areas served by a light or power service subject to frequent interruption shall have an approved secondary source for supply of main operating power.~~

~~4.3 [For SFM] Existing pumps of any type shall be acceptable if found adequate for the systems needs.~~

~~4.4 [For SFM] Electrical supervision of a fire pump need not be provided.~~

~~4.5 [For SFM] Fire department connections are not required.~~

~~4.6 [For SFM] Sprinklers may be omitted from all roof overhangs 4 feet (1219 mm) or less in width, provided the area under any such overhang is not used for storage or vehicular parking.~~

~~4.7 [For SFM] Unless otherwise required by this code, sprinklers may be omitted in spaces under ground floors when the space does not exceed 30 inches (762 mm) in height and the use and design of the space conforms to the following: The space is not accessible for or used for storage purposes or entrance of unauthorized persons and is protected against the accumulation of wind-blown debris; The space contains no equipment such as steam pipes, shafting or conveyors; The floor over the space is constructed of solid or tightfitting materials void of any unprotected openings; Nonflammable liquids are processed, handled or stored on the floor above.~~

~~4.8 [For SFM] Electric wiring in spaces under ground floors where sprinklers are omitted shall be enclosed in an approved metallic raceway unless serving circuits of 30 volts or less.~~

~~4.9 [For SFM] Sprinklers may be omitted in closets 2 feet (610 mm) or less in depth and 6 feet (1829 mm) or less in length.~~

~~4.10 [For SFM] The fire alarm and fire extinguishing system, including pumps, shall be tested at monthly intervals in a manner acceptable to the fire authority having jurisdiction.~~

~~4.11 [For SFM] The installation of automatic fire extinguishing systems installed under this exception shall not be used to permit area increases, increase in height or as a substitute for one-hour construction.~~

**904.2.1 Where required.** An automatic fire extinguishing system shall be installed in the occupancies and locations as set forth in this section.

~~[For SFM] For special provisions on hazardous chemicals and magnesium, and calcium carbide, see the Fire Code. For provisions on special hazards and hazardous materials, see the Fire Code.~~

~~**904.2.4.4 [For SFM] Special provisions.** School buildings or portions of buildings for which review and approval is required under Subdivision (a) of Section 39140 of the Education Code shall, on the effective date of this regulation, comply with State Appendixes III-AA and III-BB of the California Fire Code.~~

~~**904.2.6.4 [For SFM] Group H, Division 8 Occupancies.** An automatic sprinkler system shall be installed throughout buildings housing Group H, Division 8 Occupancies. Sprinkler system design for research laboratories and similar areas of a Division 8 Occupancy shall not be less than that required for Ordinary Hazard Group 3 with a design area of not less than 3,000 square feet (279 m<sup>2</sup>). In mixed occupancies, portions of floors or buildings not classified as Group H, Division 8 Occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m<sup>2</sup>).~~

~~**904.2.7 Group I Occupancies.** An automatic sprinkler system shall be installed in Group I Occupancies [For SFM] unless otherwise exempted in Chapter 3 of this code. In Group I, Division 1.1 and Group I, Division 2 Occupancies, approved quick response or residential sprinklers shall be installed throughout patient sleeping areas.~~

~~**EXCEPTION:** In jails, prisons and reformatories, the piping system may be dry, provided a manually operated valve is installed at a continuously monitored location. Opening of the valve will cause the piping system to be charged. Sprinkler heads in such systems shall be equipped with fusible elements or the system shall be designed as required for deluge systems in UBC Standard 9-1.~~

~~**904.2.9 Group R, Division 1 Occupancies.** An automatic sprinkler system shall be installed throughout every apartment house three or more stories in height or containing 5 or more dwelling units, every congregate residence three or more stories in height or having an occupant load of 11 or more, and every hotel three or more stories in height or containing 6 or more guest rooms. Residential or quick response standard sprinklers shall be used in the dwelling units and guest room portions of the building.~~

~~[For SFM] The requirements of this subsection shall not mandate the retroactive installation of an automatic sprinkler system to an existing R1 Occupancy.~~

~~**904.2.10 [For SFM] Group R, Division 2 Occupancies.** An automatic sprinkler system shall be installed in Group R, Division 2 Occupancies.~~

**EXCEPTIONS:** 1. Group R, Divisions 2.1.1 and 2.2.1 Occupancies not housing bedridden clients and not exceeding two stories in height or not housing bedridden clients and not housing nonambulatory clients above the first story. 2. When Group R, Divisions 2.1.1 and 2.2.1 Occupancies are required to have an automatic sprinkler system, an NFPA 13R or 13D system may be used within the scope of those standards. Section 2.6 of NFPA 13R or 13D shall not apply unless approved by the authority having jurisdiction. 3. Pursuant to Health and Safety Code Section 13113, Division 2.2 Occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors. 4. Pursuant to Health and Safety Code Section 13143.6, Division 2 Occupancies which house ambulatory persons only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

**904.2.10.1 [For SFM] Group R, Divisions 2.3 and 2.3.1 Occupancies.** An automatic sprinkler system shall be installed in Group R, Divisions 2.3 and 2.3.1 occupancies. Residential or quick response standard sprinklers shall be used in sleeping rooms. An automatic sprinkler system meeting the requirements of NFPA 13 shall be installed in all Group R, Division 2.3 Occupancies. ANFPA 13R or 13D system may be used in Group R 2.3.1 occupancies.

**904.3.3 [For SFM]** Whenever a sprinkler alarm is required for occupancies housing more than six nonambulatory persons, the water flow alarm shall be staff alerting on each floor.

**EXCEPTION:** The required manual or automatic fire alarm system may be used to provide the staff alerting notification upon initiation of a water flow alarm.

**904.5.1 General.** Standpipes shall comply with the requirements of this section and UBC Standard 9-2 and **[For SFM]** NFPA 14 with the following amendment: Section 4.4.3.4, Nozzles for Class II service hose shall be listed and approved. Such hose shall be equipped with a listed variable fog nozzle.

**905.2.4 Opening protection.** Openings in smoke barriers shall be protected by self-closing devices or automatic-closing devices actuated by the required controls for the mechanical smoke control system.

**EXCEPTIONS:** 1. Passive smoke control systems may have automatic-closing devices actuated by spot-type smoke detectors listed for releasing service. **[For SFM]** Such detectors when used in Group I, Division 1.1 Occupancies shall activate the fire alarm system. 2. The airflow method may be used to protect openings fixed in a permanently open position which are located between smoke zones **For SFM]** in other than Group I, Division 1.1 Occupancies. 3. **[For SFM]** In Group I, Division 1.1 Occupancies an approved smoke detector listed for air duct installation and releasing service shall be located in the duct up stream of the smoke damper and after the last opening or branch of that duct, or 4. **[For SFM]** In Group I, Division 1.1 Occupancies smoke damper activation may be accomplished by a fire alarm control panel provided that an open area smoke detection system as required by the California Fire Code is provided within all areas served by an HVAC system. Door openings shall be protected in accordance with Section 1004.3.4.3.2.

**EXCEPTIONS:** 1. In Group I, Division 1 Occupancies when such doors are installed across corridors, a pair of opposite swinging doors without a center mullion shall be installed having vision panels with approved fire rated glazing materials in approved fire-rated frames, the area of which shall not exceed that tested. The doors shall be close fitting within operational tolerances, and shall not have undercuts, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges and automatic-closing devices. Positive latching devices may be omitted. **[For SFM]** All doors shall have positive latching devices. 2. Group I, Division 3 Occupancies. Duct and other heating, ventilating and air conditioning openings shall be equipped with a minimum Class II, 250\_F (121\_C) smoke damper as defined and tested in accordance with approved recognized standards. See Chapter 35, Part IV.

**905.2.5 Duration of operation.** All portions of active or passive smoke control systems shall be capable of continued operation after detection of the fire event for not less than 20 minutes.

## Chapter 10

**1001.2 Standards of Quality.** The standards listed below that are labeled a UBC Standard, are also listed in Chapter 35, Part II, and are part of this code. **[For SFM]** The standards listed below that are labeled an Adopted Standard, are also listed in Chapter 35, Part III, and are part of this code.

1. **Power doors.** 1.1 UBC Standard 10-1, Power-operated Egress Doors 1.2 UBC Standard 7-8, Horizontal Sliding Fire Doors Used in a Means of Egress
2. **Stairway numbering system.** UBC Standard 10-2, Stairway Identification

### 3. Hardware.

4. ~~Smoke containment systems. Adopted standard ICBO-ES-AC 77, Acceptance Criteria for Smoke Containment Systems Used with Fire-Resistive Elevator Hoistway Doors and Frames. UBC Standard 10-4, Panic Hardware~~

~~1003.2.9.1 General. Any time a building [For SFM] or portion of a building is occupied, the means of egress serving the occupied portion shall be illuminated at an intensity of not less than 1 footcandle (10.76 lx) at the floor level.~~

~~EXCEPTIONS: 1. In Group R, Divisions 2.1.1, 2.2.1, 2.3.1, 6.1.1, 6.2.1 and 3 Occupancies and within individual units of Group R, Division 1 Occupancies. 2. In auditoriums, theaters, concert or opera halls, and similar assembly uses, the illumination at the floor level may be reduced during performances to not less than 0.2 footcandle (2.15 lx), provided that the required illumination be automatically restored upon activation of a premise's fire alarm system when such system is provided. 3. [For SFM] Sleeping rooms in Group I Occupancies, and sleeping rooms in Group R, Divisions 2.1, 2.2, 2.3, 6.1 and 6.2 Occupancies.~~

~~1003.2.9.2 Power supply. The power supply for means of egress illumination shall normally be provided by the premise's electrical supply. In the event of its failure, illumination shall be automatically provided from an emergency system for Group I, Divisions 1.1 and 1.2. [For SFM] Occupancies in rooms or areas requiring two or more exits or exit access doorways, or a combination thereof and Group R, Divisions 2.1 and 2.2 Occupancies and for all other occupancies where the means of egress system serves an occupant load of 100 or more. Such emergency systems shall be installed in accordance with the Electrical Code. For high rise buildings, see Section 403.~~

~~1003.3.1.2 Special doors. Revolving, sliding and overhead doors serving an occupant load of 10 or more shall not be used as required exit doors. [For SFM] Manually operated horizontal sliding doors may be used when serving an occupant load of 10 or less. Large family day care homes may use manually operated horizontal sliding doors when serving an occupant load of 14 or less.~~

~~EXCEPTIONS: 1. Approved revolving doors having leaves that will collapse under opposing pressures may be used, provided 1.1 Such doors have a minimum width of 6 feet 6 inches (1981 mm). 1.2 At least one conforming exit door is located adjacent to each revolving door. 1.3 The revolving door shall not be considered to provide any required width when computing means of egress width in accordance with Section 1003.2.3. 2. Horizontal sliding doors complying with UBC Standard 7-8 may be used 2.1 In elevator lobby separations. 2.2 In other than Groups A and H Occupancies, where smoke barriers are required. 2.3 In other than Group H Occupancies, where serving an occupant load of less than 50. Power-operated doors complying with UBC Standard 10-1 may be used for egress purposes. Such doors, where swinging, shall have two guide rails installed on the swing side projecting out from the face of the door jambs for a distance not less than the widest door leaf. Guide rails shall not be less than 30 inches (762 mm) in height with solid or mesh panels to prevent penetration into door swing and shall be capable of resisting a horizontal load at top of rail of not less than 50 pounds per lineal foot (730 N/m).~~

~~EXCEPTIONS: 1. Walls or other types of separators may be used in lieu of the above guide rail, provided all the criteria are met. 2. Guide rails in industrial or commercial occupancies not accessible to the public may comply with the Exception to Section 509.3. 3. Doors swinging toward flow of traffic shall not be permitted unless actuating devices start to function at least 8 feet 11 inches (2718 mm) beyond the door in an open position and guide rails extend 6 feet 5 inches (1956 mm) beyond the door in an open position. Clearances for guide rails shall be as follows: 1. Six inches (152 mm) maximum between rails and leading edge of door at the closest point in its arc of travel. 2. Six inches (152 mm) maximum between rails and the door in an open position. 3. Two inches (51 mm) minimum between rail at hinge side and door in an open position. 4. Two inches (51 mm) maximum between freestanding rails and jamb or other adjacent surface.~~

~~1004.2.5.2 Maximum travel distance. The travel distance to at least one exit shall not Exceed that specified in this section. Special travel distance requirements are contained in other sections of this code as follows: 1. For atria, see Section 402.5. 2. For Group E Occupancies, see Section 1007.3. 3. For Group H Occupancies, see Section 1007.4. 4. For malls, see Sections 404.4.3 and 404.4.5. 5.~~

~~[For SFM] For Group I Occupancies, see Section 1007.5.~~

~~1006.3.2.3 Construction. Exterior exit balconies projecting from the walls of buildings of Type I or II construction shall be of noncombustible construction. Exterior exit balconies projecting from the walls of buildings of Type III, IV or V construction may be of combustible or noncombustible construction. Walls of exterior exit balconies serving a Group R, Divisions 1 and 6 Occupancies having an occupant load of 10 or more,~~

~~[For SFM] or Group R, Divisions 2.1, 2.2 and 2.3, or Group I Occupancies having an occupant load of 7 or more shall not be less than one hour fire resistive construction and ceilings shall not be less than that required for a one hour fire resistive floor or roof system.~~

~~**EXCEPTIONS:** 1. Exterior sides of exterior exit balconies. 2. In other than Type I or II construction, exterior exit balcony roof assemblies may be of heavy timber construction without concealed spaces.~~

~~**1007.2.9 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. Such marking shall be continuous Except as interrupted by doorways, 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.~~

~~**1007.4.2.1 Travel within rooms.** Within Group H, Divisions 1, 2 and 3 [For SFM] and 8 Occupancies, all portions of any room shall be within 75 feet (22 860 mm) of an exit or exit access door from the room. Within Group H, Division 7 [For SFM] and 8, and within fabrication areas of Group H, Division 6 Occupancies, the distance of travel to an exit corridor or to an exit shall not Exceed 100 feet (30 480 mm).~~

~~**1007.4.5 Panic hardware.** Exit and exit access doors from rooms in Group H, Divisions 1, 2, 3, 6 and 7 [For SFM] and 8 Occupancies shall not be provided with a latch or lock unless it is panic hardware.~~

~~**1007.6.1 Hallways.** Hallways in Group R, Divisions 1 and 6 Occupancies that serve an occupant load of 10 or more and Group R, Division 2 Occupancies serving a client occupant load of 7 or more shall comply with the requirements of Section 1004.3.4 for corridors.~~

~~**1007.6.2.1.1 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 R, Division 1 Occupancies. Such marking shall be continuous Except as interrupted by doorways, 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.~~

## **TABLE 10-A. MINIMUM EGRESS REQUIREMENTS**

### **CHAPTER 11A HOUSING ACCESSIBILITY**

~~**1118A.1 General.** In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided. Areas for evacuation assistance shall comply with the requirements of this Code and shall adjoin an accessible route of travel complying with this Code.~~

~~**Exceptions:**~~

- ~~1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.~~
- ~~2. Areas of evacuation assistance are not required in alterations of existing buildings except when the alteration or addition is subject to the provisions of this Chapter as specified in Section 1102A.2.~~

#### ~~**1118A.2 Areas for Evacuation Assistance.**~~

~~**1118A.2.1 Location and Construction.** An area for evacuation assistance shall be one of the following:~~

- ~~1. A portion of a stairway landing within a smoke proof enclosure, complying with Section 1005.3.3.~~

- ~~2. A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20 feet (6096 mm) of the area for evacuation assistance shall be protected with fire assemblies having a three-fourths-hour fire protection rating.~~
- ~~3. A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure.~~
- ~~4. A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4.~~
- ~~5. A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies.~~
- ~~6. When approved by the building official, an area or room, which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight fitting smoke and draft-control assemblies having a fire-protection rating of not less than 20 minutes and shall be self-closing or automatic closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.~~
- ~~7. An elevator lobby complying with Section 1118A.3.~~

~~**1118A.2.2 Size.** Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30 inches by 48 inches (762 mm by 1219 mm). The area for evacuation assistance shall not encroach on any required exit width. The total number of such 30-inch by 48-inch (762 mm by 1219 mm) areas per story shall not be less than one for every 200 persons of calculated occupant load served by the area for evacuation assistance.~~

~~**Exceptions:** The building official may reduce the minimum number of 30-inch by 48-inch (762 mm by 1219 mm) areas to one for each area for evacuation assistance on floors where the occupant load is less than 200.~~

~~**1118A.2.3 Adjacent Stairway Width.** Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48 inches (1219 mm) between handrails.~~

#### ~~**1118A.2.4 Two-Way Communication.**~~

~~**1118A.2.4.1 Communication and Location.** A telephone with controlled access to a public telephone system or another method of two-way communication shall be provided between each area of refuge and the primary entry. The fire department may approve a location other than the primary entry.~~

~~**1118A.2.4.2 Visible and Audible Communication method.** A method of two-way communication with both visible and audible communication shall be provided between each area of evacuation assistance and the primary entry. A button in the area of rescue assistance shall activate both a light in the area of rescue assistance indicating that rescue has been requested and a light at the primary entry indicating that rescue is being requested. A button at the primary entry shall activate both a light at the primary entry and a light in the area of rescue assistance indicating that the request has been received.~~

~~**1118A.2.5 Identification.** Each area for evacuation assistance shall be identified by a sign with the "International Symbol of Accessibility" and text that clearly reads, "AREA FOR EVACUATION ASSISTANCE." The sign shall be illuminated when exit sign illumination is required. In each area for evacuation assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system.~~

~~**1118A.3 Area for Evacuation Assistance, High-Rise Alternative.** Within a building of any height or occupancy constructed in accordance with the requirements of Sections 403.1 through 403.10, an area for evacuation assistance may be located in the elevator lobby when:~~

- ~~1. The area for evacuation assistance complies with the requirements for size, two-way communication and identification as specified in Section 1118A.2; and~~
- ~~2. Elevator shafts and adjacent lobbies are pressurized as required for smoke proof enclosures in Section 1005.3.3. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the building official. Pressurization equipment and its ductwork within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction.~~

~~**1118A.4 Emergency Warning Systems/ Accessibility Requirements.** Emergency warning systems as part of the fire alarm system shall be designed and installed in accordance with NFPA 72 as amended in Chapter 35.~~

~~**1118A.5 Emergency Egress.** Accessible routes serving any accessible space or element shall also serve as a means of egress for emergencies or connect to an accessible place of refuge. Such accessible routes and places of refuge shall comply with the requirements established by the enforcement agency.~~

## **CHAPTER 11B ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS, COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING**

~~**1114B.2.1 [For SFM] General.** In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided. Areas for evacuation assistance shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with this code.~~

~~**EXCEPTIONS:** 1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.~~

~~2. In alterations of existing buildings, areas of evacuation assistance are not required.~~

### ~~**1114B.2.2 [For SFM] Areas for evacuation assistance.**~~

~~**1114B.2.2.1 [For SFM] Location and construction.** An area for evacuation assistance shall be one of the following:~~

~~1. [For SFM] A portion of a stairway landing within a smokeproof enclosure, complying with Section 1005.3.3.~~

~~2. [For SFM] A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20 feet (6096 mm) of the area for evacuation assistance shall be protected with fire assemblies having a three-fourths-hour fire-protection rating.~~

~~3. [For SFM] A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure.~~

~~4. [For SFM] A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4.~~

~~5. [For SFM] A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies.~~

~~6. [For SFM] When approved by the building official, an area or room which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight fitting smoke and draft-control assemblies having a fire-protection rating of not less than 20 minutes and shall be self-closing or automatic-closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.~~

~~7. [For SFM] An elevator lobby complying with Section 1114B.2.3.~~

~~**1114B.2.2.2 [For SFM] Size.** Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30 inches by 48 inches (762 mm by 1219 mm). The area for evacuation assistance shall not encroach on any required exit width. The total number of such 30-inch by 48-inch (762 mm by 1219 mm) areas per story shall not be less than one for every 200 persons of calculated occupant load served by the area for evacuation assistance.~~

~~**EXCEPTION:** The building official may reduce the minimum number of 30-inch by 48-inch (762 mm by 1219 mm) areas to one for each area for evacuation assistance on floors where the occupant load is less than 200.~~

~~1114B.2.2.3 [For SFM] Adjacent stairway width. Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48 inches (1219 mm) between handrails.~~

~~1114B.2.2.4 [For SFM] Two-way communication.~~

~~1114B.2.2.4.1 [For SFM] A telephone with controlled access to a public telephone system or another method of two-way communication shall be provided between each area of refuge and the primary entry. The fire department may approve a location other than the primary entry.~~

~~1114B.2.2.4.2 [For DSA/AC] A method of two-way communication with both visible and audible communication shall be provided between each area of evacuation assistance and the primary entry. A button in the area of rescue assistance shall activate both a light in the area of rescue assistance indicating that rescue has been requested and a light at the primary entry indicating that rescue is being requested. A button at the primary entry shall activate both a light at the primary entry and a light in the area of rescue assistance indicating that the request has been received. A telephone with controlled access to a public telephone system or another method of two-way communication shall be provided between each area of refuge and the primary entry. The fire department may approve a location other than the primary entry.~~

~~1114B.2.2.5 [For SFM] Identification. Each area for evacuation assistance shall be identified by a sign which states AREA FOR EVACUATION ASSISTANCE and the International symbol of accessibility. The sign shall be illuminated when exit sign illumination is required. In each area for evacuation assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system.~~

~~1114B.2.3 [For SFM] Area for evacuation assistance, high-rise alternative. Within a building of any height or occupancy constructed in accordance with the requirements of Sections 403.1 through 403.10, an area for evacuation assistance may be located in the elevator lobby when:~~

- ~~1. The area for evacuation assistance complies with the requirements for size, two-way communication and identification as specified in Section 1114B.2.2; and~~
- ~~2. Elevator shafts and adjacent lobbies are pressurized as required for smoke-proof enclosures in Section 1005.3.3. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the building official. Pressurization equipment and its ductwork within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction.~~

~~1114B.2.4 [For SFM] Alarms/emergency warning systems/accessibility. If emergency warning systems are required, they shall activate a means of warning the hearing impaired. Emergency warning systems as part of the fire alarm system shall be designed and installed in accordance with NFPA 72 as amended in Chapter 35.~~

## CHAPTER 15

### Section 1502 – DEFINITIONS

~~[For SFM] FIRE RETARDANT SHAKES AND SHINGLES are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A, B or C roofs.~~

~~1507.15 [For SFM] Reroofing. When the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the combustible concealed space shall be filled with the materials listed in Section 708.2.2.~~

## Chapter 31

~~3102.5 Factory-built Chimneys and Fireplaces. [For SFM.] All factory-built chimneys shall be designed and constructed in accordance with Chapters 16, 18, 19, 21 and 22 or shall be as specifically approved by the enforcement agency.~~

~~3102.6 Metal Chimneys. Metal chimneys shall be constructed and installed to meet the requirements of the [for SFM] California Mechanical Code. Metal chimneys shall be anchored at each floor and roof with two 1 1/2-inch by 1/8-inch (38mm by 3.2 mm) metal straps looped around the outside of the chimney installation and nailed with not less than six 8d nails per strap at each joist.~~

## Chapter 35

### ~~3504.1 [SFM] California Building Code Standards~~

#### ~~3504.1.1 [For SFM] Whenever the UBC refers to:~~

~~UBC Standard \_\_\_\_\_ It shall be construed to mean:~~

~~9-1 \_\_\_\_\_ NFPA 13~~

~~9-2 \_\_\_\_\_ NFPA 14~~

~~9-3 \_\_\_\_\_ NFPA 13R~~

- ~~1. NFPA 11, 2002 Edition, Low-Medium-High Expansion Foams~~
- ~~2. NFPA 11A, 1999 Edition, Medium and High Expansion Foam Systems~~
- ~~3. NFPA 12, 2000 Edition, Carbon Dioxide Extinguishing Systems~~
- ~~4. NFPA 12A, 1997 Edition, Halon 1301 Fire Extinguishing Systems~~
- ~~5. NFPA 13, 2002 Edition, The Installation of Sprinkler Systems, as amended.~~
- ~~6. NFPA 13D, 2002 Edition, Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes~~
- ~~7. NFPA 13R, 2002 Edition, Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height~~
- ~~8. NFPA 14, 2003 Edition, Installation of Standpipe and Hose Systems~~
- ~~9. NFPA 15, 2001 Edition, Water Spray Fixed Systems for Fire Protection~~
- ~~10. NFPA 16, 1999 Edition, Installation of Deluge, Foam-Water Sprinkler and Foam-Water Spray Systems~~
- ~~11. NFPA 17, 2002 Edition, Dry Chemical Extinguishing Systems~~
- ~~12. NFPA 17A, 2002 Edition, Wet Chemical Extinguishing Systems~~
- ~~13. NFPA 20, 1999 Edition, Installation of Stationary Pumps for Fire Protection~~
- ~~14. NFPA 22, 2003 Edition, Water Tanks for Private Fire Protection~~
- ~~15. NFPA 24, 2002 Edition, Installation of Private Fire Service Mains and Their Appurtenances~~
- ~~16. NFPA 37, 2002 Edition, Installation and Use of Stationary Combustion Engines and Gas Turbines~~
- ~~17. NFPA 50, 2001 Edition, Bulk Oxygen Systems at Consumer Sites~~
- ~~18. NFPA 52, 2002 Edition, Compressed Natural Gas (CNG) Vehicular Fuel Systems Code~~
- ~~19. NFPA 57, 2002 Edition, Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code~~
- ~~20. NFPA 54, 2002 Edition, National Fuel Gas Code~~
- ~~21. NFPA 58, 2001 Edition, Standard for the Storage and Handling of Liquefied Petroleum Gases~~
- ~~22. NFPA 72, 2002 Edition, National Fire Alarm Code, as amended. [The SFM does not adopt NFPA 72®, 1999 Edition, Chapter 8.]~~
- ~~23. NFPA 92 A, 2000 Edition, Recommended Practice for Smoke Control Systems~~
- ~~24. NFPA 99, 2002 Edition, Health Care Facilities,~~
- ~~25. NFPA 253, , 2000 Edition, Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source~~
- ~~26. NFPA 2001, 2000 Edition, Clean Agent Fire Extinguishing Systems~~
- ~~65. FM Class No. 3260, Radiant Energy Sensing Fire Detectors for Automatic Fire Alarm Signaling, August 2000 Edition.~~

Authority: Health and Safety Code Sections 13143, 17921, 18949

References: Health and Safety Code Sections 13143

**AMENDMENTS:**

**CALIFORNIA CHAPTER 1**  
**GENERAL CODE PROVISIONS**

(Note: Adopt only those sections listed in the matrix adoption table.)

**SECTION 101**  
**GENERAL**

**101.1 Title.** (Relocated from 2001 CBC 101.1) ~~For the State of California, these regulations shall be known as the California Building Code. The provisions contained in the California Building Code of the (compiled) as defined in Section 18910, Health and Safety Code, may be cited as such and are will be referred to hereafter herein as “these regulations” or “these building standards” or “this code.”~~ The California Building Code is Part 2 of eleven parts of the official compilation and publication of the adoptions, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2006 International Building Code of the International Code Council with necessary California amendments.

**101.2 Purpose.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; to preserve life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

**101.3 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the State of California.

**101.3.1 Non-State-Regulated Buildings, Structures, and Applications.** The provisions in Chapters 2 through 34 of the 2006 International Building Code of the International Code Council contained or referenced in this code shall apply to all occupancies and applications not regulated by a state agency.

**EXCEPTION:** Local modifications complying with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts. See section 101.8 of this code.

**101.3.2 State-Regulated Buildings, Structures, and Applications.** The model code provisions, amendments to the model code provisions and/or provisions where there are no relevant model code provisions, shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in sections 102 through 113. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.

**NOTE:** See Legend to distinguish the model code provisions from the California provisions.

- 1.** State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See section 102 for additional scope provisions.
- 2.** Local detention facilities regulated by the Board of Corrections. See section 103 for additional scope provisions.
- 3.** Barbering, cosmetology or electrolysis, establishments, acupuncture offices, pharmacies, veterinary facilities, and structural pest control locations regulated by the Department of Consumer Affairs. See section 104 for additional scope provisions.

4. Energy efficiency standards regulated by the California Energy Commission. See section 105 for additional scope provisions.
5. Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See section 106 for additional scope provisions.
6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Health Services. See section 107 for additional scope provisions.
7. Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with common toilets or cooking facilities. See section 108 for additional scope provisions.
8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of a covered multifamily dwelling, and common-use spaces serving covered multifamily dwellings which are regulated by Department of Housing and Community Development. See section 108 for additional scope provisions.
9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See section 108 for additional scope provisions.
10. Public accommodations for persons with disabilities regulated by the Division of the State Architect. See section 109.1 for additional scope provisions.
11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See section 109.2 for additional scope provisions.
12. Qualified historical buildings and structures and their associated sites regulated by the State Historical Building Safety Board with the Division of the State Architect. See section 109.3 for additional scope provisions.
13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Health Services, and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See section 110 for additional scope provisions.
14. Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 111:
  1. Buildings or structures used or intended for use as an:
    - 1.1. Asylum, jail
    - 1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity
    - 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, 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
    - 1.4. Small family day care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities
    - 1.5. State institutions or other state-owned or state-occupied buildings
    - 1.6. High rise structures
    - 1.7. Motion picture production studios
    - 1.8. Organized camps
    - 1.9. Residential structures
  2. Tents, awnings or other fabric enclosures used in connection with any occupancy

- 3. Fire alarm devices, equipment and systems in connection with any occupancy
- 4. Hazardous materials, flammable and combustible liquids
- 5. Public school automatic fire detection, alarm, and sprinkler systems
- 6. Wildland urban interface fire areas

15. Public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian. See section 112 for additional scope provisions.

16. Graywater systems regulated by the Department of Water Resources. See section 113 for additional scope provisions.

**101.4 Appendices.** Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18938 (b) for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See section 101.8 of this code.

**101.5** (Relocated from 2001 CBC 101.7) ~~**Standards Reference Documents, Referenced Codes.**~~ The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized fire-prevention engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Prevention Association may be used as authoritative guides in determining recognized fire-prevention engineering practices.

**101.6** (Relocated from 2001 CBC 101.8) ~~**Non-Building Standards, Orders and Regulations.**~~ Requirements contained in the UBC International Building Code, or in any other referenced standard, code or document, which are not building standards as defined in section 18909, Health and Safety Code, shall not be construed as part of the provisions of this code. For the applicability of regulations related to maintenance, operation, use, limitation or prohibitions, and similar non-building regulations standards, orders, and regulations, see other titles of the California Code of Regulations.

**101.7** (Relocated from 2001 CBC 101.9) ~~**Order of Precedence and Use.**~~

**101.7.1** (Relocated from 2001 CBC 101.9.1) ~~**General.**~~ In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern. Where a specific provision varies from a general provision, the specific provisions shall apply.

**101.8 City, County, or City and County Amendments, Additions or Deletions.**

The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with section 101.8.1. The effective date of amendments, additions, or deletions to this code of cities, counties, or city and counties filed pursuant to section 101.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

**101.8.1 Findings and Filings.**

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development at 1800 3<sup>rd</sup> Street, Room 260, Sacramento, CA 95814.

**101.9** (Relocated from 2001 CBC 101.4) **Effective Date of this Code.** Only those standards approved by the California Building Standards Commission and that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

**101.10** (Relocated from 2001 CBC 101.16) **Availability of Codes.** At least one entire copy each of Titles 8, 19, 20, 24, and 25 of the California Code of Regulations with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this part code. See Health and Safety Code section 18942 (d) (1) & (2).

**101.11** (Relocated from 2001 CBC 101.5) **Format.** This part fundamentally adopts the UBC International Building Code by reference on a chapter-by-chapter basis. Such adoption is reflected in the Matrix adoption table of each chapter of this part. When the Matrix adoption tables ~~of a chapter~~ makes no reference to a specific chapter of the UBC International Building Code, such chapter of the UBC International Building Code is not adopted as a portion of this code.

**101.12** (Relocated from 2001 CBC 101.6) **Validity.** If any chapter section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes, or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

Authority: Health and Safety Code Sections 13143, 17921, 18949

References: Health and Safety Code Sections 13143

## **SECTION 111** **OFFICE OF THE STATE FIRE MARSHAL**

**401.17.14-111.1** (Relocated from 2001 CBC 101.17.14) **SFM-Office of the State Fire Marshal.**

*Any building or structure used or intended for use as an asylum, jail, mental hospital, hospital, sanitarium, home for the aged, children's nursery, children's home, school or any similar occupancy of any capacity.*

*Any theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, 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.*

Authority Cited. Health and Safety Code Section 13143.

Reference. Health and Safety Code Section 13143.

### **Small Family Day-care Homes**

Authority Cited. Health and Safety Code Sections 1597.45, 1597.54, 13143 and 17921.

Reference. Health and Safety Code Section 13143.

### **Large Family Day-care Homes**

Authority Cited. Health and Safety Code Sections 1597.46, 1597.54 and 17921.

Reference. Health and Safety Code Section 13143.

### **Residential Facilities and Residential Facilities for the Elderly**

Authority Cited. Health and Safety Code Section 13133.

Reference. Health and Safety Code Section 13143.

### **Any state institution or other state-owned or state-occupied building.**

Authority Cited. Health and Safety Code Section 13108.

Reference. Health and Safety Code Section 13143.

### **High-rise Structures**

*Authority Cited. Health and Safety Code Section 13211.  
Reference. Health and Safety Code Section 13143.*

### **Motion Picture Production Studios**

*Authority Cited. Health and Safety Code Section 13143.1.  
Reference. Health and Safety Code Section 13143.*

### **Organized Camps**

*Authority Cited. Health and Safety Code Section 18897.3.  
Reference. Health and Safety Code Section 13143.*

### **Residential**

*All hotels, motels, lodging houses, apartment houses and dwellings, including congregate residences and buildings and structures accessory thereto.*

*Multiple-story structures existing on January 1, 1975, let for human habitation, including and limited to, hotels, motels, apartment houses, less than 75 feet (22 860 mm) above the lowest floor level having building access, wherein rooms used for sleeping are let above the ground floor.*

*Authority Cited. Health and Safety Code Sections 13143.2 and 17921.  
Reference. Health and Safety Code Section 13143.*

### **Residential Care Facilities**

*Certified family-care homes, out-of-home placement facilities, halfway houses, drug and/or alcohol rehabilitation facilities and any building or structure used or intended for use as a home or institution for the housing of any person of any age when such person is referred to or placed within such home or institution for protective social care and supervision services by any governmental agency.*

*Authority Cited. Health and Safety Code Section 13143.6.*

### **Tents, awnings or other fabric enclosures used in connection with any occupancy.**

*Authority Cited. Health and Safety Code Section 13116.  
Reference. Health and Safety Code Section 13143.  
Enforcing Agency. Pursuant to Section 13146, Health and Safety Code:*

### **Fire alarm devices, equipment and systems in connection with any occupancy.**

*Authority Cited. Health and Safety Code Section 13114.*

### **Hazardous materials.**

*Authority Cited. Health and Safety Code Section 13143.9.*

### **Flammable and combustible liquids.**

*Authority Cited. Health and Safety Code Section 13143.6.*

### **Public School Automatic Fire Detection, Alarm, and Sprinkler Systems**

*Authority Cited. Health & Safety Code Section 13143 and California Education Code Article 7.5, Sections 17074.50, 17074.52, & 17074.54.  
Reference. Government Code Section 11152.5 and Health & Safety Code Section 13143 and California Education Code Chapter 12.5, Leroy F. Greene School Facilities Act of 1998, Article 1.*

## **Wildland Urban Interface Fire Area**

Authority Cited. Health & Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.

Reference. Health & Safety Code Sections 13143 and Government Code Sections 51176, 51177, 51178 and 51179 and Public Resources Code Sections 4201 through 4204

### **111.2 Duties and Powers of the Enforcing Agency**

#### **111.2.1 Enforcement.**

**111.2.1.1** (Relocated from 2001 CBC 101.17.4) 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 Office of the State Fire Marshal shall 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, Division 3 dwellings, 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.

(Relocated from 2001 CBC 104.2.1) ~~**104.2.1 General.** The building official is hereby authorized and directed to enforce all the provisions of this code. For such purposes, the building official shall have the powers of a law enforcement officer.~~

(Relocated from 2001 CBC 104.2.1) ~~**NOTE [For SFM]: See Section 101.17.14.**~~

**111.2.1.2** (Relocated from 2001 CBC 104.2.1) ~~**[For SFM]**~~ Pursuant to Health and Safety Code Section 13108, upon the written request of the chief fire official of any city, county or fire-protection district, the State Fire Marshal may authorize such chief fire official and his or her authorized representatives, in their geographical area of responsibility, to make fire-prevention inspections of state-owned or state-occupied buildings, other than state institutions, for the purpose of enforcing the regulations relating to fire and panic safety adopted by the State Fire Marshal pursuant to this section and building standards relating to fire and panic safety published in the California Building Standards Code. Authorization from the State Fire Marshal shall be limited to those fire departments or fire districts which maintain a fire-prevention bureau staffed by paid personnel.

Pursuant to Health and Safety Code Section 13108, any requirement or order made by any chief fire official who is authorized by the State Fire Marshal to make fire-prevention inspections of state-owned or state-occupied buildings, other than state institutions, may be appealed to the State Fire Marshal. The State Fire Marshal shall, upon receiving an appeal and subject to the provisions of Chapter 5 (commencing with Section 18945) of Part 2, 5 of Division 13 of the Health and Safety Code, determine if the requirement or order made is reasonably consistent with the fire and panic safety regulations adopted by the Office of the State Fire Marshal and building standards relating to fire and panic safety published in the California Building Code.

The building official shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance with the intent and purpose of this code.

(Relocated from 2001 CBC 104.2.1) ~~[For SFM]~~ Any person may request a code interpretation from the State Fire Marshal relative to the intent of any regulation or provision adopted by the State Fire Marshal. When the request relates to a specific project, occupancy or building, the State Fire Marshal shall review the issue with the appropriate local enforcing agency prior to rendering such code interpretation.

**111.2.1.3** (Relocated from 2001 CBC 103.1) ~~103.1 [For SFM]~~ Pursuant to Health and Safety Code Section 13112, any person who violates any order, rule or regulation of the state fire marshal is guilty of a misdemeanor punishable by a fine of not less than \$100.00 or more than \$500.00, or by imprisonment for not less than six months, or by both. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of any provision of, or any order, rule or regulation of, the state fire marshal as contained in this code.

Any inspection authority who, in the exercise of his or her 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.

**111.2.2** (Relocated from 2001 CBC 104.2.3) ~~104.2.3 Right of entry~~ **Right of entry.**

~~[For SFM]~~ 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.

~~[For SFM]~~ 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.

**111.2.3 More Restrictive Fire and Panic Safety Building Standards.** (Relocated from 2001 CBC 101.15) ~~101.15 [For SFM] Ratification by City Council. For clarification purposes, the applicable subsection of the Health and Safety Code section is repeated.~~

~~Sec. 13869.7.~~ (a) **111.2.3.1** Any fire-protection district organized pursuant to *Health and Safety Code Part 2.7* (commencing with Section 13800) of Division 12 may adopt building standards relating to fire and panic safety that are more stringent than those building standards adopted by the State Fire Marshal and contained in the California Building Standards Code. For these purposes, the district board shall be deemed a legislative body and the district shall be deemed a local agency. Any changes or modifications that are more stringent than the requirements published in the California Building Standards Code relating to fire and panic safety shall be subject to ~~subdivision (b) of Section 18944.5~~ **101.8.1.**

(b) **111.2.3.2** Any fire protection district that proposes to adopt an ordinance pursuant to this section shall, not less than 30 days prior to noticing a proposed ordinance for public hearing, provide a copy of that ordinance, together with the adopted findings made pursuant to ~~subdivision (a)~~ **Section 111.2.3.1**, to the city, county, or city and county where the ordinance will apply. The city, county, or city and county, may provide the district with written comments, which shall become part of the fire protection district's public hearing record.

(c) **111.2.3.3** The fire-protection district shall transmit the adopted ordinance to the city, county, or city and county where the ordinance will apply. The legislative body of the city, county, or city and county, may ratify, modify or deny an adopted ordinance and transmit its determination to the district within 15 days of the determination. Any modification or denial of an adopted ordinance shall include a written statement describing the reasons for any modifications or denial. No ordinance adopted by the district shall be effective until ratification by the city, county, or city and county where the ordinance will apply. Upon ratification of an adopted ordinance, the city, county, or city and county, shall file a copy of the findings of the district, and any findings of the city, county, or city and county, together with the adopted ordinance expressly marked and identified to which each finding refers, ~~with the Department of Housing and Community Development~~ in accordance with Section 101.8.1.3.

**111.2.4** (Relocated from 2001 CFC 103.1.2.1) **Request for alternate means of protection.** Requests for approval to use an alternative material, assembly or materials, equipment, method of construction, method of installation of

equipment, or means of protection shall be made in writing to the enforcing agency by the owner or the owner's authorized representative and shall be accompanied by a full statement of the conditions. Sufficient evidence or proof shall be submitted to substantiate any claim that may be made regarding its conformance. The enforcing agency may require tests and the submission of a test report from an approved testing organization as set forth in Title 19, California code of Regulation, to substantiate the equivalency of the proposed alternative means of protection.

The authority having jurisdiction may consider implementation of the findings and recommendations identified in a Risk Management Plan (RMP) as developed in accordance with Title 19, Division 2, Chapter 3, when evaluating requests for alternative means of protection.

Approval of a request for use of an alternative material, assembly of materials, equipment, method of construction, method of installation of equipment, or means of protection made pursuant to these provisions shall be limited to the particular case covered by request and shall not be construed as establishing any precedent for any future request.

**111.2.5** (Relocated from 2001 CFC 103.1.4.2) **Appeals.** When a request for an alternate means of protection has been denied by the enforcing agency, the applicant may file a written appeal to the state fire marshal for consideration of the applicant's proposal. In considering such appeal, the state fire marshal may seek the advice of the State Board of Fire Services. The State Fire Marshal shall, after considering all of the facts presented, including any recommendations of the State board of Fire Services, determine if the proposal is for the purposes intended, at least equivalent to that specified in these regulations in quality, strength, effectiveness, fire resistance, durability and safety, and shall transmit such findings and any recommendations to the applicant and to the enforcing agency.

### **111.3 Construction Documents.**

**111.3.1** (Relocated from 2001 CBC 106.3.3.1) ~~106.3.3.1~~ **[For SFM] Public schools.** Plans and specifications for the construction, alteration or addition to any building owned, leased or rented by any public school district shall be submitted to the Division of the State Architect, Office of Regulation Services for review and approval.

**Exception:** Upon the annual submission of a written request by the chief of any city, county, or city and county fire department or fire-protection district to the Division of the State Architect, Office of Regulation Services, approvals required by this subsection shall be obtained from the appropriate chief or his or her authorized representative. In such instances plans and specifications may be submitted to the state fire marshal for relay to the appropriate local authority or may be submitted directly to such local authority.

**111.3.2** (Relocated from 2001 CBC 106.3.3.2) ~~106.3.3.2~~ **[For SFM] Movable walls and partitions.** Plans or diagrams shall be submitted to the enforcing agency for approval before the installation of, or rearrangement of, any movable wall or partition in any occupancy. Approval shall be granted only if there is no increase in the fire hazard.

**111.3.3** (Relocated from 2001 CBC 106.3.3.3) ~~106.3.3.3~~ **[For SFM] New construction high-rise buildings.**

1. Complete plans or specifications, or both, shall be prepared covering all work required to comply with new construction high-rise buildings. Such plans and specifications shall be submitted to the enforcing agency having jurisdiction.

2. All plans and specifications shall be prepared under the responsible charge of an architect or a civil or structural engineer authorized by law to develop construction plans and specifications, or by both such architect and engineer. Plans and specifications shall be prepared by an engineer duly qualified in that branch of engineering necessary to perform such services. Administration of the work of construction shall be under the charge of the responsible architect or engineer except that where plans and specifications involve alterations or repairs, such work of construction may be administered by an engineer duly qualified to perform such services and holding a valid certificate under Chapter 7 (commencing with Section 65700) of Division 3 of the Business and Professions Code for performance of services in that branch of engineering in which said plans, specifications and estimates and work of construction are applicable.

This section shall not be construed as preventing the design of fire-extinguishing systems by persons holding a C-16 license issued pursuant to Division 3, Chapter 9, Business and Professions Code. In such instances, however, the responsibility charge of this section shall prevail.

**111.3.4** (Relocated from 2001 CBC 106.3.3.4) ~~106.3.3.4~~ **[For SFM] Existing high-rise buildings.** 1. Complete plans or specifications, or both, shall be prepared covering all work required by Sections ~~403.14~~ 3412 through 403.25, Title

~~24, California Code of Regulations~~, for existing high-rise buildings. Such plans or specifications shall be submitted to the enforcing agency having jurisdiction.

2. When new construction is required to conform with the provisions of these regulations, complete plans or specifications, or both, shall be prepared in accordance with the provisions of this subsection. As used in this section "new construction" is not intended to include repairs, replacements or minor alterations which do not disrupt or appreciably add to or affect the structural aspects of the building.

**111.3.5** (Relocated from 2001 CPC 103.3.2.2) **Retention of Plans.** Refer to Building Standards Law, Health and Safety Code Sections 19850 and 19851, for permanent retention of plans.

#### **111.4 Fees**

**111.4.1** (Relocated from 2001 CBC 107.6.1) ~~107.6.1 [For SFM]~~ **Other fees.** Pursuant to Health and Safety Code Section 13146.2, a city, county or district which inspects a hotel, motel, lodging house, or apartment house may charge and collect a fee for the inspection from the owner of the structure in an amount, as determined by the city, county or district, sufficient to pay its costs of that inspection.

(Relocated from 2001 CBC 107.6.1)

**111.4.2 Large Family Day Care.** Pursuant to Health and Safety Code Section 1597.46, Large Family Day-care Homes, the local government shall process any required permit as economically as possible, and fees charged for review shall not exceed the costs of the review and permit process.

(Relocated from 2001 CBC 107.6.1)

**111.4.3 High-Rise.** Pursuant to Health and Safety Code Section 13217, High-rise Structure Inspection: Fees and Costs, a local agency which inspects a high-rise structure pursuant to Health and Safety Code Section 13217 may charge and collect a fee for the inspection from the owner of the high-rise structure in an amount, as determined by the local agency, sufficient to pay its costs of that inspection.

(Relocated from 2001 CBC 107.6.1)

**111.4.4 Fire Clearance Preinspection.** Pursuant to Health and Safety Code Section 13235, Fire Clearance Preinspection, fee; upon receipt of a request from a prospective licensee of a community care facility, as defined in Section 1502, of a residential-care facility for the elderly, as defined in Section 1569.2, or of a child day-care facility, as defined in Section 1596.750, the local fire enforcing agency, as defined in Section 13244, or state fire marshal, whichever has primary jurisdiction, shall conduct a preinspection of the facility prior to the final fire clearance approval. At the time of the preinspection, the primary fire enforcing agency shall price consultation and interpretation of the fire safety regulations, and shall notify the prospective licensee of the facility in writing of the specific fire safety regulations which shall be enforced in order to obtain fire clearance approval. A fee of not more than \$50.00 may be charged for the preinspection of a facility with a capacity to serve 25 or fewer persons. A fee of not more than \$100.00 may be charged for a preinspection of a facility with a capacity to serve 26 or more persons.

(Relocated from 2001 CBC 107.6.1)

**111.4.5 Care Facilities.** The primary fire enforcing agency shall complete the final fire clearance inspection for a community care facility, residential-care facility for the elderly, or child day-care facility within 30 days of receipt of the request for the final inspection, or as of the date the prospective facility requests the final precensure inspection by the State Department of Social Services, whichever is later.

Pursuant to Health and Safety Code Section 13235, a preinspection fee of not more than \$50 may be charged for a ~~Group R, Division 2~~ facility with a capacity to serve 25 or less clients. A fee of not more than \$100 may be charged for a preinspection of a facility with a capacity to serve 26 or more clients.

Pursuant to Health and Safety Code Section 13131.5, a reasonable final inspection fee, not to exceed the actual cost of inspection services necessary to complete a final inspection may be charged for ~~Group R, Division 2.4~~ Occupancies classified as residential care facilities for the elderly (RCFE).

Pursuant to Health and Safety Code Section 1569.84, neither the state fire marshal nor any local public entity shall charge any fee for enforcing fire inspection regulations pursuant to state law or regulation or local ordinance, with respect to residential-care facilities for the elderly (RCFE) which service six or fewer persons.

(Relocated from 2001 CBC 107.6.1)

**111.4.6 Requests of the Office of the State Fire Marshal Requests.** *Whenever a local authority having jurisdiction requests that the state fire marshal perform plan review and/or inspection services related to a building permit, the applicable fees for such shall be payable to the Office of the State Fire Marshal.*

### **111.5 Inspections**

*Work performed subject to the provisions of this Code shall comply with the inspection requirements of Title 24, Part 2, California Building Standards Code, Appendix Chapter 1, Sections 109.1, 109.3, 109.3.4, 109.3.5, 109.3.6, 109.3.8, 109.3.10 109.5 and 109.6.*

**111.5.1 Existing Group I-1 or R occupancies.** *Licensed 24-hour care in a Group I-1 or R occupancy in existence and originally classified under previously adopted state codes be reinspected under the appropriate previous code provided there is no change in the use or character which would place the facility in a different occupancy group.*

### **111.6 Certificate of Occupancy**

*A Certificate of Occupancy shall be issued as specified in Title 24, Part 2, California Building Standards Code, Appendix Chapter 1, Section 110.*

**Exception:** *Group R, Division 3 and Group U Occupancies.*

**111.7 Temporary Structures and Uses.** *See Appendix Chapter 1, Section 107.*

**111.8 Service Utilities.** *See Appendix Chapter 1, Section 111.*

**111.9 Stop Work Order.** *See Appendix Chapter 1, Section 114.*

**111.10 Unsafe Buildings, Structures and Equipment.** *See Appendix Chapter 1, Section 115.*

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13143, 17921, 18949

References: Health and Safety Code Sections 13143

## **CHAPTER 2 DEFINITIONS**

**(Note: Adopt entire chapter with amendments.)**

### **Section 201**

**201.3 Terms defined in other codes.** Where terms are not defined in this Code and are defined in the ~~International Fuel Gas Code~~, ~~International California Fire Code~~, ~~International California Mechanical Code~~ or ~~International California Plumbing Code~~, such terms shall have the meanings ascribed to them as in those codes.

**201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

*For applications listed in Section 111 regulated by the Office of the State Fire Marshal, where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies. Webster's Third New International Dictionary of the English Language, Unabridged, shall be considered as providing ordinarily accepted meanings.*

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

## Section 202

### **AGED HOME OR INSTITUTION** See Section 310

**ASSEMBLY BUILDING** is a building or portion of a building used for the gathering together of 50 or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking or dining, or awaiting transportation. (Relocated from 2001 CBC 202-A) ~~[For SFM]~~ Any building or structure or portion thereof used or intended to be used for the showing of motion pictures when an admission fee is charged and when such building or structure is open to the public and has a capacity of 10 or more persons.

**ASSEMBLY.** The gathering together of 50 or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking, dining or awaiting transportation.

### **BEDRIDDEN PERSON** See Section 310

(Relocated from 2001 CBC 203-B) ~~[For SFM]~~ **BUILDING.** is any structure ~~as to which state agencies have regulatory power, used or intended for supporting or sheltering any use or occupancy, housing or enclosure of persons, animals, chattels, equipment or property of any kind, and also includes structures wherein things may be grown, made, produced, kept, handled, stored or disposed of, and all appendages, accessories, apparatus, appliances and equipment installed as a part thereof.~~

~~Building shall not include machinery, equipment or appliances installed for manufacture or process purposes only, nor shall it include any construction installations which are not a part of a building, any tunnel, mine shaft, highway or bridge, or include any house trailer or vehicle which conforms to the Vehicle Code.~~

(Relocated from 2001 CBC 203-B) **Note:** Building shall have the same meaning as defined in Health and Safety Code Section 17920 and 18908 for the applications specified in Sections ~~101.17.9 and 101.17.10~~ 111.

(Relocated from 2001 CBC 203-B) **BUILDING OFFICIAL** The officer or other designated authority charged with the administration and enforcement of this code, or the building official's duly authorized representative ~~[for SFM] in accordance with state law, Health and Safety Code Section 13146, in occupancies regulated by the State Fire Marshal. For applications listed in section 111 regulated by the Office of the State Fire Marshal "Building Official" is the officer charged with the administration and enforcement of this code, or a regularly deputy. See "Enforcing Agency" For the State of California, "Building Official" shall be the "Enforcing Agency" as specified in Section 111.~~

**CANOPY.** An architectural projection that provides weather protection, identity or decoration and is supported by the building to which it is attached and at the outer end by not less than one stanchion. A canopy is comprised of a rigid structure over which a covering is attached. ~~A structure, enclosure, shelter or architectural projection that provides weather protection, identity or decoration, constructed of fabric or pliable materials either free standing or is supported by the building to which it is attached and at the outer end by not less than one stanchion. Canopy shall be open without sidewalls or drops on 75 percent or more of the perimeter.~~

### **CARE AND SUPERVISION** See Section 310.

### **CATASTROPHICALLY INJURED** See Section 310.

(Relocated from 2001 CBC 204-C) ~~[For SFM]~~ **CHILD-CARE CENTER,** is any facility of any capacity other than a large or small family day care home as defined in these regulations in which less than 24-hour per day non-medical supervision is provided for children in a group setting. ~~See Section 310~~

**CELL.** See Section 308.4.6 and 2102.1.

### **CHILD OR CHILDREN** See Section 310

### **CHRONICALLY ILL** Section 310.

### **CONGREGATE LIVING HEALTH FACILITY (CLHF)** See Section 310

### **CONGREGATE RESIDENCE.** See Section 310

**DAYCARE** See Section 310

**DAY-CARE HOME, LARGE FAMILY** See Section 310

**DAY-CAREHOME, SMALL FAMILY** See Section 310

**DORMORITY.** See Section 308.4.6 and 310.2

**ELECTRIC VEHICLE** See Section 406.7.

**ENFORCING AGENCY** is the designated department or agency as specified by statute or regulation.

(Relocated from 2001 CBC 207-F with modification to standard)

**FIRE-RETARDANT TREATED WOOD** is any wood product impregnated with chemicals by a pressure process or other means during manufacture, and which, when tested in accordance with ASTM E84-05 for a period of 30 minutes, shall have a flame spread of not over 25 and show no evidence of progressive combustion. In addition, the flame front shall not progress more than 101/2 feet (3200 mm) beyond the center line of the burner at any time during the test. Materials that may be exposed to the weather shall pass the accelerated weathering test and be identified as Exterior type, in accordance with ASTM D 2898-94 and ASTM D 3201-94. Where material is not directly exposed to rainfall but exposed to high humidity conditions, it shall be subjected to the hygroscopic test and identified as Interior Type A in accordance with ASTM D 2898-94 and ASTM D 3201-94.

All materials shall bear identification showing the fire performance rating thereof. Such identifications shall be issued by an approved agency having a service for inspection of materials at the factory.

~~[For SFM] Fire-retardant-treated wood shall not be construed as “noncombustible” within the meaning of UBC Section 215.~~

**FULL-TIME CARE** See Section 310

**GARAGE** is a building or portion thereof in which a motor vehicle containing flammable or combustible liquids or gas in its tank (Relocated from 2001 CBC 208-G) ~~[for SFM]~~ or an electric vehicle with a rechargeable storage battery, fuel cell, photovoltaic array or other source of electric current is stored, repaired, charged (electric vehicles only) or kept.

(Relocated from 2001 CBC 209-H) ~~[For SFM]~~ **HAZARDOUS SUBSTANCE** is a substance which, by reason of being explosive, flammable, toxic, poisonous, corrosive, oxidizing, irritant or otherwise harmful, is likely to cause injury.

~~[For SFM]~~ **HIGH-RISE BUILDING.** See Chapter 4 Section 403.

**INFANT** See Section 310

**LISTED.** See Section 902.1. *For applications listed in Section 111 regulated by the Office of the State Fire Marshal, “listed”* (Relocated from 2001 CBC 213-L) ~~[For SFM]~~ These terms shall also mean equipment or materials accepted by the state fire marshal as conforming to the provisions of the State Fire Marshal’s regulations and which are included in a list published by the State Fire Marshal.

(Relocated from 2001 CBC 213-L) ~~[For SFM]~~ **LOBBY** is an area not defined as a waiting room at the entrance of a building through which persons must pass.

**MENTALLY RETARDED PERSONS, PROFOUNDLY OR SEVERELY.** See Section 310

(Relocated from 2001 CBC 214-M) ~~**MODERNIZATION PROJECT.** is any construction effort that has an estimated total cost in excess of \$200,000.00 that is in tended to modify a permanent school building or structure and or the addition of a new school building or structure used to serve or house students from kindergarten through twelfth grade (K-12). Modernization efforts shall apply strictly to a public school that was established prior to July 1, 2002, and is funded pursuant to the Education Code, Section 17074.56, and Education Code commencing with Section 17070.10. Modernization projects that are to be completed in more than one phase may defer the installation of the automatic fire detection and alarm systems until the final phase of the modernization project. Solely for the purposes of Education Code Section 17074.20, routine maintenance and repair work shall not be considered a modernization project.~~ See Section 902.1

**MOTION PICTURE PRODUCTION STUDIO SOUND STAGES, APPROVED PRODUCTION FACILITIES AND PRODUCTION LOCATIONS.** See Chapter 46, California Fire Code.

(Relocated from 2001 CBC 215-N) **NEW PUBLIC SCHOOL CAMPUS.** New public school campus is an educational institution established on or after July 1, 2002 that houses and or serves students from kindergarten through twelfth grade (K-12) and is funded pursuant to the Education Code, commencing with Section 17070.10.

(Relocated from 2001 CBC 215-N) ~~**NONAMBULATORY PERSONS.** are persons un-able to leave a building unassisted under emergency conditions. It includes, but is not limited to, persons who depend on mechanical aids such as crutches, walkers and wheelchairs and any person who is unable to physically and mentally respond to a sensory signal approved by the state fire marshal or an oral instruction relating to fire danger. The determination of ambulatory or nonambulatory status of persons with developmental disabilities shall be made by the director of Social Services or his or her designated representative, in consultation with the director of Developmental Services or his or her designated representative. The determination of ambulatory or nonambulatory status of all other disabled persons placed after January 1, 1984, who are not developmentally disabled shall be made by the director of Social Services or his or her designated representative. See Section 310~~

(Relocated from 2001 CBC 215-N) **NONCOMBUSTIBLE** as applied to building construction material means a material which, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material passing ASTM 136 shall be considered noncombustible.
2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over  $\frac{1}{8}$  inch (3.2 mm) thick which has a flame-spread rating of 50 or less.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classed as noncombustible which is subject to increase in combustibility or flame-spread rating, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition

**ORGANIZED CAMPS.** See Section 440.

**PHOTOLUMINESCENT** see section 1002.

**RESIDENTIAL CARE FACILITY FOR THE CHRONICALLY ILL (RCF/CI)** See Section 310

**RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE)** See Section 310

**RESIDENTIAL FACILITY (RF)** See Section 310

**RESTRAINT** See Section 310

**SELF-ILUMINOUS** See section 1002.

(Relocated from 2001 CBC 220-S) ~~**STATE-OWNED/LEASED BUILDING** is a building or portion of a building that is owned, leased or rented by the state. State-leased buildings shall include all required exits to a public way serving such leased area or space. Portions of state- leased buildings that are not leased or rented by the state shall not be included within the scope of this section unless such portions present an exposure hazard to the state-leased area or space.~~

**TERMINALLY ILL** See Section 310

(Relocated from 2001 CBC 224-W) ~~**WAITING ROOM** is a room or area normally provided with seating and used for persons waiting.~~

**WINERY CAVES.** See Section 436.

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13143, 17921, 18949

### CHAPTER 3 USE AND OCCUPANCY CLASSIFICATIONS

(Note: Adopt entire chapter with amendments.)

**302.1 General.** Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5
2. Business (see Section 304): Group B
3. Educational (see Section 305): Group E
4. Factory and Industrial (see Section 306): Groups F-1 and F-2
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5
6. Institutional (see Section 308): Groups I-1, I-2, I-2.1, I-3 and I-4
7. Mercantile (see Section 309): Group M
8. Organized Camps (see Section 440): Group C
9. Research Laboratories (see Section 443): Group L
- ~~8-10~~ Residential (see Section 310): Groups R-1, R-2, R-3, R-3.1 and R-4
- ~~9~~ 11. Storage (see Section 311): Groups S-1 and S-2
- ~~10~~ 12. Utility and Miscellaneous (see Section 312): Group U

Existing buildings housing existing protective social care homes or facilities established prior to 1992 may have their use continued provided they conform, or are made to conform, to Section 3413.

Authority: Health and Safety Code Sections 13143, 17921

References: Health and Safety Code Sections 13143

**303.1 Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption; or awaiting transportation or (Relocated from 2001 CBC 303.1.1) *Motion picture production studio Sound Stages, Approved Production Facilities and production locations.*

**Exceptions:**

1. A building used for assembly purposes with an occupant load of less than 50 persons shall be classified as a Group B occupancy.
2. A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.
3. A room or space used for assembly purposes that is less than 750 square feet (70 m<sup>2</sup>) in area and is accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy. Assembly occupancies shall include the following:

**A-1** Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:

(Relocated from 2001 CBC 303.1.1) *Motion picture production studio Sound Stages, Approved Production Facilities and production locations. (With live audiences).*

Motion picture theaters

Symphony and concert halls

Television and radio studios admitting an audience

Theaters

**A-2** Assembly uses intended for food and/or drink consumption including, but not limited to:

- Banquet halls
- Night clubs
- Restaurants
- Taverns and bars

**A-3** Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Amusement arcades
- Art galleries
- Bowling alleys
- Places of religious worship
- Community halls
- Courtrooms
- Dance halls (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Libraries
- Museums
- Waiting areas in transportation terminals
- Pool and billiard parlors

**A-4** Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

**A-5** Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**303.2** (Relocated from 2001 CBC 303.1.4) ~~**303.1.4 [For SFM] Fixed Guideway Transit Systems.**~~ *Fixed guideway transit system buildings shall conform to the requirements of this code for their occupancy classification in addition to the provisions set forth in Section 414A-433.*

Authority: Health and Safety Code Sections 1502, 13143  
References: Health and Safety Code Sections 13143

**303.3** (Relocated from 2001 CBC 303.1.5 ) ~~**303.1.5 [For SFM] Subterranean Spaces for Winery Facilities in Natural or Manmade Caves.**~~ *For fire and life safety requirements, see California Fire Code Article 41 Section 436.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**304.1 Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers  
Animal hospitals, kennels and pounds  
Banks  
Barber and beauty shops  
Car wash  
Civic administration  
Clinic-outpatient (*Not classified as Group I-2.1*)  
Dry cleaning and laundries: pick-up and delivery stations and self-service  
Educational occupancies for students above the 12th grade  
Electronic data processing  
Laboratories: testing and research  
Motor vehicle showrooms  
Post offices  
Print shops  
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)  
Radio and television stations  
Telephone exchanges  
Training and skill development not within a school or academic program

**305.1 Educational Group E.** Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to churches in accordance with Section 508.3.1 and have occupant loads of less than 100, shall be classified as A-3 occupancies.

(Relocated from 2001 CBC 305.1) **Exception:** ~~For SFM~~ *A residence used as a home school for the children who normally reside at the residence. Such residences shall remain classified as Group R, Division 1 or 3 Occupancies.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**305.2 Day care.** The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2½ years of age, shall be classified as a Group E occupancy.

**Exception:** *A Daycare facility not otherwise classified as an R-3 Occupancy, where occupants are not capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group I-4.*

Authority: Health and Safety Code Sections 1502, 13143  
References: Health and Safety Code Sections 13143

**306.2 Factory Industrial F-1 Moderate-hazard Occupancy.**

Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft  
Appliances  
Athletic equipment

Automobiles and other motor vehicles  
Bakeries  
Beverages; over 12-percent alcohol content  
Bicycles  
Boats  
Brooms or brushes  
Business machines  
Cameras and photo equipment  
Canvas or similar fabric  
Carpets and rugs (includes cleaning)  
Construction and agricultural machinery  
Disinfectants  
Dry cleaning and dyeing  
Electric generation plants  
Electronics  
Engines (including rebuilding)  
Food processing  
Furniture  
Hemp products  
Jute products  
Laundries  
Leather products  
Machinery  
Metals  
Millwork (sash & door)  
(Relocated from 2001 CBC 306.1) *Motion picture production studio Sound Stages, Approved Production Facilities and production locations (without live audiences)*  
~~Motion pictures and television filming (without spectators)~~  
Musical instruments  
Optical goods  
Paper mills or products  
Photographic film  
Plastic products  
Printing or publishing  
Recreational vehicles  
Refuse incineration  
Shoes  
Soaps and detergents  
Textiles  
Tobacco  
Trailers  
Upholstering  
Wood; distillation  
Woodworking (cabinet)

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 307.1 High-hazard Group H.** High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in control areas constructed and located as required in Section 414. Hazardous uses are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the International California Fire Code.

**Exceptions:** The following shall not be classified in Group H, but shall be classified in the occupancy that they most nearly resemble:

1. Buildings and structures that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.1(1) and 307.1(2), provided that such buildings are maintained in accordance with the International California Code.

2. Buildings utilizing control areas in accordance with Section 414.2 that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.1(1) and 307.1(2).
3. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the International California Code.
4. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the International California Code.
5. Closed piping containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.
6. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment listed by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire barriers constructed in accordance with Section 706 or 1-hour horizontal assemblies constructed in accordance with Section 711, or both.
7. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).
8. Liquor stores and distributors without bulk storage.
9. Refrigeration systems.
10. The storage or utilization of materials for agricultural purposes on the premises.
11. Stationary batteries utilized for facility emergency power, uninterrupted power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and ventilation is provided in accordance with the International California Mechanical Code.
12. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.
13. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the International California Fire Code.
14. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per control area in Group M or S occupancies complying with Section 414.2.5.
15. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the International California Fire Code.
16. Group L occupancies as defined in section 443.1

Authority: Health and Safety Code Sections 18949.2  
References: Health and Safety Code Sections 13143

**307.1.1 Hazardous materials.** Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the International California Fire Code.

Authority: Health and Safety Code Sections 18949.2  
References: Health and Safety Code Sections 13143

**308.1 Institutional Group I.** Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4. Restraint shall not be permitted in any building except in Group I-3 occupancies constructed for such use. See Section 308.4. See special provisions for I-2.1 occupancies in Section 509.9.

(Relocated from 2001 CBC 308.1) **Exceptions:** 1. Group I Occupancies shall not include buildings used only for private residential purposes for a family group.

2. [For SFM] Where occupancies house both ambulatory and non-ambulatory persons, the more restrictive requirements shall apply.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing ~~more than 16 persons~~ *clients*, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. ~~The occupants are capable of responding to an emergency situation without physical assistance from staff.~~

~~Residential board and care facilities~~

~~Assisted living facilities~~

~~Halfway houses~~

~~Group homes~~

~~Congregate care facilities~~

~~Social rehabilitation facilities~~

~~Alcohol and drug centers~~

~~Convalescent facilities.~~

*This occupancy may contain more than six non-ambulatory and/or bedridden clients. (See Section 419.4 Special Provisions For Licensed 24-Hour Care Facilities in a Group I-1, R-3.1, or R-4 Occupancy).* This group shall include, but not be limited to, the following:

Assisted living facilities *such as:* Residential ~~board and~~ Care Facilities, *Residential Care Facilities for the Elderly (RCFE's), Adult Residential Facilities,* Congregate ~~care~~ *Living Health* facilities, Group homes, *Residential Care Facilities for the Chronically Ill, and Congregate Living Health Facilities for the Terminally Ill.*

Social rehabilitation facilities *such as:* Halfway houses, *Community Correctional Centers, Community Correction Reentry Centers, Community Treatment Programs, Work Furlough Programs, and Alcoholism and or drug abuse recovery or treatment facilities* ~~centers~~).

A facility such as the above with ~~five~~ *six* or fewer ~~persons~~ *clients* shall be classified as a Group ~~R-3-R-3.1~~ or shall comply with the ~~International Residential Code~~ in accordance with Section 101.2. A facility such as above, housing at least ~~more than six~~ and not more than 16 persons *clients*, shall be classified as Group R-4.

Authority: Health and Safety Code Sections 1502, 1568.02, 1569.72, 11159.2, 13131, 13143

References: Health and Safety Code Sections 13143

**308.3 Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis for more than five persons who are ~~not capable of self preservation~~ *classified as non-ambulatory or bedridden*. This group shall include, but not be limited to, the following:

Hospitals

Nursing homes (both intermediate care facilities and skilled nursing facilities)

Mental hospitals

Detoxification facilities

~~A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.~~

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**308.3.2 Group I-2.1 Ambulatory Care Facility.** *A Healthcare facility that receives persons for outpatient medical care that may render the patient incapable of unassisted self-preservation and where each tenant space accommodates more than five such patients.*

Authority: Health and Safety Code Sections 13131, 13143

References: Health and Safety Code Sections 13143

**308.4 Group I-3.** This occupancy shall include buildings *or portions of buildings* and structures that are inhabited by ~~more than five~~ *one or more* persons who are under restraint ~~or security~~. An I-3 facility is occupied by persons who are generally incapable of self preservation due to security measures not under the occupants' control ~~restrained~~. This group shall include, but not be limited to, the following:

- Prisons
- Jails
- Reformatories
- Detention centers
- Correctional centers
- ~~Prerelease centers~~
- Juvenile Halls

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.4.1 through 308.4.54 (see Section 408.1).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**308.4.1 Condition 1.** ~~This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R. *Not use.*~~

**308.4.2 Condition 2.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.

**308.4.3 Condition 3.** This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment.

**308.4.4 Condition 4.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

**308.4.5 Condition 5.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**308.4.6** (Relocated from 2001 CBC 323A) ~~SECTION 323A-DEFINITIONS~~

(Relocated from 2001 CBC 323A) *For the purpose of this chapter, certain terms are defined as follows:*

(Relocated from 2001 CBC 323A) **CELL** *is a housing unit in a detention or correctional facility for the confinement of not more than two inmates or prisoners.*

(Relocated from 2001 CBC 323A) **CELL COMPLEX** *is a cluster or group of cells or dormitories in a jail, prison or other detention facility, together with rooms used for accessory purposes, all of which open into the cell complex, and are used for functions such as dining, counseling, exercise, classrooms, sick call, visiting, storage, staff offices, control rooms or similar functions, and interconnecting corridors all within the cell complex.*

(Relocated from 2001 CBC 323A) **CELL TIERS** are cells, dormitories and accessory spaces. Cell tiers are located one level above the other, and do not exceed two levels per floor. A cell tier shall not be considered a story or mezzanine.

(Relocated from 2001 CBC 323A) **DAY ROOM** is a room which is adjacent to a cell, or cell tier, or dormitory and which is used as a dining, exercise or other activity room for inmates.

(Relocated from 2001 CBC 323A) **DORMITORY** is an area occupied by no less than three inmates.

(Relocated from 2001 CBC 323A) **HOLDING FACILITY** means a detention or correctional facility or area where inmates, staff and public are not housed but are restrained.

(Relocated from 2001 CBC 323A) **HOUSING UNIT** is an area intended to lodge inmates on a 24-hour basis where accommodations are provided for sleeping.

(Relocated from 2001 CBC 323A) **RESTRAINT** shall mean the physical retention of a person within a room, cell or holding facility by any means, or within a building by means of locked doors.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**308.5 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 five or fewer persons shall be classified as a Group R-3. ~~or shall comply with the International Residential Code in accordance with Section 101.2.~~ Places of worship during religious functions are not included.

Authority: Health and Safety Code Sections 1569.78, 13143  
References: Health and Safety Code Sections 13143

**308.5.1 Adult care facility.** A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.

~~**Exception:** A facility where occupants are capable of responding to an emergency situation without physical assistance from the staff shall be classified as Group A-3.~~

Authority: Health and Safety Code Sections 1569.78, 13143  
References: Health and Safety Code Sections 13143

**308.5.2.1 Special provisions.** See Section 442.4 for daycares located above or below the first story.

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

## **SECTION 310 RESIDENTIAL GROUP R**

**310.1 Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I ~~or when not regulated by the International Residential Code in accordance with Section 101.2.~~ Residential occupancies shall include the following:

**R-1 Residential Occupancies** containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient)  
Hotels (transient)  
Motels (transient)

**R-2** Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses  
Boarding houses (not transient)  
Convents  
Dormitories  
Fraternities and sororities  
Hotels (non-transient)  
Monasteries  
Motels (non-transient)  
Vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-3.1, R-4 or I, including:

Buildings that do not contain more than two dwelling units.

Adult facilities that provide accommodations for ~~five or fewer persons~~ clients of any age for less than 24-hours. Licensing categories that may use this classification include, but are not limited to: Adult Day-care Facilities, Adult Day-support Center.

Child care facilities that provide accommodations for ~~five or fewer persons~~ clients of any age for less than 24-hours. Licensing categories that may use this classification include, but are not limited to: Family Day-care Homes, Day-care Center for Mildly Ill Children, Infant Care Center and School Age Child Day-care Center.

Congregate living facilities with 16 or fewer persons.

~~Adult and child care facilities that are within a single family home are permitted to comply with the *International Residential Code*.~~

**R-3.1** *This occupancy group may include facilities licensed by a governmental agency for a residentially based 24-hour care facility providing accommodations for six or fewer clients of any age. Clients may be classified as ambulatory, nonambulatory or bedridden. A Group R-3.1 occupancy shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in Section 419.4 Special Provisions For Licensed 24-Hour Care Facilities in a Group I-1, R-3.1 or R-4 Occupancy. This group may include:*

Adult Residential Facilities

Congregate Living Health Facilities

Foster Family Homes

Group Homes

Intermediate Care Facilities for the Developmentally Disabled Habilitative

Intermediate Care Facilities for the Developmentally Disabled Nursing

Nurseries for the full-time care of children under the age of six, but not including "infants" as defined in Section 310

Residential Care Facilities for the Elderly

Small Family Homes and Residential Care Facilities for the Chronically Ill

**Exception:** *Group Homes licensed by the Department of Social Services which provide nonmedical board, room and care for six or fewer ambulatory children or children two years of age or younger, and which do not have any nonambulatory clients shall not be subject to regulations found in Section 419.4.*

Pursuant to Health and Safety Code Section 13143 with respect to these exempted facilities, no city, county, or public district shall adopt or enforce any requirement for the prevention of fire or for the protection of life and property

against fire and panic unless the requirement would be applicable to a structure regardless of the special occupancy. Nothing shall restrict the application of state or local housing standards to such facilities if the standards are applicable to residential occupancies and are not based on the use of the structure as a facility for ambulatory children. For the purpose of this exception, ambulatory children does not include relatives of the licensee or the licensee's spouse.

**R-4** Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than ~~five six~~ but not more than ~~16~~ ambulatory occupants clients, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code ~~or shall comply with the International Residential Code.~~

This occupancy classification may include a maximum six nonambulatory or bedridden clients (see Section 419.4 Special Provisions For Licensed 24-Hour Care Facilities in a Group I-1, R-3.1, or R-4 Occupancy). Group R-4 occupancies shall include the following:

Assisted living facilities such as: Residential care facilities, Residential Care Facilities for the Elderly (RCFE's), Adult Residential Facilities, Congregate Living Health facilities, and Group homes.

Social rehabilitation facilities such as: Halfway houses (Community Correctional Centers, Community Correction Reentry Centers, Community Treatment Programs, Work Furlough Programs, and Alcoholism or drug abuse recovery or treatment facilities.

Authority: Health and Safety Code Sections 1802, 1568.02, 1569.72, 1597.44, 1597.46, 1159.2, 13131, 13133, 13143, 17921

References: Health and Safety Code Sections 13143

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

(Relocated from 2001 CBC 202-A) ~~[For SFM]~~ **AGED HOME OR INSTITUTION** is a facility used for the housing of persons 65 years of age or older in need of care and supervision. (See definition of "care and supervision")

(Relocated from 2001 CBC 203-B) ~~[For SFM]~~ **BEDRIDDEN PERSON** means 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.

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.

**BOARDING HOUSE.** A building arranged or used for lodging for compensation, with or without meals, and not occupied as a single-family unit.

(Relocated from 2001 CBC 204-C) ~~[For SFM]~~ **CARE AND SUPERVISION** means any one or more of the following activities provided by a person or facility to meet the needs of the clients:

Assistance in dressing, grooming, bathing and other personal hygiene.

Assistance with taking medication.

Central storing and/or distribution of medications.

Arrangement of and assistance with medical and dental care.

Maintenance of house rules for the protection of clients.

Supervision of client schedules and activities.

Maintenance and/or supervision of client cash resources or property.

Monitoring food intake or special diets.

Providing basic services required by applicable law and regulation to be provided by the licensee in order to obtain and maintain a community-care facility license.

(Relocated from 2001 CBC 204-C) ~~For SFM~~ **CATASTROPHICALLY INJURED**, as termed, means a person whose origin of disability was acquired through trauma or nondegenerative neurologic illness, for whom it has been determined by the Department of Health Services Certification and Licensing that active rehabilitation would be beneficial.

(Relocated from 2001 CBC 204-C) ~~For SFM~~ **CHILD-CARE CENTER** is any facility of any capacity other than a large or small family day-care home as defined in these regulations in which less than 24-hour-per-day nonmedical supervision is provided for children in a group setting.

(Relocated from 2001 CBC 204-C) ~~For SFM~~ **CHILD OR CHILDREN** is a person or persons under the age of 18 years.

(Relocated from 2001 CBC 204-C) ~~For SFM~~ **CHRONICALLY ILL**. See "Terminally ill."

(Relocated from 2001 CBC 204-C) ~~For SFM~~ **CONGREGATE LIVING HEALTH FACILITY (CLHF)**, as termed, is a residential home with a capacity of no more than six beds, which provides inpatient care, including the following basic services: medical supervision, 24-hour skilled nursing and supportive care, pharmacy, dietary, social recreational, and at least provides services for persons who are diagnosed with a terminal illness or who are catastrophically and severely disabled.

**CONGREGATE LIVING FACILITIES.** A building or part thereof that contains sleeping units where residents share bathroom and/or kitchen facilities.

(Relocated from 2001 CBC 204-C) **CONGREGATE RESIDENCE** is any building or portion thereof that contains facilities for living, sleeping and sanitation, as required by this code, and may include facilities for eating and cooking, for occupancy by other than a family. A congregate residence may be a shelter, convent, monastery, dormitory, fraternity or sorority house, but does not include jails, hospitals, nursing homes, hotels or lodging houses.

(Relocated from 2001 CBC 205-D) ~~For SFM~~ **DAYCARE** shall, for the purposes of these regulations, mean the care of persons during any period of a 24-hour day where permanent sleeping accommodations are not provided.

**Note:** "Daycare" shall not be construed to preclude the use of cots or mats for napping purposes, provided all employees, attendants and staff personnel are awake and on duty in the area where napping occurs.

(Relocated from 2001 CBC 205-D) ~~For SFM~~ **DAY-CARE HOME, LARGE FAMILY.** A provider's own home which is licensed to provide day care for periods less than 24 hours per day for nine to 14 persons, including children under the age of 10 years who reside at the home.

(Relocated from 2001 CBC 205-D) ~~For SFM~~ **DAY-CARE HOME, SMALL FAMILY.** A home which provides family day-care to eight or fewer children, including children under the age of 10 years who reside at the home, in the provider's own home, for periods of less than 24 hours per day. Small family day-care homes are exempted from state fire and life safety regulations other than those state and local standards applicable to Group R, division 3 Occupancies. [See Health and Safety Code, Section 13143 (b).]

**DORMITORY.** A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.

(Relocated from 2001 CBC 207-F) ~~For SFM~~ **FULL-TIME CARE** shall mean the establishment and routine care of persons on an hourly, daily, weekly, monthly, yearly or permanent basis, whether for 24-hours per day or less, and where sleeping accommodations are provided.

(Relocated from 2001 CBC 210-I) ~~For SFM~~ **INFANT**, for the purpose of these regulations, shall mean any child who because of age only, is unable to walk and requires the aid of another person to evacuate the building. In no case shall the term "infant" mean a child beyond two years of age.

(Relocated from 2001 CBC 214-M) ~~[For SFM]~~ **MENTALLY RETARDED PERSONS, PROFOUNDLY OR SEVERELY**, shall mean any retarded person who is unable to evacuate a building unassisted during emergency conditions.

**Note:** The determination as to such incapacity shall be made by the Director of the State Department of Public Health or his or her designated representative pursuant to Health and Safety Code Section 13131.3.

(Relocated from 2001 CBC 215-N) ~~[For SFM]~~ **NONAMBULATORY PERSONS** are persons unable to leave a building unassisted under emergency conditions. It includes, but is not limited to, persons who depend on mechanical aids such as crutches, walkers and wheelchairs and any person who is unable to physically and mentally respond to a sensory signal approved by the state fire marshal or an oral instruction relating to fire danger.

The determination of ambulatory or nonambulatory status of persons with developmental disabilities shall be made by the Director of Social Services or his or her designated representative, in consultation with the director of Developmental Services or his or her designated representative. The determination of ambulatory or nonambulatory status of all other disabled persons placed after January 1, 1984, who are not developmentally disabled shall be made by the Director of Social Services or his or her designated representative.

~~**PERSONAL CARE SERVICE.** The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for the safety of the resident while inside the building.~~

~~**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** A building or part thereof housing persons, on a 24 hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.~~

(Relocated from 2001 CBC 219-R) ~~[For SFM]~~ **RESIDENTIAL CARE FACILITY FOR THE CHRONICALLY ILL (RCF/CI)**, as termed, means a housing arrangement with a maximum capacity of 25 residents that provides a range of services to residents who have chronic, life-threatening illnesses.

(Relocated from 2001 CBC 219-R) ~~[For SFM]~~ **RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE)**, as defined in Health and Safety Code Section 1569.2, shall mean a facility with a housing arrangement chosen voluntarily by persons 60 years of age or over, or their authorized representative, where varying levels and intensities of care and supervision, protective supervision or personal care are provided, based on their varying needs, as determined in order to be admitted and to remain in the facility. Persons under 60 years of age with compatible needs, as determined by the Department of Social Services in regulations, may be allowed to be admitted or retained in a residential-care facility for the elderly.

~~[For SFM]~~ Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Group R, Division 2 Occupancies classified as Residential Facilities (RF) and Residential-care Facilities for the Elderly (RCFE) shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is inconsistent with these regulations. A city, county, city and county, including a charter city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential-care Facilities for the Elderly.

(Relocated from 2001 CBC 219-R) ~~[For SFM]~~ **RESIDENTIAL FACILITY (RF)**, as defined in Section 1502 of the Health and Safety Code, shall mean any family home, group care facility, or similar facility determined by the director of Social Services, for 24-hour nonmedical care of persons in need of personal services, supervision, or assistance essential for sustaining the activities of daily living or for the protection of the individual. Such facilities include small family homes and social rehabilitation facilities.

~~[For SFM]~~ Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Group R, Division 2 Occupancies classified as Residential Facilities (RF) and Residential-care Facilities for the Elderly (RCFE) shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is inconsistent with these regulations. A city, county, city and county, including a charter

city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential-care Facilities for the Elderly.

(Relocated from 2001 CBC 219-R) ~~For SFM~~ **RESTRAINT** shall mean the physical retention of a person within a room, cell or cell block by any means, or within the exterior walls of a building by means of locked doors inoperable by the person restrained. Restraint shall also mean the physical binding, strapping or similar restriction of any person in a chair, walker, bed or other contrivance for the purpose of deliberately restricting the free movement of ambulatory persons.

Restraint shall not be construed to include nonambulatory persons nor shall it include the use of bandage material, strip sheeting or other fabrics or materials (soft ties) used to restrain persons in hospital-type beds or wheelchairs to prevent injury, provided an approved method of quick release is maintained. Facilities employing the use of soft ties, however, shall be classified as a building used to house nonambulatory persons.

Restraint shall not be practiced in licensed facilities classified as Group I-1, R-3.1 and R-4 occupancies unless constructed as a Group I-3 occupancy.

(Relocated from 2001 CBC 221-T) ~~For SFM~~ **TERMINALLY ILL**, as termed for an individual, means the individual has a life expectancy of six months or less as stated in writing by his or her attending physician and surgeon.

**TRANSIENT.** Occupancy of a dwelling unit or sleeping unit for not more than 30 days.

Authority: Health and Safety Code Sections 1802, 1568.02, 1569.72, 1597.44, 1597.46, 1159.2, 13131, 13133, 13143, 17921

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15) **310.3 310.15** ~~For SFM~~ **Large Family Day-Care Homes.**

(Relocated from 2001 CBC 310.15.1) **310.3.1 310.15.1** ~~For SFM~~ For purposes of clarification, Health and Safety Code Section 1597.46 is repeated.

(a) A city, county, or city and county shall not prohibit large family day care homes on lots zoned for single-family dwellings, but shall do one of the following:

(1) Classify these homes as a permitted use of residential property for zoning purposes.

(2) Grant a nondiscretionary permit to use a lot zoned for a single-family dwelling to any large family day care home that complies with local ordinances prescribing reasonable standards, restrictions, and requirements concerning spacing and concentration, traffic control, parking, and noise control relating to such homes, and complies with subdivision (d) and any regulations adopted by the State Fire Marshal pursuant to that subdivision. Any noise standards shall be consistent with local noise ordinances implementing the noise element of the general plan and shall take into consideration the noise level generated by children. The permit issued pursuant to this paragraph shall be granted by the zoning administrator, if any, or if there is no zoning administrator by the person or persons designated by the planning agency to grant such permits, upon the certification without a hearing.

(3) Require any large family day care home to apply for a permit to use a lot zoned for single-family dwellings. The zoning administrator, if any, or if there is no zoning administrator, the person or persons designated by the planning agency to handle the use permits shall review and decide the applications. The use permit shall be granted if the large family day care home complies with local ordinances, if any, prescribing reasonable standards, restrictions, and requirements concerning spacing and concentration, traffic control, parking, and noise control relating to such homes, and complies with subdivision (d) and any regulations adopted by the State Fire Marshal pursuant to that subdivision.

Any noise standards shall be consistent with local noise ordinances implementing the noise element of the general plan and shall take into consideration the noise levels generated by children.

The local government shall process any required permit as economically as possible, and fees charged for review shall not exceed the costs of the review and permit process. Not less than 10 days prior to the date on which the decision will be made on the application, the zoning administrator or person designated to handle such use permits shall give notice of the proposed use by mail or delivery to all owners shown on the last equalized assessment roll as owning real property within a 100 foot radius of the exterior boundaries of the proposed large family day care home. No hearing on the application for a permit issued pursuant to this paragraph shall be held before a decision is made unless a hearing is requested by the applicant or other affected person. The applicant or other affected person may appeal the decision. The appellant shall pay the cost, if any of the appeal.

(b) A large family day care home shall not be subject to the provisions of Division 13 (commencing with Section 21000) of the Public Resources Code.

(c) Use of a single-family dwelling for the purposes of a large family day care home shall not constitute a change of occupancy for purposes of Part 1.5 (commencing with Section 17910) of Division 13 (State Housing Law), or for purposes of local building and fire codes.

(d) Large family day care homes shall be considered as single-family residences for the purposes of the State Uniform Building Standards Code and local building and fire codes, except with respect to any additional standards specifically designed to promote the fire and life safety of the children in these homes adopted by the State Fire Marshal pursuant to this subdivision.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.2) **310.3.2 310.15.2 [For SFM] Smoke Alarms.** Large family day-care homes shall be equipped with State Fire Marshal approved and listed single station residential type smoke alarms. The number and placement of smoke alarms shall be determined by the enforcement authority.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.3) **310.3.3 310.15.3 [For SFM] Fire Extinguishers.** Large and small family day-care homes shall be equipped with a portable fire extinguisher having a minimum 2A10BC rating.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.4) **310.3.4 310.15.4 [For SFM] Fire Alarm Devices.** Every large family day-care home shall be provided with at least one manual device at a location approved by the authority having jurisdiction. Such device shall actuate a fire alarm signal, which shall be audible throughout the facility at a minimum level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel or be electrically supervised or provided with emergency power. Such device or devices shall be attached to the structure and may be of any type acceptable to the enforcing agent, provided that such devices are distinctive in tone and are audible throughout the structure.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.5) **310.3.5 310.15.5 [For SFM] Compliance** Every large family day-care home shall comply with the provisions for Group R, Division 3 Occupancies.

Enforcement of these provisions shall be in accordance with the Health and Safety Code Sections 13145 and 13146. No city, county, city and county, or district shall adopt or enforce any building ordinance or local rule or regulation relating to the subject of fire and life safety in large family day-care homes which is inconsistent with those standards

adopted by the state fire marshal, except to the extent the building ordinance or local rule or regulation applies to single family residences in which day care is not provided.

Authority: Health and Safety Code Sections 1597.46, 13143

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.2) **310.3.6** ~~310.12 [For SFM]~~ **Special Hazards.** Every un-enclosed gas-fired water heater or furnace which is within the area used for child care in a large family day-care home shall be protected in such a way as to prevent children from making contact with those appliances.

**Exception:** This does not apply to kitchen stoves or ovens.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

#### CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

(Note: Adopt entire chapter with amendments.)

**403.1 Applicability.** The provisions of this section shall apply to new high-rise buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

**Exceptions:** The provisions of this section shall not apply to the following buildings and structures:

1. Airport traffic control towers in accordance with Section 412.
2. Open parking garages in accordance with Section 406.3.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.
4. Low-hazard special industrial occupancies in accordance with Section 503.1.2.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.
6. Hospitals as defined in Section 1250 of the Health and Safety Code.
7. Buildings such as power plants, lookout towers, steeples, grain houses and similar structures with non continuous human occupancy, when so determined by the enforcing agency.
8. Buildings used exclusively for jails and prisons.

For existing high-rise buildings see Section 3412 for R occupancies and see Section 3411.13.

(Relocated from 2001 CBC 403.1.3 NOTE) ~~NOTE: It is the intent of this subsection that~~ For the purpose of this section, in determining the level from which the highest occupied floor is to be measured, the enforcing agency should exercise reasonable judgment, including consideration of overall accessibility to the building by fire department personnel and vehicular equipment. When a building is located on sloping terrain and there is building access on more than one level, the enforcing agency may select the level that provides the most logical and adequate fire department access.

Authority: Health and Safety Code Sections 13108, 13143, 13211, 13210

References: Health and Safety Code Sections 13143

**403.1.1** (Relocated from 2001 CBC 403.1.3) ~~403.1.3 [For SFM]~~ New building shall mean a high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

Authority: Health and Safety Code Sections 13108, 13143, 13211, 13210  
References: Health and Safety Code Sections 13143

**403.1.2** (Relocated from 2001 CBC 403.1.2) ~~**403.1.2 [For SFM]**~~ For the purposes 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 (610 mm) 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.

Authority: Health and Safety Code Sections 13108, 13143, 13211, 13210  
References: Health and Safety Code Sections 13143

**[F] 403.2 Automatic sprinkler system.** Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 903.3.5.2. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at the lateral connection to the riser on each floor.

**Exception:** An automatic sprinkler system shall not be required in spaces or areas of:

1. Open parking garages in accordance with Section 406.3.
2. Telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building with fire barriers consisting of 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ceiling assemblies.

Authority: Health and Safety Code Sections 13108, 13143, 13211, 13210  
References: Health and Safety Code Sections 13143

**403.3.1 Type of construction.** The following reductions in the minimum construction type allowed in Table 601 shall be allowed for other than the Structural Frame as provided in Section 403.3:

Authority: Health and Safety Code Sections 113108, 13143  
References: Health and Safety Code Sections 13143

**403.9 Elevators.** Elevator operation and installation shall be in accordance with Chapter 30 and the following:

Elevator lobby shall be provided in accordance with Section 707.14.1.

Authority: Health and Safety Code Sections 113108, 13143  
References: Health and Safety Code Sections 13143

**403.12 Stairway door operation.** Stairway doors other than the exit discharge doors shall be permitted to be locked from stairway side. Stairway doors that are locked from the stairway side shall be capable of being unlocked simultaneously without unlatching upon a signal from the fire command center.

Upon failure of electrical power to the locking mechanism the door shall unlock.

Authority: Health and Safety Code Sections 13108, 13143, 13211, 13210  
References: Health and Safety Code Sections 13143

**403.13 Smoke proof exit enclosures.** ~~Every required stairway serving floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall comply with Section 909.20 and 1020.1.7.~~ **Smoke Control.**

**403.13.1 Smoke Control System.** All portions of high-rise buildings shall be provided with a smoke control system in accordance with Section 909.

**403.13.2 Smokeproof exit enclosures.** Every exit enclosure shall comply with Sections 909.20 and 1020.1.7

Authority: Health and Safety Code Sections 13143, 13211, 13210  
References: Health and Safety Code Sections 13143

**403.15 Existing High-rise Buildings.** For Existing High-rise Buildings, see Section 3412

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**404.5 Enclosure of atriums.** Atrium spaces shall be separated from adjacent spaces by a 1-hour fire barrier constructed in accordance with Section 706 or a horizontal assembly constructed in accordance with Section 711, or both.

**Exceptions:**

1. A glass wall forming a smoke partition where automatic sprinklers are spaced 6 feet (1829 mm) or less along both sides of the separation wall, or on the room side only if there is not a walkway on the atrium side, and between 4 inches and 12 inches (102mm and 305 mm) away from the glass and designed so that the entire surface of the glass is wet upon activation of the sprinkler system without obstruction. The glass shall be installed in a gasketed frame so that the framing system deflects without breaking (loading) the glass before the sprinkler system operates.
2. A glass-block wall assembly in accordance with Section 2110 and having a 3/4-hour fire protection rating.
3. In other than Group I Occupancies, ~~the~~ adjacent spaces of any three floors of the atrium shall not be required to be separated from the atrium where such spaces are included in the design of the smoke control system.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**404.9 Group I Occupancy Means of Egress.** Required means of egress from sleeping rooms in Group I Occupancies other than jails, prisons and Juvenile Halls shall not pass through the atrium.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**405.1 General.** The provisions of this section apply to building spaces having a floor level used for human occupancy more than 30 feet (9144 mm) below the lowest level of exit discharge.

**Exceptions:**

1. One- and two-family dwellings, sprinklered in accordance with Section 903.3.1.3.
2. Parking garages with automatic sprinkler systems in compliance with Section 405.3.

3. Fixed guideway transit systems.
4. Grandstands, bleachers, stadiums, arenas and similar facilities.
5. Where the lowest story is the only story that would qualify the building as an underground building and has an area not exceeding 1,500 square feet (139 m<sup>2</sup>) and has an occupant load less than 10.
6. Winery Caves having a floor level used for human occupancy 30 feet (9144 mm) or less below the lowest level of exit discharge.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**406.4.2 Ventilation.** A mechanical ventilation system shall be provided in accordance with the ~~International~~ California Mechanical Code.

#### **Section 406.7 Electric Vehicle**

**406.7.1 Electric Vehicle.** An automotive-type vehicle for highway use, such as passenger automobiles, buses, trucks, vans and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array or other source of electric current. For the purpose of this chapter, electric motorcycles and similar type vehicles and off-road self-propelled electric vehicles such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats and the like, are not included

**406.7.2 Charging.** In any building or interior area used for charging electric vehicles, electrical equipment shall be installed in accordance with the California Electrical Code.

**406.7.3 Ventilation.** Mechanical exhaust ventilation, when required by the California Electrical Code shall be provided at a rate as required by Article 625 or as required by Section 1203 of the California Building Code whichever is greater. The ventilation system shall include both the supply and exhaust equipment and shall be permanently installed and located to intake supply air from the outdoors, and vent the exhaust directly to, the outdoors without conducting the exhaust air through other spaces within the building.

**Exception:** Positive pressure ventilation systems shall only be allowed in buildings or areas that have been designed and approved for that application.

**406.7.4 Electrical Interface.** The electrical supply circuit to electrically powered mechanical ventilation equipment shall be interlocked with the recharging equipment used to supply the vehicle(s) being charged, and shall remain energized during the entire charging cycle. Electric vehicle recharging equipment shall be marked or labeled in accordance with the California Electrical Code.

**Exceptions:** 1. Exhaust ventilation shall not be required in areas with an approved engineered ventilation system, which maintains a hydrogen gas concentration at less than 25 percent of the lower flammability limit.

2. Mechanical exhaust ventilation for hydrogen shall not be required where the charging equipment utilized is installed and listed for indoor charging of electric vehicles without ventilation.

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

**407.1 General.** Occupancies in Group I-2 and I-2.1 shall comply with the provisions of this section and other applicable provisions of this code.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.2 Corridors.** Corridors in occupancies in Group I-2 and I-2.1 shall be continuous to the exits and separated from other areas in accordance with Section 407.3 except spaces conforming to Sections 407.2.1 through 407.2.4.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.2.1 Spaces of unlimited area.** Waiting areas and similar spaces constructed as required for corridors shall be permitted to be open to a corridor, only where all of the following criteria are met:

1. The spaces are not occupied for patient sleeping units, treatment rooms, hazardous or incidental use areas ~~as defined in Section 508.2 listed in Table 508.2.~~
2. The open space is protected by an automatic ~~fire~~ smoke detection system installed in accordance with ~~Section 907.2.6.2~~
3. The corridors onto which the spaces open, in the same smoke compartment, are protected by an automatic ~~fire~~ smoke detection system installed in accordance with Section ~~907.2.6.2~~, ~~or~~ and the smoke compartment in which the spaces are located is equipped throughout with quick-response sprinklers in accordance with Section 903.3.2.
4. The space is arranged so as not to obstruct access to the required exits.
5. Each space is located to permit direct visual supervision by the facility staff.

**407.2.2 Nurses' stations.** Spaces for doctors' and nurses' charting, communications and related clerical areas shall be permitted to be open to the corridor, when such spaces are constructed as required for corridors and the smoke compartment is provided with an automatic fire sprinkler system throughout complying with Sections 903.3.1.1. A minimum of one (1) smoke detector interconnected to the facility fire alarm system shall be installed directly above the nurses' station.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.3 Corridor walls.** Corridor walls shall be constructed as ~~smoke~~ fire partitions in accordance with Section ~~710~~ 708.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.3.1 Corridor doors.** Corridor doors *in fully sprinklered buildings*, other than those in a wall required to be rated by Section 508.2 or for the enclosure of a vertical opening or an exit, shall not have a required fire protection rating and shall not be required to be equipped with self-closing or automatic-closing devices, but shall provide an effective barrier to limit the transfer of smoke and shall be equipped with positive latching. Roller latches are not permitted. Other doors shall conform to Section 715.4. Patient sleeping and treatment rooms shall not be required to be equipped with self-closing or automatic-closing devices

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.3.1.1 Swing of Corridor Doors.** Corridor doors, other than those equipped with self-closing or automatic-closing devices shall not swing into the required width of corridors.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.3.4 Glazing.** In fully sprinklered buildings, fixed fully tempered or laminated glass in wood or metal frames may be used in corridor walls, provided the glazed area does not exceed 25 percent of the areas of the corridor wall of the

room. The total area of glass in corridor walls is not limited when the glazing is fixed ¼-inch-thick (6.4mm) wired glass in steel frames and the size of individual glazed panel does not exceed 1,296 square inches (0.836m<sup>2</sup>).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**407.4 Smoke barriers.** Smoke barriers shall be provided to subdivide every story used by patients for sleeping or treatment and to divide other stories with an occupant load of 50 or more persons, into at least two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m<sup>2</sup>) and the travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be in accordance with Section 709 and 909.5.

- Exceptions:** 1. This requirement shall not apply to Group I-2.1 less than 10,000 ft<sup>2</sup> (929 m<sup>2</sup>).  
2. An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for a Group I-2.1 facility if the following criteria are met:
- (a) The separating wall and both compartments meet the requirements of 407.4.
  - (b) The Group I-2.1 is less than 22,500 ft<sup>2</sup> (2100 m<sup>2</sup>).
  - (c) Access from the Group I-2.1 to the other occupancy is unrestricted.

**407.4.2 Independent egress.** At least two means of egress shall be provided from each smoke compartment created by smoke barriers. Means of egress may pass through adjacent compartments provided it does not return through the smoke compartment from which means of egress originated.

**407.5 Automatic sprinkler system.** ~~Smoke compartments containing patient sleeping units shall be equipped throughout with an automatic fire sprinkler system in accordance with Section 903.3.1.1. The smoke compartments shall be equipped with approved quick response or residential sprinklers in accordance with Section 903.3.2. [F]~~

Every facility as specified herein wherein more than six clients or patients are housed or cared for on the premises on a 24-hour-per-day-basis shall have installed and maintained in an operable condition in every building or portion thereof where clients or patients are housed, an automatic sprinkler system of a type approved by the state fire marshal. (Relocated from 2001 CBC 308.7.1) ~~308.7.1 [For SFM] Automatic sprinkler systems.~~ The provisions of this subsection shall apply to every person, firm or corporation establishing, maintaining or operating a hospital, children's home, children's nursery or institution, or a home or institution for the care of aged or persons with dementia or other cognitive impairments, or any institution for persons with mental illness or persons with developmental disabilities and any nursing or convalescent home, and to any state-owned or state-occupied building used for any of the types of facilities specified herein.

**Exceptions:** 1. This section shall not apply to homes or institutions for the 24-hour-per-day care of ambulatory children if all of the following conditions are satisfied:

1.1 The buildings or portions thereof in which children are housed are not more than two stories in height and are constructed and maintained in accordance with regulations adopted by the state fire marshal.

1.2 The buildings or portions thereof housing more than six such children shall have installed and maintained in an operable condition therein, a fire alarm system of a type approved by the state fire marshal. Such system shall be activated by detectors responding to invisible particles of combustion other than heat, except that detectors used in closets, usable under-floor areas, storage rooms, bathrooms, attached garages, attics, plenums, laundry rooms and rooms of similar use, may be heat-responsive devices.

1.3 The building or portions thereof do not house persons with mental illness or children with developmental disabilities.

2. This section shall not apply to any one-story building or structure of an institution or home for the care of the aged providing 24-hour-per-day care if such building or structure is used or intended to be used for the housing of no more than six ambulatory aged persons. Such buildings or institutions shall have installed and maintained in an operable condition herein a fire alarm system of a type approved by the state fire marshal. Such system shall be activated by detectors responding to either visible or invisible particles of combustion other than heat, except that detectors used in closets, usable under-floor areas, storage rooms, bathrooms, attached garages, attics, plenums, laundry rooms and rooms of similar use, may be heat-responsive devices.

3. This section shall not apply to occupancies or any alterations thereto conforming to the construction provisions of this exception which were under construction or in existence on March 4, 1972. "Under construction" as used in this exception shall mean that actual work had been performed on the construction site and shall not be construed to mean that the hospital, home, nursery, institution, sanitarium or any portion thereof, was or is in the planning stage. The provisions of this exception shall apply to those buildings or structures having bearing walls and structural flame protected in accordance with the provisions of Column Type 1A of Table 601.

4. In detention facilities where inmates are not restrained

The provisions of this section shall not apply to any facility used to house six or less persons on the premises.

Authority: Health and Safety Code Sections 13113, 13131, 13143.6

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 308.7.2)

~~308.7.2 [SFM] 407.5.1~~ When a new addition is to be made to an unsprinklered building or structure as permitted by this subsection, such new addition shall be sprinklered as required by this section and shall be separated from the existing building or structures by not less than a two-hour fire-resistive ~~occupancy separation~~ fire barrier.

When a sprinkler system is added to an existing unsprinklered building or structure, the sprinklered area(s) shall be separated from the remainder of the building by not less than a one-hour fire-resistive ~~occupancy separation~~ fire barrier.

**NOTE:** The provisions of this section do not apply to any facility used to house six or less persons on the premises.

Authority: Health and Safety Code Sections 13113, 13131, 13143

References: Health and Safety Code Sections 13143

**407.6 Automatic smoke detection.** ~~Corridors in nursing homes (both intermediate care and skilled nursing facilities), detoxification facilities and spaces permitted to be open to the corridors by Section 407.2 shall be equipped with an automatic fire detection system. Hospitals shall be equipped with smoke detection as required in Section 407.2. [F] See Section 907.2.6.2~~

**Exceptions:** ~~1. Corridor smoke detection is not required where patient sleeping units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each patient sleeping unit and an audible and visual alarm at the nursing station attending each unit.  
2. Corridor smoke detection is not required where patient sleeping unit doors are equipped with automatic door closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.~~

Authority: Health and Safety Code Sections 13113, 13131, 13143.6

References: Health and Safety Code Sections 13143

Authority: Health and Safety Code Sections 13113, 13131, 13143.6

References: Health and Safety Code Sections 13143

**407.7 Secured yards.** Grounds are permitted to be fenced and gates therein are permitted to be equipped with locks, provided that safe dispersal areas having 30 net square feet (2.8 m<sup>2</sup>) for bed and litter patients and 6 net square feet (0.56 m<sup>2</sup>) for ambulatory patients and other occupants are located between the building and the fence. Such provided safe dispersal areas shall not be located less than 50 feet (15 240 mm) from the building they serve. Each safe dispersal area shall have a minimum of two exits. The aggregate clear width of exits from a safe dispersal area shall be determined on the basis of not less than one exit unit of 22 inches (559 mm) for each 500 persons to be accommodated, and no exit shall be less than 44 inches (1118 mm) in width. Gates shall not be installed across

corridors or passageways leading to such dispersal areas unless they comply with egress requirements. Keys to gate locks shall be provided in accordance with the Fire Code.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**407.8 Special Hazards. Storage and handling of flammable, combustible liquids and hazardous materials shall be in accordance with the California Fire Code.**

All exterior openings in a boiler room or room containing central heating equipment, if located below openings in another story, or if less than 10 feet (3048 mm) from other doors or windows of the same building, shall be protected by a fire assembly having a three-fourths-hour fire protection rating.

Authority: Health and Safety Code Sections 13108, 13143.9

References: Health and Safety Code Sections 13143

**407.8.1 Safety padding. See Sections 308.1 and 408.14.**

**407.8.2. Floor Surfaces. Rooms occupied by patients whose personal liberties are restrained shall have noncombustible floor surfaces see Section 308.1 and 804.4.2.**

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**407.8 Special Hazards.**

**407.8.1 Storage and handling of flammable, combustible liquids and hazardous materials shall be in accordance with the California Fire Code.**

Authority: Health and Safety Code Sections 13108, 13143.9

References: Health and Safety Code Sections 13143

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Authority: Health and Safety Code Sections 13108, 13143.9

References: Health and Safety Code Sections 13143

**407.8.3 Safety padding. See Sections 308.1 and 408.14.**

Authority: Health and Safety Code Sections 13108, 13143.9

References: Health and Safety Code Sections 13143

**407.8.4. Floor Surfaces. Rooms occupied by patients whose personal liberties are restrained shall have noncombustible floor surfaces see Section 308.1 and 804.4.2.**

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.1.1 Construction.** *Group I, Division 3 Occupancies shall be housed in buildings of Type IA or Type IB.*

**Exception:** *Such occupancies may be housed in one-story buildings of Type IIA, Type IIIA or Type VA construction provided the floor area does not exceed 5,200 square feet (483 m<sup>2</sup>) between fire walls of two-hour fire-resistive construction with openings protected by fire assemblies having one- and one-half-hour fire-protection rating.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.2 Mixed occupancies.** Portions of buildings with an occupancy in Group I-3 that are classified as a different occupancy shall meet the applicable requirements of this code for such occupancies. Where security operations necessitate the locking of required means of egress, provisions shall be made for the release of occupants at all times.

Means of egress from detention and correctional occupancies that traverse other use areas shall, as a minimum, conform to requirements for detention and correctional occupancies.

**Exception:** 1. It is permissible to exit through a horizontal exit into other contiguous occupancies that do not conform to detention and correctional occupancy egress provisions but that do comply with requirements set forth in the appropriate occupancy, as long as the occupancy is not a high-hazard use.  
2. *Regardless of the provisions of Section 508, laundry areas and kitchens including associated dining areas, where commercial/institutional equipment is used shall be separated from the remainder of the building by construction capable of resisting the passage of smoke.*  
3. *For the purpose of occupancy separation only prisoner docks directly accessory to courtrooms need not be separated from a courtroom.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.3.1.1** *Cell Doors shall outwardly or slide laterally.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.3.4 Exit discharge.**

**408.3.4.1** Exits are permitted to discharge into a fenced or walled courtyard. Enclosed yards or courts shall be of a size to accommodate all occupants, a minimum of 50 feet (15 240 mm) from the building with a net area of ~~15-3~~ square feet (1.4 m<sup>2</sup>) per person. (Relocated from 2001 CBC 333A.1) ~~**333A.1** Exterior fenced enclosures and fenced enclosures utilized for recreational or activity purposes into which exits from a building or buildings terminate shall be provided with a safe dispersal area located not less than 50 feet (15 240 mm) from any building. Dispersal areas shall be based on an area of not less than 3 square feet (0.28 m<sup>2</sup>) per occupant. An exit gate shall be provided from the safe dispersal area to allow for the necessary relocation of occupants.~~

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.3.4.2** (Relocated from 2001 CBC 333A.2) ~~**333A.2**~~ *Exterior fenced enclosures and fenced enclosures utilized for recreational or activity purposes, used for exit termination for more than 20 persons, and which do not provide a safe dispersal area, shall have not less than two exits.*

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

**408.3.4.3** (Relocated from 2001 CBC 333A.3) ~~**333A.3**~~ *Fenced enclosure utilized for recreational or activity purposes only, for more than 49 people, and which do not provide a safe dispersal area, shall be provided with not less than two exits.*

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

**408.3.4.4** (Relocated from 2001 CBC 333A.4) ~~**333A.4**~~ *Fenced enclosures located on roofs of buildings one or more stories in height shall be provided with not less than two exits regardless of occupant load.*

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

#### **408.3.6 Exit enclosures.**

**408.3.6.1**. One of the required exit enclosures in each building shall be permitted to have glazing installed in doors and interior walls at each landing level providing access to the enclosure, provided that the following conditions are met:

1. The exit enclosure shall not serve more than four floor levels.
2. Exit doors shall not be less than 3/4-hour fire door assemblies complying with Section 715.4
3. The total area of glazing at each floor level shall not exceed 5,000 square inches (3m<sup>2</sup>) and individual panels of glazing shall not exceed 1,296 square inches (0.84 m<sup>2</sup>).
4. The glazing shall be protected on both sides by an automatic fire sprinkler system. The sprinkler system shall be designed to wet completely the entire surface of any glazing affected by fire when actuated.
5. The glazing shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler system operates.
6. Obstructions, such as curtain rods, drapery traverse rods, curtains, drapes or similar materials shall not be installed between the automatic sprinklers and the glazing.

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

**408.3.6.2**. Where the number and arrangement of exits complies with the requirements of Chapter 10, other stairways which occur within the secure area of the detention facility and are not used for required exiting but are used primarily for the movement of inmates and security staff need not extend to the exterior.

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

**408.4 Locks.** Egress doors are permitted to be locked in accordance with the applicable use condition. Doors from an area of refuge to the exterior are permitted to be locked with a key in lieu of locking methods described in Section 408.4.1. The keys to unlock the exterior doors shall be available at all times and the locks shall be operable from both sides of the door. Security hardware may be used on any fire-rated door.

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

**408.4.3 Redundant operation.** ~~Remote release, m~~Mechanically operated sliding doors or ~~remote release,~~ mechanically operated locks shall be provided with a mechanically operated release mechanism at each door, ~~or and~~ shall be provided with a ~~redundant~~ remote release control.

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

**408.5 Vertical openings.** Vertical openings shall be enclosed in accordance with Section 707.

**Exception:** ~~A floor opening between floor levels of residential housing areas is permitted without enclosure protection between the levels, provided that both of the following conditions are met: The open space in front of a cell tier and connected chases, not exceeding two tiers in height, shall not be considered a vertical shaft and need not meet the fire-resistive shaft enclosure requirements of Section 707.~~

- ~~1. The entire normally occupied areas so interconnected are open and unobstructed so as to enable observation of the areas by supervisory personnel.~~
- ~~2. Means of egress capacity is sufficient to provide simultaneous egress for all occupants from all interconnected levels and areas.~~

~~The height difference between the highest and lowest finished floor levels shall not exceed 23 feet (7010 mm). Each story, considered separately, has at least one half of its individual required means of egress capacity provided by exits leading directly out of that story without traversing another story within the interconnected area.~~

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

**408.6 Smoke barrier.** Occupancies in Group I-3 shall have smoke barriers complying with Section 709 to divide every story occupied by residents for sleeping, or any other story having an occupant load of 50 or more persons, into at least two smoke compartments.

**Exception:** Spaces having a direct exit to one of the following, provided that the locking arrangement of the doors involved complies with the requirements for doors at the smoke barrier for the use condition involved:

1. A public way.
2. A building separated from the resident housing area by a 2-hour fire-resistance-rated assembly or 50 feet (15 240 mm) of open space.
3. A secured yard or court having a holding space 50 feet (15 240 mm) from the housing area that provides 6 square feet (0.56 m<sup>2</sup>) or more of refuge area per occupant, including residents, staff and visitors.
4. Holding Facility

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

**408.7 Subdivision of resident housing areas.** ~~Sleeping areas and any contiguous day room, group activity space or other common spaces where residents are housed. Each cell complex shall be separated from other cell complexes or other spaces in accordance with Sections 408.7.1 through 408.7.4 by a smoke-tight partition.~~

~~**408.7.1 Occupancy Conditions 3 and 4.** Each sleeping area in Occupancy Conditions 3 and 4 shall be separated from the adjacent common spaces by a smoke tight partition where the travel distance from the sleeping area through the common space to the corridor exceeds 50 feet (15 240 mm).~~

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

~~**408.7.2 Occupancy Condition 5.** Each sleeping area in Occupancy Condition 5 shall be separated from adjacent sleeping areas, corridors and common spaces by a smoke tight partition. Additionally, common spaces shall be separated from the corridor by a smoke tight partition.~~

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

~~**408.7.3 Openings in room face.** The aggregate area of openings in a solid sleeping room face in Occupancy Conditions 2, 3, 4 and 5 shall not exceed 120 square inches (77 419 mm<sup>2</sup>). The aggregate area shall include all openings including door undercuts, food passes and grilles. Openings shall be not more than 36 inches (914 mm) above the floor. In Occupancy Condition 5, the openings shall be closeable from the room side.~~

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

~~**408.7.41 Smoke-tight doors.** Doors in openings in partitions required to be smoke tight by Section 408.7 shall be substantial doors, of construction that will resist the passage of smoke. Latches and door closures are not required on cell doors.~~

**408.9 Nonbearing Walls and Partitions Interior.** *Nonbearing cell or dormitory walls within cell complexes shall be of noncombustible construction.*

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

**408.10 Cells with Open Bars.** *In buildings protected throughout by an automatic sprinkler system and automatic fire detection system, corridor doors or walls of cells and dormitories, may be of open bars, perforated metal, grilles, or other similar construction.*

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

**408.11 Dead-end Balconies.** *Exit balconies serving cell tiers shall not extend more than 50 feet (15240mm) beyond an exit stairway.*

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

**408.12 Emergency and standby power systems.** *Special electrical systems, exit illumination, power installations and alternate on-site electrical supplies shall be provided for every building or portion of a building housing 10 or more inmates in a detention or correctional facility in accordance with the provisions of the California Electrical Code. There shall be a source of emergency power in all detention facilities capable of providing minimal lighting in all*

housing units, activity areas, corridors, stairs and central control points, and to maintain fire and life safety, security, communications, and alarm systems.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.13 Windows.** In security areas within cell complexes sprinklered throughout, the area of glazing in one-hour corridor walls and smoke barrier walls shall not be restricted, provided:

1. All openings are protected by fixed glazing listed and labeled for a fire-protection of at least three-fourths hour; or

2. Fixed security glazing set in noncombustible frames. Shall comply with the minimum requirements of one of the following test standards: ASTM F1233-98, Class III glass, or; California Department of Corrections, CDC 860-94d, or H.P. White Laboratory, Inc., HPW-TP-0500.02, Forced Entry Level III.

3. In lieu of the sizes set forth in CBC, the size and area of glazed assemblies shall conform to the following:

Windows required to have a three-fourths-hour fire-resistive rating or windows protected by fixed security glazing, as delineated in Items 1 and 2 above, may have an area not greater than 84 square feet (7.8m<sup>2</sup>) with neither width nor height exceeding 12 feet (3658mm).

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**408.14 Safety padding.** Padding material used on walls, floors and ceilings in Group I Occupancies shall be of an approved type tested in accordance with the procedures established by State Fire Marshal Standard 12-8-100, Room Fire Test for Wall and Ceiling Materials, Part 12, Title 24, California Code of Regulations.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**409.3 Projection room and equipment ventilation.** Ventilation shall be provided in accordance with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**412.4.6 Ventilation.** Aircraft paint hangars shall be provided with ventilation as required in the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

**414.1.2 Materials.** The safe design of hazardous material occupancies is material dependent. Individual material requirements are also found in Sections 307 and 415, and in the ~~International~~ California Mechanical Code and the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**414.3 Ventilation.** Rooms, areas or spaces of Group H in which explosive, corrosive, combustible, flammable or highly toxic dusts, mists, fumes, vapors or gases are or may be emitted due to the processing, use, handling or storage of materials shall be mechanically ventilated as required by the ~~International~~ California Fire Code and the ~~International~~ California Mechanical Code.

Ducts conveying explosives or flammable vapors, fumes or dusts shall extend directly to the exterior of the building without entering other spaces. Exhaust ducts shall not extend into or through ducts and plenums.

**Exception:** Ducts conveying vapor or fumes having flammable constituents less than 25 percent of their lower flammable limit (LFL) are permitted to pass through other spaces.

Emissions generated at workstations shall be confined to the area in which they are generated as specified in the ~~International~~ California Fire Code and the ~~International~~ California Mechanical Code.

The location of supply and exhaust openings shall be in accordance with the ~~International~~ California Mechanical Code. Exhaust air contaminated by highly toxic material shall be treated in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949

References: Health and Safety Code Sections 13143

**[F] 415.6.1.4 Explosion control.** Explosion control shall be provided as specified in the ~~International~~ California Fire Code, or spaces shall be equipped with the equivalent mechanical ventilation complying with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

**415.6.2 Flammable and combustible liquids.** The storage, handling, processing and transporting of flammable and combustible liquids shall be in accordance with the ~~International~~ California Mechanical Code and the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949

References: Health and Safety Code Sections 13143

**[F] 415.6.2.8 Room ventilation.** Storage tank areas storing Class I, II or IIIA liquids shall be provided with mechanical ventilation. The mechanical ventilation system shall be in accordance with the ~~International~~ California Mechanical Code and the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

**415.6.3 Liquefied petroleum gas-distribution facilities.** The storage and handling of liquefied petroleum gas systems shall conform to the ~~International~~ California Fire Code. The design and installation of piping, equipment and systems that utilize liquefied petroleum gas shall be in accordance with the ~~International~~ Fuel Gas California Mechanical Code and the California Plumbing Code. Liquefied petroleum gas-distribution facilities shall be ventilated in accordance with the ~~International~~ California Mechanical Code and Section 415.6.3.1.

**[F] 415.6.4 Dry cleaning plants.** The construction and installation of dry cleaning plants shall be in accordance with the requirements of this code, the ~~International~~ California Mechanical Code, the ~~International~~ California Plumbing Code and NFPA 32. Dry cleaning solvents and systems shall be classified in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949.2  
References: Health and Safety Code Sections 13143

**[F] 415.8.11.1 Exhaust ducts for HPM.** An approved automatic sprinkler system shall be provided in exhaust ducts conveying gases, vapors, fumes, mists or dusts generated from HPM in accordance with this section and the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949.2  
References: Health and Safety Code Sections 13143

**[F] 416.3 Spraying spaces.** Spraying spaces shall be ventilated with an exhaust system to prevent the accumulation of flammable mist or vapors in accordance with the ~~International~~ California Mechanical Code. Where such spaces are not separately enclosed, noncombustible spray curtains shall be provided to restrict the spread of flammable vapors.

Authority: Health and Safety Code Sections 18949.2  
References: Health and Safety Code Sections 13143

**419.2 Separation walls.** Walls separating dwelling units in the same building and walls separating sleeping units in the same building shall comply with Section 708.

**419.2.1 Townhouses.** *Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section 708. See Chapter 11A, Section 1102A.1 for separate building limitations regarding accommodations for persons with disabilities.*

**419.2.1.1 Structural independence.** *Each individual townhouse shall be structurally independent.*

**Exceptions:**

- 1. Foundations supporting exterior walls or common walls.*
- 2. Structural roof and wall sheathing from each unit may fasten to the common wall framing.*
- 3. Nonstructural wall coverings.*
- 4. Flashing at termination of roof covering over common wall.*
- 5. Townhouses separated by a common 2-hour fire-resistance-rated wall as provided in Section 708.3.*

**419.2.1.2 Parapets.** *Parapets constructed in accordance with Section 704.11.1 shall be constructed for townhouses as an extension of exterior walls or common walls in accordance with the following:*

- 1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.*
- 2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.*

**Exception:** *A parapet is not required in the two cases above when the roof is covered with a minimum class C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of <sup>5</sup>/<sub>8</sub>-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a minimum distance of 4 feet (1220 mm) on each side of the wall or walls.*

- 3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall have not less than a 1-hour fire-resistance rating. The wall shall be rated for exposure from both sides.*

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

#### **419.4 Special Provisions for Licensed 24-Hour Care Facilities in a Group I-1, R-3.1, or R-4 Occupancy**

**419.4.1 Scope.** *The provisions of this section shall apply to 24-hour care facilities in a Group 1-1, R-3.1, or R-4 occupancy licensed by a governmental agency.*

**419.4.2 General.** *The provisions in this section shall apply in addition to general requirements in this code.*

(Relocated from 2001 CBC, 310.1.2)

**310.1.2 [For SFM] 419.4.2.1** Restraint shall not be practiced in a Group ~~R, Division 2~~ I-1, R-3.1, or R-4 Occupancies.

**Exception:** ~~Group R, Division 2~~ Occupancies which meet all the ~~construction~~ requirements for a Group I-1, ~~Division 3~~ Occupancy.

**310.1.4 [For SFM] 419.4.2.2** Pursuant to Health and Safety Code Section 13133, regulations of the state fire marshal pertaining to Occupancies classified as Residential Facilities (RF) and Residential-care Facilities for the Elderly (RCFE) shall apply uniformly throughout the state and no city, county, city and county, including a charter city or charter county, or fire protection district shall adopt or enforce any ordinance or local rule or regulation relating to fire and panic safety which is inconsistent with these regulations. A city, county, city and county, including a charter city or charter county may pursuant to Health and Safety Code Section 13143.5, or a fire protection district may pursuant to Health and Safety Code Section 13869.7, adopt standards more stringent than those adopted by the state fire marshal that are reasonably necessary to accommodate local climate, geological, or topographical conditions relating to roof coverings for Residential-care Facilities for the Elderly.

**Exception:** Local regulations relating to roof coverings in facilities licensed as a Residential Care Facility for the Elderly (RCFE) per Health and Safety Code Section 13133.

**310.1.1 [For SFM] Special Provisions for Group ~~R, Division 2~~ Occupancies. 419.4.2.3** **Temporarily bedridden clients.** Clients who become temporarily bedridden as defined in Health and Safety Code Section 1569.72, as enforced by the Department of Social Services, may continue to be housed on any story in Group ~~R, Division 2~~ 3.1 Occupancies classified as Residential-care Facilities for the Elderly (RCFE). Every Residential-care Facility for the Elderly (RCFE) 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.

Authority: Health and Safety Code Sections 1569.72, 13143  
References: Health and Safety Code Sections 13143

#### **419.4.3 Building Height and Area Provisions.**

**419.4.3.1 One or two stories.** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) one or two stories in height where more than six nonambulatory clients are housed shall be constructed of a minimum Type VA construction.*

**419.4.3.2 Three to five stories.** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) three to five stories in height where more than six nonambulatory clients are housed above the first floor shall be constructed of a minimum Type IIA construction.*

**419.4.3.3 Six or more stories** *Group I-1 occupancies licensed as a Residential Care Facility for the Elderly (RCFE) exceeding five stories in height where more than six nonambulatory clients are housed above the fifth floor shall be constructed of a minimum Type IA construction.*

**419.4.3.4 Limitations six or less.** *Group R-3.1 occupancies where clients are housed above the first story, having more than two stories in height or having more than 3,000 square feet (279 m<sup>2</sup>) of floor area above the first story shall not be of less than one-hour fire-resistance construction throughout.*

**419.4.3.5 Limitations seven or more.** *Group R-4 occupancies where nonambulatory clients are housed above the first story and there is more than 3,000 square feet (279 m<sup>2</sup>) of floor area above the first story or housing more than 16 clients above the first story shall be constructed of not less than one-hour fire-resistance construction throughout.*

(Relocated from 2001 CBC 415A.2)

**415A-2 419.4.3.6 Location.** *In Group R, ~~Divisions 2.1.1 and 2.2.1~~ 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, ~~Division 2.1~~ 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.*

#### **419.4.4 Type of Construction Provisions.**

**419.4.4.1** *Group I-1 occupancies are not permitted in non-fire-resistance construction, see Health and Safety Code Section 13131.5.*

#### **419.4.5 Fire-Resistance-Rated Construction Provisions.**

**419.4.5.1 Smoke barriers required.** *Group I-1 and R-4 occupancies licensed as a Residential Care Facility (RCF) with individual floor areas over 6000 square feet (557 m<sup>2</sup>) per floor, shall be provided with smoke barriers, constructed in accordance with Section 709.*

*When smoke barriers are required, the area within a smoke compartment shall not exceed 22,500 square feet (2090 m<sup>2</sup>) nor shall its width or length exceed 150 feet (45 720 mm). Such smoke barriers shall divide the floor as equally as possible.*

**419.4.5.2 Smoke partitions.** *Group I-1 and R-4 occupancies where smoke partitions are required, framing shall be covered with noncombustible materials having an approved thermal barrier with an index of not less than 15 in accordance with FM 4880, UL 1040, NFPA 286 or UL 1715.*

#### **419.4.6 Interior Finish Provisions.**

(Relocated from 2001 CBC 415A.8)

**415A.8 Interior Finish.** *In all facilities housing a bedridden client, the interior finishes shall be in accordance with Table 8-B.*

**419.4.6.1 Interior wall and ceiling finish.** Group R-3.1 occupancies housing a bedridden client shall comply with Interior Wall and Ceiling Finish requirements specified for Group I-2 occupancies in Table 803.5.

**[F] 419.4.7 Fire Protection System Provisions.**

**[F] 419.4.7.1 Automatic sprinkler systems in Group I-1 occupancies.** An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout buildings with a Group I-1 fire area.

**Exceptions:**

1. When not used in accordance with Section 504.2 or 506.3 an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group I-1 facilities.
2. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children shall have an automatic fire alarm system activated by approved smoke detectors.
3. Pursuant to Health and Safety Code Section 13113 (d) occupancies, or any alterations thereto, located in Type IA construction in existence on March 4, 1972.

**[F] 419.4.7.2 Automatic sprinkler systems in Group R-3.1 and Group R-4 occupancies.** An automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 shall be provided throughout all buildings with a Group R-3.1 or Group R-4 fire area.

**Exceptions:**

1. Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor, and not housing clients above the second floor.
2. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
3. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

**[F] 419.4.7.3 Fire alarm systems in Group I-1 occupancies.** An approved manual and automatic fire alarm system shall be installed in Group I-1 occupancies in accordance with Section 907.2.6.

**Exceptions:** Buildings housing non-ambulatory clients on the first story only and which are protected throughout by the following:

1. An approved and supervised automatic sprinkler system, as specified in Sections 903.3.1.1 or 903.3.1.2, which upon activation will initiate the fire alarm system to notify all occupants.
2. A manual fire alarm system
3. Smoke alarms required by Section 907.2.10.

**[F] 419.4.7.4 Fire alarm systems in Group R-4 occupancies.** An approved manual and automatic fire alarm system in accordance with Section 907.2.8.

**Exceptions:**

1. Protective social care occupancies housing persons none of whom are physically or mentally handicapped or nonambulatory and which provide supervisory services such as alcoholism or drug abuse recovery or treatment facilities., halfway houses operated by the California Department of Corrections, and similar facilities and are provided with a manual fire alarm box which will actuate a distinctive fire alarm signal that can be heard throughout the facility.
2. Protective social care facilities provided with an automatic sprinkler system which complies with Chapter 9 and are provided with a manual fire alarm box which will actuate a distinctive fire alarm signal that can be heard throughout the facility.

**[F] 419.4.7.5 Smoke alarms in Groups I-1, R-3.1, and R-4 occupancies. See Section 907.2.10**

(Relocated from 2001 CBC 415A.7)

~~415A.7 Smoke Alarms.~~ In all facilities housing a bedridden client, smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall be electrically interconnected so as to cause all smoke alarms to sound a distinctive alarm signal upon actuation of any single smoke alarm. Such alarm signal shall be audible throughout the facility at a minimum level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel, or be electrically supervised or provided with emergency power.

**[F] 419.4.7.6 Power source. See Section 907.2.10.2.**

**[F] 419.4.7.7 Hearing impaired. See Section 907.9.1.6.**

**419.4.8 Means of Egress Provisions.**

**419.4.8.1 General.** In addition to the general means of egress requirements of Chapter 10, this section shall apply to Group I-1, R-3.1, and Group 4 occupancies.

**419.4.8.2 Number of exits.**

**419.4.8.2.1** Group I-1, R-3.1, and R-4 occupancies shall have a minimum of two exits.

**Exception.** Ancillary use areas or occupancies shall have egress as required by Section 1019.

**419.4.8.3 Egress arrangements.**

**419.4.8.3.1** Egress through adjoining dwelling units shall not be permitted.

**419.4.8.3.2 Nonambulatory.** In a Group R-3.1 occupancy, bedrooms used by nonambulatory clients shall have access to at least one of the required exits which shall conform to one of the following:

1. Egress through a hallway or area into a bedroom in the immediate area which has an exit directly to the exterior and the corridor/hallway is constructed consistent with the dwelling unit interior walls. The hallway shall be separated from common areas by a solid wood door not less than 1 $\frac{3}{8}$  inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector.
2. Egress through a hallway which has an exit directly to the exterior. The hallway shall be separated from the rest of the house by a wall constructed consistent with the dwelling unit interior walls and opening protected by a solid wood door not less than 1 $\frac{3}{8}$  inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector.
3. Direct exit from the bedroom to the exterior.
4. Egress through an adjoining bedroom which exits to the exterior.

(Relocated from 2001 CBC 415A.3)

~~415A.3~~ **419.4.8.3.3 Exits Required Bedridden.** In Group R, Divisions 2.1.1 and 2.2.1 3.1 Occupancies housing a bedridden client, a direct exit to the exterior of the residence shall be provided from the client sleeping room.

(Relocated from 2001 CBC 415A.4)

**415A.4 419.4.8.3.3.1 Doors and door hardware.** Doors to a bedridden client's sleeping room shall be of a self-closing, positive latching 1- $\frac{3}{8}$  inch solid wood door. Such doors shall be provided with a gasket so installed as to provide a seal where the door meets the jam on both sides and across the top. Doors shall be maintained self-closing or shall be automatic closing by actuation of a smoke alarm in accordance with Section 713 detector listed for that purpose.

(Relocated from 2001 CBC 415A.4.1)

**415A.4.1 419.4.8.3.3.2 Locks on Interior Doors.** Group R, ~~Division 2.1.1 and 2.2.1~~ 3.1 Occupancies shall not have a night latch, dead bolt, security chain or any similar locking device installed on any interior door leading from a bedridden client's sleeping room to any interior area such as a corridor, hallway and or general use areas of the residence in accordance with Chapter 10.

(Relocated from 2001 CBC 415A.5)

**415A.5 419.4.8.3.3.3 Exterior exit door.** The exterior exit door to a bedridden client's sleeping room shall be operable from both the interior and exterior of the residence.

(Relocated from 2001 CBC 415A.6)

**415A.6 419.4.8.3.3.4 Width and Height.** Every required exit doorway from a bedridden client sleeping room shall be of a size as to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height. When installed in exit doorways, exit doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exit way is not less than 32 inches (813 mm).

(Relocated from 2001 CBC 1007.6.3.2.3 and 1007.6.3.2.4)

~~1007.6.3.2.3, 1007.6.3.2.4~~ **419.4.8.3.4 Intervening rooms.** A means of exit shall not pass through more than one intervening room. A means of egress shall not pass through kitchens, storerooms, closets, garages or spaces used for similar purposes.

**Exception:** Kitchens which do not form separate rooms by construction.

#### **419.4.8.4 Corridors/hallways.**

**419.4.8.4.1** Unless specified by Section 419.4.8.4, corridors serving Group I-1 and Group R-4 occupancies shall comply with Section 1017.1.

(Relocated from 2001 CBC, 1007.6.3.3.1)

~~1007.6.3.3.1~~ **419.4.8.4.2** The minimum clear width of a corridor and hallways shall be as follows:

~~Division 2.1 . 1. Group I-1 occupancies shall have Ssixty inches (1524 mm) on floors housing nonambulatory clients and Fforty-four inches (1118 mm) on floors housing only ambulatory clients.~~

**EXCEPTION:** Existing buildings reclassified to a Group R, Division 2.1 Occupancy, built prior to January 1, 1994, with existing corridors having a width of not less than 44 inches (1118 mm).

~~Division 2.1.1. Thirty-six inches (914 mm) on floors housing clients.~~

~~Division 2.2- 2. Group R-4 occupancies shall have Fforty-four inches (1118 mm) on floors housing clients.~~

**EXCEPTIONS:** 1. Corridors serving an occupant load of 10 or less shall not be less than 36 inches (914 mm) in width.

2. Corridors serving ambulatory persons only and having an occupant load of 49 or less shall not be less than 36 inches (914 mm) in width.

~~Division 2.2-1. 3. Group R-3.1 occupancies shall have Tthirty-six inches (914 mm) on floors housing clients.~~

~~Division 2.3- Sixty inches (1524 mm) on floors housing clients.~~

~~Division 2.3-1.1 Thirty-six inches (914 mm) on floors housing clients.~~

In Group I-1 occupancies provided with automatic fire sprinklers throughout and which are required to have rated

corridors, door closers need not be installed on doors to client sleeping rooms.

(Relocated from 2001 CBC, 1007.6.3.3.1)

**419.4.8.4.3** In a Group R-3.1 occupancy housing bedridden clients, interior doors to client bedrooms shall be solid wood doors not less than 1 $\frac{3}{8}$  inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector. Such doors shall be provided with a gasket so installed as to provide a seal where the door meets the stop on both sides and across the top.

(Relocated from 2001 CBC, 1007.6.3.3.2)

**419.4.8.4.4** In a Group I-1 and Group R-3.1 occupancies having smoke barriers, cross-corridor doors in corridors 6 feet (1829 mm) or less in width shall have, as a minimum, a door 36 inches (914 mm) in width.

~~**1007.6.3.3.3** In Divisions 2.1.1 and 2.2.1 Occupancies, hallways may be interrupted by intervening rooms.~~

(Relocated from 2001 CBC, 1007.6.3.4)

**419.4.8.5** Changes in level. Group R-3.1 occupancies housing nonambulatory clients changes in level up to ~~1/4~~ 0.25 inch (6.35 mm) may be vertical and without edge treatment. Changes in level between  $\frac{1}{4}$  0.25 inch (6.35 mm) and  $\frac{1}{2}$  0.5 inch (12.7 mm) shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50% slope). Changes in level greater than  $\frac{1}{4}$  0.5 inch (12.7 mm) shall be accomplished by means of a ramp.

#### **419.4.8.6 Stairways.**

(Relocated from 2001 CBC, 1007.6.3.5)

**419.4.8.6.1** Group I-1 and Group R-4 occupancies housing more than six non-ambulatory clients above the first floor shall be provided with two vertical exit enclosures. Stairway enclosures shall be in compliance with Section 1020. Exceptions to Section 1020 shall not apply in facilities licensed as a 24-hour care facility.

(Relocated from 2001 CBC, 1007.6.3.5)

**419.4.8.6.2** Group R-3.1 occupancies may continue to use existing stairways (except for winding and spiral stairways which are not permitted as a required means of egress) provided the stairs have a maximum rise of 8 inches (203 mm) with a minimum run of 9 inches (229 mm). The minimum stairway width may be 30 inches (762 mm).

(Relocated from 2001 CBC, 1007.6.3.6)

**419.4.8.7** Floor separation. Group R-3.1 occupancies shall be provided with a non-fire resistance constructed floor separation at stairs which will prevent smoke migration between floors. Such floor separation shall have equivalent construction of 0.5 inch (12.7 mm) gypsum wallboard on one side of wall framing.

#### **Exceptions:**

1. Occupancies with at least one exterior exit from floors occupied by clients.
2. Occupancies provided with automatic fire sprinkler systems complying with chapter 9.

**419.4.8.7.1** Doors within floor separations. Doors within such floor separations shall be tight fitting solid wood at least 1  $\frac{3}{8}$  inches (35 mm) in thickness. Door glazing shall not exceed 1296 inches (32 918 mm) with no dimension greater than 54 inches (1372 mm). Such doors shall be positive latching, smoke gasketed and shall be automatic-closing by smoke detection.

(Relocated from 2001 CBC, 1007.6.3.7)

**419.4.8.8** Fences and gates. Grounds of a Residential Care for the Elderly facility serving Alzheimer clients may be fenced and gates therein equipped with locks, provided safe dispersal areas are located not less than 50 feet (15 240 mm) from the buildings. Dispersal areas shall be sized to provide an area of not less than 3 square feet (0.28<sup>2</sup>) per occupant. Gates shall not be installed across corridors or passageways leading to such dispersal areas unless they comply with egress requirements.

(Relocated from 2001 CBC, 1007.6.3.8)

**419.4.8.9** Basement exits. One exit is required to grade level when the basement is accessible to clients.

**419.4.8.10 Delayed egress locks.** See Section 1008.1.8.6.

(Relocated from 2001 CBC 415A.9)

**415A-9 419.4.9 Request for alternate means of protection.** Request for alternate means of protection shall apply to Sections ~~415A-4~~ 419.4 through ~~415A-9~~ 419.4.9. Request for approval to use an alternative material, assembly or materials, equipment, method of construction, method of installation of equipment, or means of protection shall be made in writing to the local fire authority having jurisdiction by the facility, client or the client's authorized representative. Sufficient evidence shall be submitted to substantiate the need for an alternate means of protection.

The facility, client or the client's representative or the local fire authority having jurisdiction may request a written opinion from the State Fire Marshal concerning the interpretation of the regulations promulgated by the State Fire Marshal for a particular factual dispute. The State Fire Marshal shall issue the written opinion within 45 days following the request.

Approval of a request for use of an alternative material, assembly or materials, equipment, method of construction, method of installation of equipment, or means of protection made pursuant to this section shall be limited to Group R, ~~Divisions 2-1.1 and 2-2.1~~ 3.1 Occupancies housing a bedridden client.

Approvals made by the local fire authority having jurisdiction and the written opinion by the State Fire Marshal shall be applicable only to the requesting facility and shall not be construed as establishing any precedent for any future request by that facility or any other facility.

Authority: Health and Safety Code Sections 1250, 1502, 1568.02, 1569.72, 1569.78, 11159.2, 13131.5, 13133, 13143, 13143.6

References: Health and Safety Code Sections 13143

**419.5 Special provisions.** Rooms classified as Group I-4 shall not be located above or below the first story.

**Exceptions:** 1. Basements or stories having floor levels located within 4 feet (1219 mm), measured vertically, from adjacent ground level at the level of exit discharge, provided the basement or story has exterior exit doors at that level.

2. In buildings equipped with an automatic sprinkler system throughout, rooms used for day-care purposes may be located on the second story, provided there are at least two exterior exit doors for the exclusive use of such occupants.

3. Group I-4 childcare facilities may be located above the first story in buildings of Type I construction and in Types II-A, and III-A construction, subject to the limitation of Section 503 when:

3.1 Group I-4 childcare facilities with children under the age of seven or containing more than 12 children per story shall not be located above the fourth floor; and

3.2 The entire story in which the Group I-4 childcare facility is located is equipped with an approved manual fire alarm and smoke-detection system. (See the Fire Code.) Actuation of an initiating device shall sound an audible alarm throughout the entire story.

When a building fire alarm system is required by other provisions of this code or the Fire Code, the alarm system shall be connected to the building alarm system. An approved alarm signal shall sound at an approved location in the Group I-4 childcare facility to indicate a fire alarm or sprinkler flow condition in other portions of the building; and

3.3 Group I-4 childcare facilities, if more than 1,000 square feet (92.9 m<sup>2</sup>) in area, is divided into at least two compartments of approximately the same size by a smoke barrier with door openings protected by smoke- and draft-control assemblies having a fire-protection rating of not less than 20 minutes. Smoke barriers shall have a fire-resistive rating of not less than one hour. In addition to the requirements of Section 508.3.3, occupancy separations between Group I-4 childcare and other occupancies shall be constructed as smoke barriers. Door openings in the smoke barrier shall be tightfitting, with gaskets installed as required by Section 709, and shall be automatic closing by actuation of the automatic sprinklers, fire alarm or smoke-detection system.

3.4 Each compartment formed by the smoke barrier has not less than two exits or exit access doors, one of which is permitted to pass through the adjoining compartment; and

3.5 Where two or more means of exits or exit access are required at leased one shall not share a common path of travel.

3.6 The building is equipped with an automatic sprinkler system throughout.

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

**419.6 Existing Group R Occupancies. See Section 3411.**

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

**SECTION 430**  
**HORSE RACING STABLES**

*For automatic sprinkler and fire alarm system requirements applying to each building, barn or structure which is used by an association regulated by the California Horse Racing Board for the stabling of horses or human habitation, and the stable area grounds, including any additional location where any excess horses are stabled see Title 4, Division 4, Article 1, Section 1927.*

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

**SECTION 431**  
**PET KENNELS**

**431.1** *These regulations shall apply to every building or fire area in which a pet dealer, as defined in Health and Safety Code Section 122125, maintains a kennel.*

**431.2 Automatic Sprinkler System.** *An approved automatic sprinkler system complying with CFC Section 903 shall be installed.*

**Exception:** *Where a fire alarm system that is connected to a central reporting station that alerts the local fire department in case of fire.*

Authority: Health and Safety Code Sections 122155  
References: Health and Safety Code Sections 13143

**SECTION 432**  
**COMBUSTION ENGINES AND GAS TURBINES**

**432.1 General.** *The installation of combustion engines and gas turbines shall be in accordance with NFPA-37 and this chapter.*

**432.2 Separation.**

**432.2.1 Construction.** *Every room in which is installed a combustion engine or gas turbine shall be separated from the remainder of the building by not less than a one-hour fire barrier.*

**432.2.2 Exterior openings.** *When doors, windows or louvered openings are located below openings in another story or less than 10 feet (3048 mm) from doors, windows or louvered openings of the same building, they shall be protected by a fire assembly having a 3/4-hour rating. Such fire assemblies shall be fixed, automatic or self-closing.*

**432.2.2.1 Interior openings.** *In other than buildings housing Group I Occupancies, interior openings shall be allowed in buildings protected by an automatic fire sprinkler system throughout.*

**432.2.3 Location.** *Combustion engines and gas turbines used for emergency power shall not be located in a room or area used for any other purpose other than equipment and controls related to the generation and distribution of emergency power.*

**432.2.4 Special hazards.** *The handling and use of flammable or combustible liquids shall comply with the CFC.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

## **SECTION 433** **FIXED GUIDEWAY TRANSIT SYSTEMS**

### **433.1 General.**

**433.1.1 Scope.** *The provisions of this section shall apply to buildings or structures defined as stations for fixed guideway transit systems and shall supersede other similar requirements in other sections of this code.*

**433.1.2 Definitions.** *For the purpose of this section, certain terms are defined as follows:*

**AT-GRADE STATION** *is any at-grade or unroofed station other than an elevated or underground station.*

**ELEVATED STATION** *is a station greater than one story not otherwise defined as an at-grade or underground station.*

**EMERGENCY MANAGEMENT PANEL (EMP)** *is the location where all necessary on-site control and communication facilities are consolidated for effective response to emergency situations.*

**ENCLOSED STATION** *is a station or portion thereof that does not meet the definition of an open station.*

**ENGINEERING ANALYSIS (FIRE HAZARD/FIRE RISK ASSESSMENT)** *is an analysis that evaluates all various factors that affect the fire safety of the system or component. A written report of the analysis shall indicate the fire protection method(s) recommended that demonstrates a level of fire safety commensurate with this standard.*

**FIXED GUIDEWAY TRANSIT SYSTEM** *(the system) is an automated driverless or manually controlled electrified transportation system, utilizing a fixed guideway, operating on right-of-way for the mass movement of passengers and consisting of its fixed guideways, transit vehicles and other rolling stock; power system; buildings; maintenance facilities; stations; transit vehicle yard; and other stationary and movable apparatus, equipment, appurtenances and structures.*

**GUIDEWAY** *is that portion of the system on which the transit vehicles operate.*

**OPEN STATION** *is a station that is constructed in such a manner that it is open to the atmosphere, and smoke and heat are allowed to disperse directly into the atmosphere. The following enclosed areas in open stations are permitted but limited to:*

- 1. Ticket/pass booths not exceeding 150 square feet (13.9 m<sup>2</sup>) in area.*
- 2. Mechanical and electrical spaces typically not used for human occupancy and necessary for the operation of a fixed guideway transit system. Such spaces shall be limited to two per level.*
- 3. Restrooms not exceeding 150 square feet (13.9 m<sup>2</sup>) in area. A maximum of four restrooms are permitted per level.*

**OPERATIONS CONTROL CENTER (OCC) (CENTRAL CONTROL)** *is the operation center where the authority controls and coordinates the system-wide movement of passengers and trains from which communication is maintained with supervisory and operating personnel of the authority, and with participating agencies when required.*

**POINT OF SAFETY** *is an enclosed fire exit that leads to a public way or safe location outside the structure, or an at-grade point beyond any enclosing structure, or other area that affords adequate protection for passengers.*

**POWER SUBSTATION** is the location of electric equipment that does not generate electricity but receives and converts or transforms generated energy to usable electric energy.

**STATION** is a place designated for the purpose of loading and unloading passengers, including patron service areas and ancillary spaces associated with the same structure.

**STATION PLATFORM** is the area of a station used primarily for loading and unloading transit vehicle passengers.

**UNDERGROUND STATION** is a station or that part of a station located beneath the surface of the earth or of the water.

### **433.2 Types of Construction.**

**433.2.1** Unless otherwise specified in this section, buildings or portions of buildings classed as stations of fixed guideway transit systems shall be minimum Type I, Type I-B, or Type II-A construction and shall not exceed in area or height the limits specified in Table 503.

Underground stations shall be a minimum Type I or Type I-B constructions.

Open stations may be of Type II-B construction and shall not exceed in area or height as required by Table 503 for Type II-A.

**Exception:** At-grade structures of open stations with an occupancy load not exceeding 300 persons may be of any construction type permitted by this code.

### **433.2.2 Mixed occupancies.**

**433.2.2.1** Stations of fixed guideway transit systems shall be separated from other occupancies in accordance with Table 508.3.3 for Group A Occupancies.

**433.2.2.2** The following areas shall be separated from public areas by a two-hour barrier:

1. Electrical control rooms, auxiliary electrical rooms and associated battery rooms.
2. Trash rooms.
3. Train control rooms and associated battery rooms.
4. Fan rooms.
5. Emergency generator rooms.

**433.2.2.3** Within station structures, all power substations shall be separated from all other areas by a three-hour fire barrier with no openings to public areas.

### **433.3 Access and Exit Facilities.**

**433.3.1 Occupant load.** The occupant load for a transit station shall be based on the emergency condition requiring evacuation of that station to a point of safety. The station occupant load shall be the sum of the number of persons in the calculated train load of trains entering a station plus the entraining load of persons awaiting train(s), during a specified time period. Notwithstanding, the minimum occupant load shall not be less than the maximum capacity load of a train which would occupy the entire length of the station platform on a single track. Exiting shall be provided for occupant loads recalculated upon increase in service and/or every five years.

**433.3.1.1 Calculated train load.** The calculated train load is the number of passengers on trains simultaneously entering the station on all tracks in normal traffic direction during the peak 15-minute period.

The following limitations to the calculated train load shall be applied:

1. No more than one train will unload at any one track to a platform during an emergency.
2. The load on any single train is limited to the maximum train capacity.

**433.3.1.2 Entraining load (on platform awaiting train).** *The entraining load is equal to the number of passengers that would accumulate on the platform in the time period equivalent to two headways or 12minutes during the peak 15-minute period, whichever time period is greater.*

*This entraining load is constrained as stated as follows:*

- 1. Special consideration shall be given to stations servicing areas where events occur that establish occupant loads not included in normal passenger loads. These would include such areas as civic centers, sports complexes and convention centers.*
- 2. At multiplatform stations, each platform shall be considered separately. Arrival of trains from all normal traffic directions, plus their entraining loads, shall be considered.*
- 3. At concourses, mezzanines or multilevel stations, simultaneous platform loads shall be considered for all exit lanes passing through that area.*

### **433.3.2 Exits required.**

**433.3.2.1 Number of exits.** *Stations shall have at least two exits placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the station. Enclosed station platforms shall have a minimum of one exit within 20 feet (6096 mm) from each end. Underground station platforms shall have a minimum of one enclosed exit within 20 feet (6096 mm) from each end. Routes from platform ends into the underground guideway shall not be considered as exits for calculating exiting requirements.*

### **433.3.2.2 Capacity of exits and station evacuation time.**

**433.3.2.2.1 Exit capacities shall be calculated on the basis of 22-inch-wide (559mm) exit lanes at the clear and narrowest point except that individual handrails may project into the required width as permitted by Chapter 10. Fractional lanes shall not be counted in measuring exit capacities except that 12 inches (305 mm) added to one or more lanes shall be counted as one-half a lane. Escalators 32 inches (813 mm) in width may be considered as 11/2 lanes.**

**433.3.2.2.2** *There shall be sufficient means of exit to evacuate the station occupant load from the station platforms in four minutes or less.*

**433.3.2.2.3** *The station shall also be designed to permit evacuation from the most remote point on the platform to a point of safety in six minutes or less.*

**433.3.2.2.4** *In at-grade or elevated structures so designed that the station platform is open to the elements and, when the concourse is below or protected from the platform by distance or materials as determined by an appropriate engineering analysis, that concourse may be defined as a point of safety, with Fire Code Official concurrence.*

**433.3.2.2.5** *To calculate evacuation time, the walking travel time should be tabulated using the longest exit route and travel speeds. To this time should be added the following factors:*

- 1. The waiting time at the vertical elements at platform level minus the longest walking travel time at platform level.*
- 2. The waiting time at the fare collection barriers minus the waiting time at the platform vertical circulation elements.*
- 3. The waiting time at the vertical or horizontal circulation elements from mezzanine to grade minus the waiting time at the platform vertical circulation elements or fare collection barrier, whichever is greater.*
- 4. The waiting time, if any, at any additional constriction minus the greatest previous waiting time. (Repeat for all additional constrictions.)*

**Note:** *The total of any of the factors in Items 1 through 4 above cannot be less than zero.*

### **433.3.3 Exit width and exit lanes.**

**433.3.3.1** *The capacity in persons per minute (ppm), patron travel speeds in feet per minute (fpm) and requirements for exit lanes shall be as follows:*

- 1. Platforms, corridors, and ramps of 1 foot vertical for 20 feet horizontal (5% slope) or less: Exit corridors, platforms and ramps shall be a minimum clear width of 5 feet (1524 mm). In computing the number of exit*

lanes available, 1 foot 6 inches (457 mm) shall be deducted at each platform edge and 1 foot (305 mm) at each side wall.

Per exit lane:

Capacity - 50 ppm

Travel speed - 200 fpm

2. Stairs, stopped escalators, and ramps of over 1 foot vertical for 20 feet horizontal (5% slope): Exit ramps shall be a minimum clear width of 6 feet (1829 mm). Stopped escalators may be considered as a means of egress, provided they are of nominal 2 feet 8 inches (813 mm) width.

Per exit lane "up" direction:

Capacity - 35 ppm

Travel speed - 50 fpm\*

Per exit lane "down" direction:

Capacity - 40 ppm

Travel speed - 60 fpm\*

3. Doors and gates: Gates fitted with approved panic hardware and opening in the direction of exit travel, with minimum nominal width of 3 feet (914 mm) shall be permitted in exit calculation.

Per doors and gate:

Capacity - 50 ppm per exit lane

4. Fare collection gates: Fare collection gates, when deactivated, shall provide a minimum 20 inches (508 mm) clear unobstructed aisle. Console shall not exceed 40 inches (1016 mm) in height.

Per gate:

Capacity . 50 ppm

**Note:** Examples of exiting analysis may be found in Appendix C of NFPA 130, 1995 edition, Standard for Fixed Guideway Transit Systems.

\*Indicates vertical component of travel speed.

#### **433.3.4 Arrangement of exits.**

**433.3.4.1** Vertical circulation elements shall be comprised of stairs or stair/escalator combinations. Escalators shall not account for more than half of the units of exit at any one level in the public area. Escalators must be paired in combination with stairs to be included in exiting capacity calculations.

**433.3.4.2** Because of the possibility of maintenance or malfunction, one escalator at each station shall be considered as being out of service in calculating egress requirements. The escalator chosen shall be that one having the most adverse effect on exiting capacities.

**433.3.5 Distance to exits.** No point of the station platform(s) or mezzanine(s) shall be more than 300 feet (91 440mm) from a point of safety.

#### **433.3.6 Other exits required/guideway access.**

**433.3.6.1** Access/egress between guideway and platforms shall be provided as follows:

1. Stairs or ramps, 2 feet 10 inches (864 mm) in width minimum, or other arrangement having equivalent capacity, shall be provided at each end of the platform, arranged to provide access/egress to guideway level.

2. Except in underground stations, the access points between the guideway and the platform, and the exit from the platform may be integrated.

433.3.6.2 In enclosed stations, escalator and stairway enclosures are not required in the public areas of multilevel transit stations among platform, mezzanine and concourse when the station is provided with an emergency ventilation system.

**433.3.7 Emergency lighting and exit signs.**

433.3.7.1 Emergency lighting and exit signs shall be provided in accordance with Chapter 10.

Exception: Open stations at grade need not provide emergency lighting or exit signs.

**433.4 Special Provisions.**

433.4.1 Automatic sprinkler system. An automatic sprinkler system shall be installed in all stations of fixed guideway transit systems.

- Exceptions:
1. Guideways when the closest sprinkler heads to the guideway are within 3 feet (914mm) of the edge, over the platform, and spaced 6 feet (1829 mm) on center parallel to the guideway.
  2. Station agent booths not exceeding 150 square feet (13.9 m<sup>2</sup>) in area, when provided with an approved smoke detector connected to the building fire alarm system.
  3. Power substations.
  4. Machinery rooms, electrical rooms and train control rooms protected by an approved automatic fixed fire-extinguishing system.
  5. Open stations.
  6. Station platform areas open to three or more sides.

433.4.2 Station guideway deluge system. Underground stations and stations in open cuts with walls 5 feet (1524 mm) above the top of the running rail and with a raised platform shall be provided with an under-vehicle guideway manually activated deluge sprinkler system. In open cut stations, such system shall be provided in guideways which are situated between a raised platform edge and a retaining wall.

433.4.2.1 Systems shall be provided along the entire length of track at each station platform.

433.4.2.2 Deluge nozzles with caps shall be located in the approximate center of track with spacing designed to completely wet the undersides of the vehicle at the applied density.

433.4.2.3 System density shall be a minimum of 0.19 gallon per minute (gpm) per square foot (0.72 L/m per m<sup>2</sup>) for the design area. When more than one zone is provided, two adjacent zones are required to be considered operating for calculating purposes.

433.4.2.4 Deluge systems shall be directly connected to a water supply capable of supplying the required flow rate for a minimum 30-minute duration.

433.4.2.5 Controls or manually operable valves shall be in a location acceptable to the Fire Code Official. All deluge systems shall be monitored by the station fire alarm system.

433.4.2.6 Each valve shall be monitored by a separate circuit. The alarm panel shall be located in an area normally occupied by station personnel or signals shall be transmitted to the operations control center (OCC).

**433.4.3 Standpipe systems.**

433.4.3.1 Underground stations shall be provided with a class III standpipe system designed to comply with the following:

1. Automatically supply the required flow at 65 pounds per square inch (psi) for each 1 1/2 inch (38 mm) outlet.
2. Supply a 250 gpm (946 L/m) flow to each of the two most remote 2 1/2 inch (64 mm) outlets when pressurized through the fire department connection(s).

433.4.3.2 All other stations shall be provided with a class I manual wet standpipe system; a manual dry class I standpipe system may be allowed in areas subject to freezing.

**Exception:** Open at-grade stations with unrestricted fire department access need not be provided with a standpipe system.

**433.4.3 Standpipe systems.** /See Section 905.3.10.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**433.4.4 Emergency Management Panel (EMP).** An EMP shall be required for enclosed and underground stations. Location of the EMP shall be determined by the Fire Code Official. The EMP shall include but not be limited to the following:

1. Indication of manual pull boxes and automatic smoke detectors.
2. Indication of alarm signals from all suppression systems.
3. Capabilities for using station paging system.
4. Emergency telephone.
5. Escalator controls.
6. Emergency ventilation controls.
7. Station schematics.

**433.4.5 Emergency ventilation systems.**

**433.4.5.1 General.** Emergency ventilation shall be provided for enclosed and underground stations for the protection of passengers, employees and emergency personnel.

**433.4.5.2** These systems shall be designed as follows:

1. A stream of non contaminated air is provided to passengers in a path(s) of egress away from a train fire; and
2. Airflow rates produced toward a train fire in a path of egress are sufficient to prevent back layering of smoke; and
3. The temperature in a path of egress away from a train fire is limited to 140 F (60 C), or less; and
4. The design heat release rate produced by a train fire shall be used to design the emergency ventilation system.

**433.4.5.3** Ventilation shaft terminals at-grade shall be located to prevent recirculation as follows:

1. Openings for blast relief shafts, and under platform and smoke exhaust shafts at-grade shall be separated by a minimum horizontal distance of 40 feet (12 192 mm) from any station entrance, elevator hoistway enclosure, surface emergency stair doorway, unprotected outside air intake or other opening, or from each other. Exhaust outlets that are not used for intakes may be adjacent to each other.
2. Where this distance is not practical, the horizontal distance may be reduced to 15 feet (4572 mm) if the closest blast relief or under platform and smoke exhaust shaft terminal is raised a minimum of 10 feet (3048 mm) above the station entrance, emergency stair doorway and unprotected outside air intake or other opening, or the underplatform and smoke exhaust shaft terminal is raised a minimum of 10 feet (3048 mm) above the blast relief shaft terminal.
3. Ventilation of stations shall not terminate at grade on any vehicle roadway.

**433.4.5.4 Emergency ventilation fans.**

**433.4.5.4.1** Ventilation fans used for emergency service, their motors, dampers, and all related components exposed to the ventilation airflow shall be designed to operate in an ambient atmosphere of 482 F (250 C) for a period of at least one hour. Ventilation fans and related components shall be capable of withstanding the maximum anticipated plus/minus pressure transients induced by train operations.

**433.4.5.4.2** Local fan motor starters and related operating control devices for emergency ventilation equipment shall be isolated from the ventilation airflow by a separation having a fire-resistance rating of at least one hour.

433.4.5.4.3 Thermal overload protective devices shall not be provided on motor controls of fans used for emergency ventilation.

433.4.5.4.4 The power supply for fans essential for emergency ventilation service shall consist of two separate electrical feeders. Each feeder shall originate from a different source (substation) and shall be separated physically to the extent possible. Automatic transfer shall be provided in the event the normal supply source fails.

433.4.5.4.5 Operation and fail-safe verification for proper operation of emergency fans shall be affected from the operation control center with indication provided for all modes of operation for each fan.

**433.4.5.5 Emergency ventilation control.**

433.4.5.5.1 Local controls shall override remote control. Local control shall be capable of operating the fans in all modes in the event the remote controls become inoperative.

433.4.5.5.2 Emergency ventilation systems shall be supervised and/or controlled in all operating modes locally (motor control center and/or fan unit) and remotely at both the OCC and the station EMP.

433.4.5.5.3 Fan running shall be provided by sensing devices for each fan for operation in both the supply and exhaust directions.

433.4.5.5.4 Trouble status signals shall be annunciated in the local control room. A summarized trouble signal shall be annunciated at OCC and EMP.

433.4.5.6 Ventilation systems and ancillary areas. Ancillary area ventilation systems shall be arranged so that air is not exhausted into station public occupancy areas.

**433.5 Fire Alarm and Communication Systems.**

433.5.1 General. Every station shall be provided with a State Fire Marshal approved and listed fire alarm system. The alarm and communication systems shall be proprietary, designed and installed so that damage to any one speaker will not render any paging zone of the system inoperative.

**Exception: Open stations.**

The voice alarm and public address system may be a combined system.

When approved by the fire department, a communications system may be combined with the voice alarm system and the public address system. Such combined systems shall meet the requirements of the California Electric Code.

**433.5.1.1 System components. Each station fire alarm system shall consist of:**

1. Fire alarm control panel at a location as permitted by the Fire Code Official.
2. An alarm annunciator(s). The annunciator(s) shall be located at a point acceptable to the Fire Code Official. The annunciator(s) shall indicate the type of device and general location of alarm. All alarm, supervisory and trouble signals shall be transmitted to the local annunciator(s) and the OCC.
3. Manual pull stations shall be provided throughout passenger platforms and stations.

**Exception: Voice alarm reporting devices (emergency telephones) may be used in lieu of manual pull stations as permitted by the Fire Code Official. Such devices shall provide two-way communication between the OCC and each device. Such devices shall be located as required for manual fire alarm pull boxes, and shall be distinctly identified by signs, coloring, or other means acceptable to the Fire Code Official.**

4. Automatic smoke detectors in all ancillary spaces.

**Exceptions:**

1. Ancillary spaces protected by an approved fixed automatic extinguishing system; or
2. Ancillary spaces protected by quick-response sprinklers.

5. Automatic control of exiting components.

**433.5.1.2 Combined voice alarm/public address system.** Each station shall be provided with a one-way paging system(s) capable of transmitting voice, tape or electronically generated messages to all areas of the station. The system(s) shall be configured such that the messages can be initiated from either the EMP or the OCC.

**433.5.2 Emergency telephones.** A dedicated emergency phone system shall be provided in all underground stations to facilitate direct communications for emergency response between remote locations and the EMP.

**433.5.2.1** The remote phones shall be located at ends of station platforms, each hose outlet connection and station valve rooms.

**433.5.2.2** Provisions shall be made in the design of this system for extensions of the system to the next passenger station or guideway portal.

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

## **SECTION 412A-~~[FOR-SFM]~~ .434 EXPLOSIVES**

*(Relocated from 2001 CBC 412A.1)*

**412A.1 434.1 General Construction Requirements.** Magazines shall be constructed in conformity with the provisions of these regulations, or may be of substantially equivalent construction satisfactory to the enforcing agency having jurisdiction. Reasonable allowances shall be made for storage facilities in existence prior to the adoption of these regulations. No allowance, however, shall be made for storage facilities which constitute a distinct hazard to life and property. **CHAP. 4A, DIV. II**

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.2)*

**412A.2 434.2 Ventilation and Weather Resistance.** Magazines for the storage of explosives shall be sufficiently ventilated and weather resistant and when used for the storage of Class A explosives (other than black powder, blasting agents, blasting caps and electric blasting caps), they shall also be of bullet-resistant construction unless deemed exempt by the enforcing agency having jurisdiction.

**NOTE:** The recommendation for ventilation as contained in Pamphlet No. 1, Institute of Makers of Explosives, 1965 edition, is evidence of good practice.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.3)*

**412A.3 434.3 Construction for Separation between Primers and Flammable Liquids.** Primers shall be separated from flammable liquids by a one-hour fire-resistive occupancy separation.

**EXCEPTION:** A separation need not be provided for small arms ammunition primers when such primers are located a distance of not less than 25 feet (7620 mm) from flammable liquids.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4)*

**412A.4 434.4 Construction of Type I Magazine.** Type I magazines shall be of bullet-resistant construction. Plans shall be submitted to the enforcing agency having jurisdiction for approval prior to construction.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.1)*

**412A.4.1 434.4.1 General.** Use of the following materials and methods of construction shall be evidence of compliance with this requirement:

1. Masonry units not less than 8 inches (203 mm) in thickness with all hollow spaces filled with weak cement, well-tamped sand, or equivalent material; or
2. Reinforced concrete not less than 6 inches (152 mm) in thickness; or
3. Steel walls of minimum No. 14 manufacturers. Standard gage (0.0747 inch) (1.9 mm) to No. 6 manufacturers. Standard gage (0.1943 inch) (4.9 mm) may be used, provided there are two layers spaced at least 6 inches (152 mm) apart with all hollow spaces filled with weak cement, well-tamped sand or equivalent material; or
4. One layer of No. 6 manufacturers. standard gage (0.1943 inch) (4.9 mm) or heavier; steel lined on the interior with a minimum of 4 inches (102 mm) of wood; or
5. Two layers of No. 6 manufacturers. standard gage (0.1943 inch) (4.9 mm) or heavier steel spaced a minimum 1/2 inch (12.7mm) apart and lined on the interior with a minimum of 2 inches (51mm) of wood; or
6. Two layers of wood, at least 2 inches (51mm) nominal thickness each, spaced a minimum 4 inches (102 mm) apart with the hollow space filled with weak cement, well-tamped sand or equivalent material.
7. Wood used shall conform to the following:  
Wood shall be of tongue-and-grooved lumber or plywood. Wood shall be covered, on the exterior side, with metal to provide protection against flying embers and sparks.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.2)*

**412A.4.2 434.4.2 Doors.** Doors shall be of bullet-resistant construction. Each door is to be equipped with:

1. Two mortise locks;
2. Two padlocks fastened in separate hasps and staples;
3. A combination of a mortise lock and a padlock;
4. A mortise lock that requires two keys to open; and
5. A three-point lock.

Padlocks must have at least five tumblers and a case-hardened shackle of at least 3/8-inch (9.5 mm) diameter. Padlocks must be protected with not less than 1/4-inch (6.4 mm) steel hoods constructed so as to prevent sawing or lever action on the locks, hasps and staples. These requirements do not apply to magazine doors that are adequately secured on the inside by means of a bolt, lock or bar that cannot be actuated from the outside.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.3)*

**412A.4.3 434.4.3 Floors.** Floors of magazines shall be securely fastened in place and shall be capable of withstanding the loads imposed.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.4)*

**412A.4.4 434.4.4 Roofs.** Roofs shall be securely fastened in place and they shall be bullet resistant, if required by the chief having jurisdiction.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.5)*

**~~412A.4.5~~ 434.4.5 Ventilation openings.** *Ventilation openings shall be screened to prevent the entrance of sparks and they shall be protected in a manner that will maintain the bullet resistance of the magazine.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.6)*

**~~412A.4.6~~ 434.4.6 Interiors.** *Magazine interiors shall be of a smooth finish without cracks or crevices with all nails, screws, bolts and nuts countersunk. Exposed metal capable of emitting sparks shall be covered so as not to come in contact with packages of explosives.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.4.7)*

**~~412A.4.7~~ 434.4.7 Location.** *No Type I magazine, or portion thereof, shall be located under a high-voltage power line (750 volts or more). For the purposes of this section, .under. shall include an open space of not less than the height of the power line from the ground at right angles to the walls of the magazine.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5)*

**~~412A.5~~ 434.5 Buildings Used for Mixing of Blasting Agents.** *Buildings used for the mixing of blasting agents shall conform to the requirements of Sections 412A.5 and 412A.6, unless otherwise specifically approved by the enforcing agency having jurisdiction.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5.1)*

**~~412A.5.1~~ 434.5.1 Construction.** *Buildings shall be of all noncombustible construction or of sheet metal on wood studs.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5.2)*

**~~412A.5.2~~ 434.5.2 Separation.** *The layout of the mixing building shall be such so as to provide physical separation between the finished product storage and the mixing and packaging operations.*

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5.3)*

**412A.5.3 434.5.3 Storage areas.** Floors in storage areas and in the processing plant shall be of concrete or other noncombustible material. Isolated fuel storage shall be provided to avoid contact between molten ammonium nitrate and fuel in case of fire.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5.4)*

**412A.5.4 434.5.4 Ventilation.** The building shall be well ventilated in accordance with Section 412A.2.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5.5)*

**412A.5.5 434.5.5 Heat.** Heat, if used, shall be provided exclusively from a unit outside of the building.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.5)*

**412A.5.6 434.5.6 Venting.** Explosion venting shall be provided when required by the enforcing agency having jurisdiction.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.6)*

**412A.6 434.6 Building Construction Storage.** Blasting agents may be stored in the manner set forth in Title 19, California Code of Regulations, Subchapter 10, Article 3, or in one-story warehouses (without basements), which shall be:

1. Of noncombustible or one-hour fire-resistive construction;
2. Constructed so as to eliminate floor drains and piping into which molten materials could flow and be confined in case of fire;
3. Weather resistant;
4. Well ventilated in accordance with Section 412A.2; and
5. Equipped with a substantially constructed and lockable door which shall be kept securely locked, except when the facility is open for business.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.7)*

**412A.7 434.7 Electrical Requirements for Type I Magazines.** Magazines shall not be provided with either heat or light, except upon the approval of the enforcing agency having jurisdiction. Electrical installation, when permitted, shall be in accordance with the California Electrical Code for Type II, Division I locations.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.8)*

**412A.8-434.8 Mixing Room Blasting Agents.** All electrical switches, controls, motors and lights, if located in the mixing room, shall be installed in accordance with the California Electrical Code for Type II, Division I locations.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.9)*

**412A.9 434.9 Storage of Special Effects Materials.** The storage of not more than 750 pounds (340 kg) of special effects materials shall be in a building or a room conforming to the requirements of Group H, Division I Occupancies as defined in this part. In addition, the following shall apply to every special effects materials storage building or room:

1. The building shall be sprinklered as required in Chapter 9.
2. It shall be deemed that the storage of special effects materials creates an atmosphere of flammable dust.
3. Two or more permanent openings having an area of not less than 100 square inches (64 500 mm<sup>2</sup>) shall be located in the exterior wall to provide natural ventilation. These openings shall be protected by screens or louvers covered with 1/4-inch (6.4 mm) wire mesh screen.
4. Walls, floor ceiling, shelves and benches shall have a smooth nonmetallic surface which can be easily cleaned with a minimum of brushing or scrubbing.
5. Each entrance door shall be posted on the outside with signs stating, .Authorized Personnel Only. and .No Smoking..
6. Assembling and manufacturing are prohibited in special effects storage rooms or buildings.
7. The room shall be located above grade in a one-story building or on the top floor of a multistory building or may be a separate building.
8. The room or building shall have a minimum floor area of 80 square feet (7.4 m<sup>2</sup>) with no dimension less than 8 feet (2438mm).
9. Electric wiring, lighting and heating shall be of a type approved for use in hazardous locations.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.10)*

**412A.10-434.10 Mixing Room or Building.** Buildings or rooms in which more than 50 pounds (22.7 kg) of special effects materials are present at any time shall be constructed with at least one wall of explosion-relief type. The relief wall should be placed so as to be of least hazard to persons in adjacent buildings.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.10.1)*

**412A.10.1 434.10.1 Explosive venting** When explosive venting is required, the venting area will be calculated on 1 square foot (0.0929 m<sup>2</sup>) for each 35 cubic feet (0.99 m<sup>3</sup>) of building or roof area.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

*(Relocated from 2001 CBC 412A.10.2)*

**412A.10.2 434.10.2 Egress** All rooms or buildings shall have adequate aisle space and at least two exits separated by a distance equal to at least one-fifth the perimeter of the room. Openings in fire walls shall be equipped with approved, self-closing fire doors. All exit doors shall open outward and be equipped with approved panic hardware.

**EXCEPTION:** Cubicles 100 square feet (9.3 m<sup>2</sup>) or less and occupied by not more than two persons working within 12 feet (3658 mm) of an unobstructed passageway may have one exit.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.3)

**412A.10.3 434.10.3 Room finishes.** Floors, walls, interior surfaces and equipment shall be of a finish and color that will indicate the presence of dust and spilled material. They shall be smooth finished for easy cleaning.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.4)

**412A.10.4 434.10.4 HVAC.** Heating and cooling shall be by the indirect method using water, steam, electric heaters or other indirect methods.

**NOTE:** Floor registers shall not be permitted.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.5)

**412A.10.5 434.10.5 Electrical.** All electrical wiring and equipment shall be acceptable for the hazard involved and installed in accordance with Hazardous Locations, California Electrical Code.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.6)

**412A.10.6 434.10.6 Grounding.** Effective bonding and grounding means shall be provided to prevent accumulation of static charges where static charges are a hazard, as set forth in the California Electrical Code.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.7)

**412A.10.7 434.10.7 Pressure relief valves.** Hydraulic or air presses and hand jacks shall be provided with pressure-relief valves so arranged and set that the material being processed will not be subjected to pressure likely to cause it to explode. Dies and plugged press equipment shall not be cleared by striking blows that may detonate or start the material burning.

Authority: Health and Safety Code Section 12081  
References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.8)

**412A.10.8 434.10.8 Dust control.** Dust from special effects materials shall not be exhausted to the atmosphere. Where vacuum dust collections systems are used, they shall comply with the following requirements:

1. Adequate filters must be installed between the source vacuum and the point of pickup to prevent explosive special effects materials from entering the vacuum pump or exhauster.

2. The dust-collection system shall be designed to prevent pinch points threaded fittings exposed to the hazardous dust and sharp turns, dead ends, pockets, etc., in which special effects materials may lodge and accumulate outside the collecting chamber.
3. The entire vacuum collection system shall be made electrically continuous and be grounded to a maximum resistance of 5 ohms.
4. Chambers in which the dusts are collected shall not be located in the operating area unless adequate shields for the maximum quantity of material in the collector are furnished for personnel protection.
5. No more than two rooms may be serviced by a common connection to a vacuum collection chamber. Where interconnections are used, means should be employed to prevent propagation of an incident via the collection piping.
6. When collecting the more sensitive special effects materials, such as black powder, lead azide, etc., a wet collector which moistens the dust close to the point of intake and maintains the dust wet until removed for disposal shall be used. Wetting agents shall be compatible with the explosives.
7. Dusts shall be removed from the collection chamber as often as necessary to prevent overloading. The entire system shall be cleaned at a frequency that will eliminate hazardous concentrations of dusts in pipes, tubing and/or ducts.

Authority: Health and Safety Code Section 12081  
 References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.9)

**412A.10.9 434.10.9 Fans** Squirrel cage blowers should not be used for exhausting hazardous fumes, vapors or gases. Only nonferrous fan blades are permitted for fans located within the ductwork and through which hazardous materials are exhausted. Motors shall be located outside the duct.

Authority: Health and Safety Code Section 12081  
 References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.10)

**412A.10.10 434.10.10 Work stations** Work stations for small amounts of special effects materials [less than 1 pound (0.454 kg)] shall be separated by distance, barrier or other means, so fire in one station will not ignite material in the next work station. When necessary, each operator shall be protected by a personnel shield located between the operator and the material being processed. This shield and its support shall be a test design to withstand a blast from the maximum amount of special effects materials allowed behind it.

Authority: Health and Safety Code Section 12081  
 References: Health and Safety Code Section 12081

(Relocated from 2001 CBC 412A.10.11)

**412A.10.11 434.10.11 Shielding** When shields or structures are needed to protect personnel, the following requirement shall be followed when specific weights of special effects materials in the amount of 1 pound (0.454 kg) or more are involved:

**Weight of Explosive**

**Structure of Shield Wall**

1-15 pounds  
 (0.454-6.8 kg)

Shield wall constructed of concrete not less than 12 inches (305 mm) thick which is reinforced near both sides by rods not less than 1/2 inch (12.7 mm) in diameter located on maximum centers of 12 inches (305 mm) both horizontally and vertically. The rods must be staggered on opposite faces.

More than 15 pounds  
 (6.8 kg)

The shield wall for the protection of workers must be designed in such a manner to protect against the efforts of not less than 25 percent overload above the expected maximum charge to be processed.

- NOTES:** 1. One inch (25 mm) of mild steel is equivalent to 1 foot (305 mm) of reinforced concrete.  
2. Explosives shall be located not less than 36 inches (914 mm) from the wall and 24 inches (610 mm) above the floor.

(Relocated from 2001 CBC 412A.10.12)

**412A.10.12** If this personnel protection wall for the required operation involving large quantities of special effects materials becomes so large that it is impractical, the operator must perform the operations by remote control or be protected by a suitably constructed shelter designed with a safety factor of not less than 4 to withstand the overpressure from the maximum amount of explosives in process.

Authority: Health and Safety Code Section 12081

References: Health and Safety Code Section 12081

### **SECTION 436** **WINERY CAVES**

**436.1 Scope.** The use of subterranean space for winery facilities in natural or manmade caves shall be in accordance with this Section. Winery Caves having a floor level used for human occupancy more than 30 feet (9144 mm) below the lowest level of exit discharge shall comply with the provisions of Section 405.

#### **436.2 Definitions**

**436.3 General.** For definitions of ASSEMBLY, FIRE APPLIANCE and NONCOMBUSTIBLE, see Chapter 2.

**436.4 Limited Application.** For the purpose of Section 436, certain terms are defined as follows:

**TYPE 1 WINERY CAVES** are natural or manmade caves used solely for storage and/or processing of wine at a winery facility. Type 1 winery caves are not accessible to the public.

**TYPE 2 WINERY CAVES** are natural or manmade caves used for the storage and/or processing of wine at a winery facility. Type 2 winery caves are accessible to the public on guided tours only.

**TYPE 3 WINERY CAVES** are natural or manmade caves used for the storage and/or processing of wine at a winery facility. Type 3 winery caves are accessible to the public on guided tours and contain assembly use areas.

**436.5 Permits.** For permits to operate Type 2 and 3 winery caves, see Appendix Chapter 1, Section 105.

**436.6 Fire Apparatus Access Roads** Fire apparatus access roads shall be constructed and maintained in accordance with the California Fire Code, Section 503.

#### **436.7 Construction Requirements**

**436.7.1 Allowable Area.** The area of winery caves shall not be limited if constructed entirely of noncombustible materials.

Winery caves constructed with combustible materials shall be limited in area so that no point is more than 150 feet (45 720 mm) from an exit.

**436.7.2 Interior Construction.** The walls and ceilings of winery caves shall not contain hidden or concealed spaces.

#### **436.8 General Requirements.**

**436.8.1 Public Tours.** Tours for the public shall be continuously guided by staff knowledgeable in the location of exits and the use of emergency notification devices.

**436.8.2 Standby Personnel.** Per the California Fire Code, Section 2404.20, when, in the opinion of the Fire Chief, it is essential for public safety, the owner, agent or lessee shall employ one or more qualified persons, as required and

approved by the chief, to be on duty at such place. Such individuals shall be in uniform or otherwise easily identifiable.

Standby personnel shall be subject to the Fire Chief's orders at all times when so employed and shall remain on duty during the times such places are open to the public or when such activity is being conducted.

Before the start of any activity requiring standby personnel, such individuals shall:

1. Inspect the required fire appliances to ensure they are in the proper place and in good working order.
2. Inspect all exits to verify accessibility and proper operation.

While on duty, such individuals shall not be required or permitted to perform any duties other than those specified by the Fire chief.

**436.8.3 Open-Flame Devices.** The use of candles and other open-flame devices shall be in accordance with California Fire Code Section 308.3.5.

#### **436.9 Portable Fire Extinguishers and Other Fire Appliances**

Portable fire extinguishers shall be located to be readily accessible. Its type, location and spacing throughout the facility shall be in accordance with the provisions of Title 19, Chapter 3 and California Fire Code Section 906.1. Other fire appliances shall be maintained at the site as required by the chief.

#### **436.10 Fire Alarm Systems**

An approved manual fire alarm system conforming with the provisions of the California Fire Code, Section 907.2.1 shall be provided in all Type 3 winery caves.

#### **436.11 Exits**

**436.11.1 Distribution.** Exits shall be located remotely from each other and arranged to minimize any possibility that more than one may be blocked off by any one fire or other emergency condition.

**436.11.2 Number.** Winery caves shall be provided with a minimum of two exits.

Assembly areas of Type 3 winery caves shall be provided with exits as required by the California Building Code for Group A Occupancies.

#### **436.12 Exit Illumination**

**436.12.1 General.** Exits shall be illuminated to a minimum intensity of not less than 1 foot-candle (10.76 lx) at floor level whenever the winery cave is occupied. Fixtures providing exit illumination shall be supplied from a dedicated circuit or source of power used only for exit illumination.

**436.12.2 Separate Sources of Power.** The power supply for exit illumination may be provided by the premises' wiring system. In the event of its failure, illumination shall be automatically provided from an emergency system in Types 2 and 3 winery caves. Emergency systems shall be supplied from storage batteries or an on-site generator set, and the system shall be installed in accordance with the requirements of the California Electrical Code.

#### **436.13 Exit Signs**

Exit signs shall be installed at required exits and where otherwise necessary to clearly indicate the exits from assembly areas in Type 3 winery caves.

#### **436.14 Maximum Occupant Load.**

Occupant load requirements in the assembly areas of Type 3 winery caves shall be in accordance with Section 1004.

#### **436.15 Seating Arrangements**

Seating arrangements in the assembly areas of Type 3 winery caves shall be in accordance with California Fire Code, Section 1024.9.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**SECTION 439**  
**PUBLIC LIBRARIES.**

Public libraries funded from the California Library Construction and Renovation Act of 1988.

**439.1 Automatic Sprinkler System.** Automatic sprinkler systems shall be installed in:

1. New facilities, including additions:

2. Existing facilities to which a project adds the lesser of 5,000 square feet (465m<sup>2</sup>) or 10 percent of the size of the existing facility, if the existing facility does not already have an automatic sprinkler system.

**439.2. System Monitoring Requirement.** All fire protection systems shall be monitored by a fire alarm supervising station in accordance with the NFPA 72.

**439.3 Book Return Slots.** Any interior book return with a slot piercing the exterior wall shall have a separate sprinkler head and be enclosed in fire-rated construction.

**439.4 Requirements.** For public libraries constructed with funds awarded under the California Reading and Literacy Improvement and Public Library Construction and Renovation Bond Act of 2000:

1. All libraries funded for new construction, including additions, shall have automatic sprinkler systems installed.

2. Where an automatic sprinkler system is not installed in the existing facility, grant recipients shall be required to install an automatic sprinkler system throughout the facility.

3. The grant recipient may choose, on approval by the local fire authority, from wet-pipe, dry-pipe or pre-action systems, utilizing listed standard, early suppression fast response (ESFR), or on/off type sprinkler heads.

4. Book return rooms with slots in exterior walls shall have an automatic sprinkler head and be of approved fire-resistive construction. Book return slots and book drops shall have an additional automatic sprinkler head when shielded from the room sprinkler head.

5. When approved by the fire code official, other types of approved automatic extinguishing systems may be utilized as an alternate to sprinklers in the following areas: rare book rooms, central computer rooms and telecommunication rooms.

6. Automatic sprinkler system drawings shall use the furniture plan as a background for coordination with furniture and bookstack location and height. An approved audible sprinkler flow alarm to alert the occupants shall be provided in the interior of the building in a normally occupied location.

Authority: Health and Safety Code Sections 13108, 13113, 13143, 13210

References: Health and Safety Code Sections 13143

**SECTION 431A [FOR SFM] 440 REQUIREMENTS FOR GROUP C OCCUPANCIES**

(Relocated from 2001 CBC 431A.1)

**431A.1 440.1 Group C Occupancies Defined.**

(Relocated from 2001 CBC 431A.1.1)

**431A.1.1 440.1.1 Organized Camps.** For the purposes of these regulations, Group C Occupancies shall mean "organized camps" as defined in Section 18897, Health and Safety Code.

(Relocated from 2001 CBC 431A.1.1.1 and 431A.1.1.2)

**431A.1.1.1 440.1.1.1 Description.** An organized camp is a site with programs and facilities established for the primary purpose of providing an outdoor group living experience with social, spiritual, educational or recreational objectives, for five days or more during one or more seasons of the year.

**431A.1.1.2** The term “organized camp” does not include a motel, tourist camp, trailer park, resort, hunting camp, auto court, labor camp, penal or correctional camp, child-care institution or home-finding agency nor does it include any charitable or recreational organization which complies with the rules and regulations for recreational trailer parks provided for by Section 18301 (b), Health and Safety Code.

(Relocated from 2001 CBC 431A.1.2)

**431A.1.2 440.1.2 Tents and tent structures.** For the purpose of this chapter, a tent or tent structure is defined as any shelter of which 25 per-cent or more of the walls or roof, or both, are constructed of, or covered or protected by, a canvas or any other fabric material.

(Relocated from 2001 CBC 431A.2)

**431A.2 440.2 Purpose and Intent.** The provisions of this section are established to provide fire and life safety in organized camps, but at the same time preserve the basic concept of outdoor living. It is the intent of this section that organized camps shall be considered as a separate and distinct occupancy.

(Relocated from 2001 CBC 431A.3)

**431A.3 440.3 Basic Building and Structures.**

(Relocated from 2001 CBC 431A.3.1)

**431A.3.1 440.3.1 Building Classification.** Every building or structure shall be classified into the occupancy group they most nearly resemble and be constructed in accordance with appropriate occupancy requirements specified in this part.

- Exceptions:**
1. Tents, tent structures, and buildings and structures that do not exceed 25 feet (7620 mm) in any lateral dimension and where such building or structure is not more than one story.
  2. For fire safety, buildings or structures on the premises of an organized camp which are used for sleeping purposes, regardless of their similarity to other occupancy groups, shall conform to the provisions of Sections ~~431A.4, 431A.5, 431A.6,~~ 440.4, 440.5, 440.6 and ~~431A.7~~ 440.7.
  3. For fire safety, buildings and structures which are not used for sleeping purposes shall conform to the provisions of Section ~~431A.7~~ 440.7, which shall supersede any similar provisions contained in this part.

(Relocated from 2001 CBC 431A.3.2)

**431A.3.2 440.3.2 Occupant load.** The living shelter, whether a building, structure, tent and tent structure, or cabin, shall provide a minimum of 30 square feet (2.8 m<sup>2</sup>) of superficial floor area per person for single-tier bed units, and 20 square feet (1.9 m<sup>2</sup>) of superficial floor area per person for two-tier bed units. More than two tiers per bed unit are prohibited. There shall be at least 3 feet (914 mm) of lateral distance between beds.

**Exception:** Intermittent short-term organized camps are not required to provide shelter facilities but, if provided, they shall comply with this section.

(Relocated from 2001 CBC 431A.4)

**431A.4 440.4 General.**

(Relocated from 2001 CBC 431A.4.1)

**431A.4.1 440.4.1 Buildings intended for sleeping.** Buildings and structures used or intended for sleeping purposes which do not exceed any one of the limitations set forth below shall conform to the provisions of Sections ~~431A.5~~ 440.5 and ~~431A.7~~ 440.7.

1. One story in height.
2. Twenty-five feet (7620 mm) in any lateral dimension.

**Exception:** This provision shall not apply to buildings or structures conforming to construction provisions of this section in effect prior to January 1, 1985.

3. Maximum housing of 12 persons.

(Relocated from 2001 CBC 431A.4.2)

**431A.4.2 440.4.2 Limitations.** Buildings and structures used or intended for sleeping purposes, including those so used in whole or in part by staff personnel, and which exceed any one of the limitations set forth in Section 431A.4.1 440.4.1, shall conform to the provisions of Sections ~~431A.5 440.5~~ and ~~431A.7 440.7~~.

**Exception:** Buildings or structures used exclusively for living and sleeping purposes by resident custodial or caretaker personnel only may be constructed in accordance with the provisions of these regulations for a Group R, ~~Division 3~~ Occupancy.

(Relocated from 2001 CBC 431A.5)

**431A.5 440.5 Special Buildings, Tents and Tent Structures.**

(Relocated from 2001 CBC 431A.5.1)

**431A.5.1 440.5.1 Special buildings.** In addition to the provisions of Section ~~431A.7 440.7~~, special buildings conforming to the limitations specified in Section ~~431A.4.1 440.4.1~~ shall conform to the following:

1. The flame-spread end-point rating of all interior finish materials shall not exceed 200 ~~as determined by Standard Test Method No. 723, Underwriters Laboratories.~~
2. Every room or area housing more than eight persons shall be provided with not less than two approved exits, each of which shall be direct to the exterior and shall not be less than 32 inches (813mm) in clear width and 6 feet 8 inches (2032 mm) in height. Rooms or areas housing eight or less persons shall be provided with at least one such exit direct to the exterior.
3. Every exit door shall be openable from the inside without the use of any key, special knowledge or effort.
4. Exit doors need not be hung to swing in the direction of exit travel. Where exit doors are hung to swing in the direction of exit travel, a landing conforming to the provisions of Section ~~1003.3.1.7-1008.1.5~~ shall be provided.
5. When the distance (measured vertically) between the ground level and the floor level exceeds 8 inches (203 mm), a stairway from each exit shall be provided. Steps shall have a rise of not more than 8 inches (203 mm) and a run of not less than 9 inches (229 mm). Such stairway shall be at least as wide as the door it serves.

**Exception:** In lieu of a stairway, a ramp having a slope of not more than 1 foot (305 mm) of rise for each 8 feet (2438 mm) of run may be provided.

6. When the floor level at any door opening of any building or structure is more than 30 inches (762 mm) above the adjacent ground level, handrails or guardrails shall be provided on the landing, balcony or porch, and on every stairway or ramp to ground level.
7. Buildings and structures or groups of buildings and structures shall be separated from each other by not less than 10 feet (3048 mm). This section shall not apply to existing buildings and structures of existing Group C Occupancies.

(Relocated from 2001 CBC 431A.5.2)

**431A.5.2 440.5.2 Tents and tent structures.** In addition to the provisions of Section ~~431A.7 440.7~~, tents and tent structures, or groups thereof, shall conform to the provisions of Section ~~431A.5 440.5~~, except as follows:

1. Regardless of any other provisions of this section, heating of tents and tent structures shall be prohibited unless written permission is obtained from the Fire Chief.
2. All canvas or other fabric material shall be treated and maintained in a flame-retardant condition.

**Exceptions:** 1. Tents in existence prior to January 1, 1979, provided the following conditions are met:

- 1.1 Tents shall not exceed 80 square feet (7.4 m<sup>2</sup>) in area.
  - 1.2 No electrical devices, except flashlights, are installed or used in the tents.
  - 1.3 Tents are not located closer than 30 feet (9144 mm) to any open fire.
  - 1.4 Smoking is prohibited in the tents.
  - 1.5 All other applicable provisions of this article are met.
2. Canvas or materials used exclusively to protect windows and similar openings in walls.

3. Canvas or materials used as a windbreak enclosure of not more than three sides and open to the sky.

**Note:** It is not the intent of Section ~~431A.5.2~~ 440.5.2 that strict adherence to the width and height requirements of exit openings be enforced for exits from tents.

(Relocated from 2001 CBC 431A.6)

**~~431A.6~~ 440.6 Building and Structures for Sleeping.** Buildings and structures, or portions thereof, used or intended for sleeping purposes and which exceed the height, area or capacity limitations specified in Section ~~431A.4.1~~ 440.4.1 shall conform to the provisions of this section.

(Relocated from 2001 CBC 431A.6.1)

**~~431A.6.1~~ 440.6.1 Area, height and type of construction.** Buildings and structures, or portions thereof, shall not exceed the limits of area, height and type of construction specified in these regulations for a Group I, ~~Division 2~~ 1 Occupancy. Such buildings and structures shall not be of less than one-hour fire-resistive construction throughout.

(Relocated from 2001 CBC 431A.6.2)

**~~431A.6.2~~ 440.6.2 Location on Property.** The fire-resistive protection of exterior walls and openings, as determined by location on property, shall be in accordance with the provisions of these regulations for a Group I, ~~Division 2~~ 1 Occupancy.

(Relocated from 2001 CBC 431A.6.3)

**~~431A.6.3~~ 440.6.3 Exits.** Stairs, exits and smoke-proof enclosures shall be provided in accordance with the provisions of Chapter 10.

(Relocated from 2001 CBC 431A.6.4)

**~~431A.6.4~~ 440.6.4 Enclosure of vertical openings.** Exits shall be enclosed as specified in Chapter 10. Elevator shafts, vent shafts and other vertical openings shall be enclosed and enclosures shall be as set forth in Chapter 7.

(Relocated from 2001 CBC 431A.6.5)

**440.6.5 Fire-extinguishing systems.** Automatic fire-extinguishing systems, standpipes, and basement pipe inlets shall be installed when and as specified in ~~Section 904~~ Chapter 9 for buildings, based on the occupancy they most nearly resemble.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 431A.6.6)

**~~431A.6.6~~ 440.6.6 Automatic fire alarm system.** Every building and structure used or intended for sleeping purposes shall be provided with an automatic smoke detection system. Such systems shall conform to the Fire Code and shall be state fire marshal approved and listed.

**EXCEPTION:** Buildings and structures in existence in operation prior to January 1, 1985.

See Section 907.

(Relocated from 2001 CBC 431A.7)

**~~431A.7~~ 440.7 Special Requirements.** The provisions of this section shall apply to the premises and to all buildings and structures of all organized camps.

(Relocated from 2001 CBC 431A.7.1)

**~~431A.7.1~~ 440.7.1 Electrical.** The installation of all electrical wiring shall conform to the applicable provisions of the California Electrical Code.

(Relocated from 2001 CBC 431A.7.2)

**431A.7.2 440.7.2 Heating equipment.** Heating equipment, and the installation thereof, shall conform to the provisions of ~~3402~~ and the California Mechanical Code.

(Relocated from 2001 CBC 431A.7.3)

**431A.7.3 440.7.3 Motion picture booths.** Motion picture machine booths shall conform to the requirements of Section ~~406~~ 409.

(Relocated from 2001 CBC 431A.7.4)

**431A.7.4 440.7.4 Interior finish.** Interior finish shall conform to the requirements of Chapter 8, except as permitted in Section ~~431A.5.1~~ 440.5.1, Item 1.

(Relocated from 2001 CBC 431A.7.5)

**431A.7.5 440.7.5 Heater room openings.** All exterior openings in rooms containing central heating equipment, low-pressure boilers or water-heating boilers used as part of the heating system, if located below openings in another story, or if less than 10 feet (3048 mm) from other doors or windows of the same building, shall be protected by a fire assembly having a three-fourths-hour fire-resistive rating. Such fire assemblies shall be fixed, automatic or self-closing.

**Exception:** The requirement for three-fourths-hour fire assembly protection of openings may be deleted if the entire room is protected by an automatic sprinkler system conforming to the provisions of Section ~~904~~ 903.

(Relocated from 2001 CBC 431A.7.6)

**431A.7.6 440.7.6 Heating rooms.** Every room containing central-heating equipment, low-pressure boiler or water-heating boiler used as part of the heating system shall be separated from the rest of the building by a one-hour fire-resistive ~~occupancy separation~~ fire barrier with all openings protected as set forth in ~~Table 5-A~~ Section 706.7.

**Exceptions:** 1. Boilers or central heating plants where the largest piece of fuel equipment does not exceed ~~460,000~~ 400,000 Btu per hour (135 kW) input.

2. When any such opening is protected by a pair of fire doors, the inactive leaf shall be normally secured in the closed position and shall be openable only by use of a tool. An astragal shall be provided and the active leaf shall be self-closing.

(Relocated from 2001 CBC 431A.7.7)

**431A.7.7 440.7.7 Exits.** For purposes of determining occupant load for exit requirements, see Section ~~431A.3-2~~ 440.3.2.

(Relocated from 2001 CBC 431A.7.8)

**431A.7.8 440.7.8 Liquefied petroleum gas.** The construction and installation of all tanks, cylinders, equipment and systems used or intended for use in conjunction with any liquefied petroleum gas shall conform to the provisions of the California Mechanical Code and the California Fire Code.

(Relocated from 2001 CBC 431A.7.9)

**431A.7.9 440.7.9 Air-conditioning and ventilation systems.** Heating units used as an integral part of an air-conditioning and ventilation system shall be installed in accordance with Sections ~~431A.7.2, 431A.7.3~~ 440.7.2, 440.7.3 and ~~431A.7.6~~ 440.7.6.

(Relocated from 2001 CBC 431A.8)

**431A.8 440.8 Camp Fire Alarm.** Every organized camp shall provide and maintain a device or devices suitable for sounding a fire alarm. Such device or devices may be of any type acceptable to the enforcing agency provided they are distinctive in tone from all other signaling devices or systems and shall be audible throughout the camp premises.

When an automatic fire alarm system is provided, as required by Section 431A.6.6 440.6.6, all signaling devices required by this section shall be of the same type as that used in the automatic system.

Authority: Health and Safety Code Sections 18897.3

References: Health and Safety Code Sections 13143

## **SECTION 442** **GROUP E**

**442.1 Location on Property.** *All buildings housing Group E Occupancies shall front directly on a public street or an exit discharge not less than 20 feet (6096 mm) in width. The exit discharge to the public street shall be a minimum 20-foot-wide (6096 mm) right-of-way, unobstructed and maintained only as access to the public street. At least one required exit shall be located on the public street or on the exit discharge.*

**442.2 Separate means of egress systems required.** *Every room with an occupant load of 300 or more shall have one of its exits or exit-access doorways lead directly into a separate means of egress system that consists of not less than two paths of exit travel which are separated in such a manner to provide an atmospheric separation that precludes contamination of both paths of exit travel by the same fire. Not more than two required exits or exit-access doorways shall enter into the same means of egress system.*

**442.3 Fences and Gates.** *School grounds may be fenced and gates therein may be equipped with locks, provided that safe dispersal areas based on 3 square feet (0.28 m<sup>2</sup>) per occupant are located between the school and the fence. Such required safe dispersal areas shall not be located less than 50 feet (15240 mm) from school buildings.*

*Every public and private school shall conform with Section 32020 of the Education Code which states:*

*The governing board of every public school district, and the governing authority of every private school, which maintains any building used for the instruction or housing of school pupils on land entirely enclosed (except for building walls) by fences or walls, shall, through cooperation with the local law enforcement and fire-protection agencies having jurisdiction of the area, make provision for the erection of gates in such fences or walls. The gates shall be of sufficient size to permit the entrance of the ambulances, police equipment and fire-fighting apparatus used by the law enforcement and fire-protection agencies. There shall be no less than one such access gate and there shall be as many such gates as needed to assure access to all major buildings and ground areas. If such gates are to be equipped with locks, the locking devices shall be designed to permit ready entrance by the use of the chain or bolt-cutting devices with which the local law enforcement and fire-protection agencies may be equipped.*

**442.4 Special provisions.** *Rooms in Group E daycare, Group I-4 daycare, kindergarten, first-, or second-grade pupils shall not be located above or below the first story.*

**Exceptions:** *1 Basements or stories having floor levels located within 4 feet (1219 mm), measured vertically, from adjacent ground level at the level of exit discharge, provided the basement or story has exterior exit doors at that level.*

*2. In buildings equipped with an automatic sprinkler system throughout, rooms used for kindergarten, first- and second-grade children or for day-care purposes may be located on the second story, provided there are at least two exterior exit doors for the exclusive use of such occupants.*

*3. Group E daycare and Group I-4 daycare facilities may be located above the first story in buildings of Type I-A, Type 1-B, Type II-A and III-A construction, subject to the limitation of Section 503 when:*

*3.1 Facilities with children under the age of seven or containing more than 12 children per story shall not be located above the fourth floor; and*

*3.2 The entire story in which the daycare facility is located is equipped with an approved manual fire alarm and smoke-detection system. Actuation of an initiating device shall sound an audible alarm throughout the entire story.*

*When a building fire alarm system is required by other provisions of this code, the alarm system shall be interconnected and sound the daycare fire alarm system and*

*3.3 The daycare facility, if more than 1,000 square feet (92.9 m<sup>2</sup>) in area, is divided into at least two compartments of approximately the same size by a smoke barrier in accordance with Section 709. In addition to the requirements of Section 508, occupancy separations between daycare and other occupancies shall be constructed as smoke barriers. Door openings in the smoke barrier shall be tightfitting, with gaskets installed as required by Section 7.15.4.3 and shall be automatic closing by*

actuation of the fire sprinklers, fire alarm or smoke detection system.

3.4 Each compartment formed by the smoke barrier has not less than two exits or exit-access doors, one of which is permitted to pass through the adjoining compartment, and

3.5 Where two or more means of exits or exit access are required at leased one shall not share a common path of travel.

3.6 The building is equipped with an automatic sprinkler system throughout.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

#### **442.5.1**

Class I, II or III-A flammable liquids shall not be placed, stored or used in Group E Occupancies, except in approved quantities as necessary in laboratories and classrooms and for operation and maintenance as set fort in the Fire Code.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

### **SECTION 443** **GROUP L**

**443.1 Group L Laboratories.** This occupancy shall include buildings and structures or portions thereof, which are part of a Post Secondary Education Institution, used as laboratories for scientific experimentation or research having quantities of materials not in excess of those listed in Tables 307.1(1) and 307.1.(2) except as modified in this Section and not classified as Group B in conjunction with a Post Secondary Education Institution. This occupancy shall be designed and constructed in accordance with the requirements for a Group B Occupancy except as specified in this Section.

#### **443.2 Requirements for Group L**

**443.2.1 Multiple Hazards.** When a hazardous material has multiple hazards, all hazards shall be addressed and controlled in accordance with the provisions of this code.

**443.2.2 Requirement for Report.** The enforcing agency may require a technical opinion and report to identify and develop methods of protection from the hazards presented by the hazardous materials. A qualified person, firm, or corporation, approved by the enforcing agency, shall prepare the opinion and report, and shall be provided without charge to the enforcing agency. The opinion and report may include, but is not limited to, the preparation of a hazardous material management plan (HMMP); chemical analysis; recommendations for methods of isolation, separation, containment or protection of hazardous materials or processes, including appropriate engineering controls to be applied; the extent of changes in the hazardous behavior to be anticipated under conditions of exposure to fire or from hazard control procedures; and the limitations or conditions of use necessary to achieve and maintain control of the hazardous materials or operations. The report shall be entered into the files of the code enforcement agencies. Proprietary and trade secret information shall be protected under the laws of the state or jurisdiction having authority.

**443.2.3 Laboratory Suite.** For purposes of this Section the definition of a "laboratory suite" shall be the same as a "control area" as defined by Section 307.2.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**443.2.4 Emergency Power.** An emergency power system shall be provided. The emergency power system shall be designed and installed in accordance with the Electrical Code to automatically supply power to all required electrical equipment when the normal electrical supply system is interrupted. The exhaust system may be designed to operate

at not less than one half the normal fan speed on the emergency power system when it is demonstrated that the level of exhaust will maintain a safe atmosphere.

**(Relocated form 397.2.12, 2001 H)**

**307.2.12 [For SFM] Special Provisions for Group H, Division 8 Occupancies 443.2.5 Construction Type.**  
~~Division 8 Occupancies shall be in buildings of at least Type II, One-hour construction. Division 8 Occupancies three stories or less shall be at least Type V, One-hour.~~

Buildings containing Group L Occupancies shall be of Type I or Type IIA construction.

**Exception: Buildings of less than three stories shall be a minimum of Type VA construction**

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**443.2.6 Floor Construction.** *Liquid-tight floors, which comply with ASTM D 2843 (OI greater than 25) and ASTM E 84 (Class 1), shall be required. Pipe and similar penetrations shall maintain the fire-resistive and liquid-tight characteristics of the floor a minimum of 4 inches (102 mm) at the bottom of walls from the floor level.*

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

**443.2.7 Occupancy Separation.** *The interstitial space above a laboratory shall be separated from a corridor by one-hour construction. Laboratories-shops and similar areas shall in Group H, Division 8 Occupancies shall not require an occupancy separation from each other when the use of the area is determined to be compatible. Classrooms and offices directly related to the use shall not require an occupancy separation.*

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

**(Relocated from 307.2.12, 2001 CBC)**

**443.2.8 Fume Hood Exhaust Ducts.** *Fume hood exhaust ducts exposed to fire-resistive exit corridors shall be separated from the corridor by one-hour fire-resistive construction.*

**443.2.9 Emergency spill response.** *An area for spill emergency-response equipment shall be located on each floor and shall be a minimum of 50 square feet (4.6 m<sup>2</sup>) with an increase in the size at the rate of 5 square feet (0.46 m<sup>2</sup>) per 1,000 square feet (93 m<sup>2</sup>) in excess of 10,000 square feet (929 m<sup>2</sup>)*

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

### **443.3 Hazardous Material Restrictions**

**443.3.1 Hazardous Material Restrictions - Floors 1, 2, 3, and 1<sup>st</sup> Basement Level.** *Up through the third floor and down through the first basement level, the maximum quantity of hazardous materials per laboratory suite shall comply with Tables 307.1 (1) and 307.1 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.*

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

**443.3.2 Hazardous Material Restrictions - Floors 4, 5, 6, and 2<sup>nd</sup> and 3<sup>rd</sup> Basement Levels.** *For the fourth, fifth, sixth floors, and the second and third basement levels, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 75% of those allowed by Tables 307.1 (1) and 307.1 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.*

Authority: Health and Safety Code Section 13143  
References: Health and Safety Code Section 13143

**443.3.3 Hazardous Material Restrictions - Floors 7 and Above, and Below 3<sup>rd</sup> Basement Level.** *For the seventh floor and above, and below the third basement floor level, the maximum quantity of hazardous materials per laboratory suite shall be reduced to 50% of those allowed by Tables 307.1 (1) and 307.1 (2). Quantities of materials shall not be permitted to be increased with an approved automatic sprinkler system.*

Authority: Health and Safety Code Section 13143  
References: Health and Safety Code Section 13143

#### **443.4 Ventilation**

**307.5.5 [For SFM] 443.4.1 General Ventilation in Group H, Division 8 Occupancies.** *In all Group H, Division 8 L Occupancies, exhaust streams when combined shall not create a physical hazard or react to degrade the containment material. The building official may require a technical report in accordance with Section 307.4-6 443.2. Fire and smoke dampers in fume hood exhaust ducts are prohibited.*

*Ducts from laboratory hoods and local exhaust systems shall be constructed entirely of noncombustible material.*

##### **Exceptions:**

1. Flexible ducts for special local exhausts used within a laboratory work ~~area~~ suite.
2. Combustible ducts with flame-spread index less than 75 located within a shaft of noncombustible construction where passing through areas other than the laboratory ~~unit~~ suite they serve and provided with internal fire sprinklers.
3. Combustible ducts or duct linings having a flame spread of 25 or less.

*Exhaust ducts from each laboratory ~~unit~~ suite shall be separately ducted to a point outside the building, to a mechanical space or to a shaft. Connection to a common duct may occur at those points. Exhaust ducts within the same laboratory suite may be combined within that laboratory ~~unit~~ suite.*

*Perchloric acid hoods and exhaust ducts shall be constructed of materials that are acid resistant, nonreactive, and impervious to perchloric acid. A water-spray system shall be provided for washing down the hood interior behind the baffle and the entire duct system. Ductwork shall provide a positive drainage slope back to the hood and shall consist of sealed sections. The hood baffle shall be removable for inspection.*

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**443.4.2 Ventilation Rates.** *Ventilation rates shall comply with the requirements of the Mechanical Code.*

#### **443.5 Special Hazards**

**307.8 [For SFM] 443.5.1 Special Hazards.** *Storage, handling and use of hazardous materials in Group H, Division 8 Occupancies L shall comply with the ~~International~~ California Fire Code.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

## **443.6 Means Of Egress**

**443.6.1 Access to Exits.** *Every portion of a Group L Occupancy having a floor area of 200 square feet or more shall have access to not less than two separate exits or exit-access doors.*

Relocated from 1007.4.2.1, 2001 CBC)

~~1007.4.2.1 [For SFM] 443.6.2 Travel within Rooms.~~ *Within a Group H, Division 8 Occupancies L Occupancy all portions of any room shall be within 75-100 feet (22-860 mm) of an exit or exit-access door from the room. Within Group H, Division 8 Occupancies The distance of travel to an exit, corridor or to an exit shall not exceed 100 feet (30 480 mm).*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**443.6.3 Door Swing.** *All exit and exit-access doors serving areas with hazardous materials shall swing in the direction of exit travel, regardless of the occupant load served.*

~~1007.4.5 [For SFM] 443.6.4 Panic Hardware.~~ *Exit and exit access doors from rooms in Group H, Division 8 Occupancies areas with hazardous materials shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.*

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

~~1007.4.7 [For SFM] 443.6.5 Horizontal Exits.~~ *Buildings containing Group H, Division 8 L Occupancies located four or more floors above the first floor shall have each floor of the building separated with at least one horizontal exit constructed as required for a two-hour fire-resistive occupancy separation fire barrier as defined in 1002 in Part 5. Each side of the horizontal exit shall be provided with a separate mechanical exhaust system without interconnection. No side shall be less than 30 percent of the total area for the floor. At least one elevator shall be provided to serve the floor on each side of the horizontal exit wall and shall comply with the provisions of Chapter 30.*

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

(relocated from CBC 1007.4.3)

**443.6.6 Corridor doors.** *Corridor doors shall be protected by a fire assembly having a fire-protection rating of not less than three-fourths-hour [For SFM] with smoke gasketing, shall not have more than 100 square inches (64 516 mm<sup>2</sup>) of wired glass set in steel frames and shall be maintained self-closing or shall be automatic closing.*

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**443.7 Automatic Fire Sprinkler Systems.** *See Section 903.2.16*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**443.8 Fire Alarm System.** *See Section 907.2.28*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**307.13.1 [For SFM] Additions, Alterations or Repairs 443.8.1 General.** Alterations, repairs, or additions may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this Section, provided the addition, alteration, or repair conforms to the requirements of this Section.

**443.8.2 Unsafe Condition.** Alterations, repairs, or additions shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, nor shall such alterations or additions cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an alteration or addition will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

**443.8.3 Changes in Use or Occupancy.** Any building so altered, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings. Any building plus new additions shall not exceed the height, number of stories and area permitted for new buildings.

**443.8.4 Buildings Not in Compliance with Code.** Alterations or additions shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such alteration or addition will result in the existing building or structure being no more hazardous, based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken.

**443.8.5 Maintenance of Structural and Fire Resistive Integrity** Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member of any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed.

**443.8.6 Continuation of Existing Use.** Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life.

**443.8.7 Automatic Fire Protection Systems.** In mixed occupancies, portions of floors or buildings not classified as Group L Occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m<sup>2</sup>).

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

## **SECTION 445** **LARGE FAMILY DAY CARE HOMES**

(Relocated from 2001 CBC 310.15)

**310.15 [For SFM] 445.1 Large Family Day-Care Homes.**

(Relocated from 2001 CBC 310.15.1)

**310.15.1 [For SFM] 445.2** For purposes of clarification, Health and Safety Code Section 1597.46 is repeated.

(a) A city, county, or city and county shall not prohibit large family day care homes on lots zoned for single-family dwellings, but shall do one of the following:

(1) Classify these homes as a permitted use of residential property for zoning purposes.

(2) Grant a nondiscretionary permit to use a lot zoned for a single-family dwelling to any large family day care home that complies with local ordinances prescribing reasonable standards, restrictions, and requirements concerning spacing and concentration, traffic control, parking, and noise control relating to such homes, and complies with subdivision (d) and any regulations adopted by the State Fire Marshal pursuant to that subdivision. Any noise standards shall be consistent with local noise ordinances implementing the noise element of the general plan and

shall take into consideration the noise level generated by children. The permit issued pursuant to this paragraph shall be granted by the zoning administrator, if any, or if there is no zoning administrator by the person or persons designated by the planning agency to grant such permits, upon the certification without a hearing.

(3) Require any large family day care home to apply for a permit to use a lot zoned for single-family dwellings. The zoning administrator, if any, or if there is no zoning administrator, the person or persons designated by the planning agency to handle the use permits shall review and decide the applications. The use permit shall be granted if the large family day care home complies with local ordinances, if any, prescribing reasonable standards, restrictions, and requirements concerning spacing and concentration, traffic control, parking, and noise control relating to such homes, and complies with subdivision (d) and any regulations adopted by the State Fire Marshal pursuant to that subdivision.

Any noise standards shall be consistent with local noise ordinances implementing the noise element of the general plan and shall take into consideration the noise levels generated by children.

The local government shall process any required permit as economically as possible, and fees charged for review shall not exceed the costs of the review and permit process. Not less than 10 days prior to the date on which the decision will be made on the application, the zoning administrator or person designated to handle such use permits shall give notice of the proposed use by mail or delivery to all owners shown on the last equalized assessment roll as owning real property within a 100 foot radius of the exterior boundaries of the proposed large family day care home. No hearing on the application for a permit issued pursuant to this paragraph shall be held before a decision is made unless a hearing is requested by the applicant or other affected person. The applicant or other affected person may appeal the decision. The appellant shall pay the cost, if any of the appeal.

(b) A large family day care home shall not be subject to the provisions of Division 13 (commencing with Section 21000) of the Public Resources Code.

(c) Use of a single-family dwelling for the purposes of a large family day care home shall not constitute a change of occupancy for purposes of Part 1.5 (commencing with Section 17910) of Division 13 (State Housing Law), or for purposes of local building and fire codes.

(d) Large family day care homes shall be considered as single-family residences for the purposes of the State Uniform Building Standards Code and local building and fire codes, except with respect to any additional standards specifically designed to promote the fire and life safety of the children in these homes adopted by the State Fire Marshal pursuant to this subdivision.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.2)

**310.15.2 [For SFM] 445.3 Smoke Alarms.** Large family day-care homes shall be equipped with State Fire Marshal approved and listed single station residential type smoke alarms. The number and placement of smoke alarms shall be determined by the enforcement authority.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.3)

**310.15.3 [For SFM] 445.4 Fire Extinguishers.** Large and small family day-care homes shall be equipped with a portable fire extinguisher having a minimum 2A10BC rating.

Authority: Health and Safety Code Sections 1597.46

References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.4)

**310.15.4 [For SFM] 445.5 Fire Alarm Devices.** Every large family day-care home shall be provided with at least one manual device at a location approved by the authority having jurisdiction. Such device shall actuate a fire alarm signal, which shall be audible throughout the facility at a minimum level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel or be electrically supervised or provided with emergency power. Such device or devices shall be attached to the structure and may be of any type acceptable to the enforcing agent, provided that such devices are distinctive in tone and are audible throughout the structure.

Authority: Health and Safety Code Sections 13143  
 References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.15.5)

**310.15.5 [For SFM] 445.6 Compliance** Every large family day-care home shall comply with the provisions for Group R, Division 3 Occupancies.

Enforcement of these provisions shall be in accordance with the Health and Safety Code Sections 13145 and 13146. No city, county, city and county, or district shall adopt or enforce any building ordinance or local rule or regulation relating to the subject of fire and life safety in large family day-care homes which is inconsistent with those standards adopted by the State Fire Marshal, except to the extent the building ordinance or local rule or regulation applies to single family residences in which day care is not provided.

Authority: Health and Safety Code Sections 1597.46, 13143  
 References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 310.12)

**310.12 [For SFM] 445.7 Special Hazards.** Every unenclosed gas-fired water heater or furnace which is within the area used for child care in a large family day-care home shall be protected in such a way as to prevent children from making contact with those appliances.

**Exception:** This does not apply to kitchen stoves or ovens.

Authority: Health and Safety Code Sections 1597.46  
 References: Health and Safety Code Sections 13143

## CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

(Note: Adopt entire chapter with amendments.)

**TABLE 503  
 ALLOWABLE HEIGHT AND BUILDING AREAS<sup>a</sup>**  
 Height limitations shown as stories and feet above grade plane.  
 Area limitations as determined by the definition of "Area, building," per story

		TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
GROUP	HGT(feet) HGT(S)	UL	160	65	55	65	55	65	50	40
A-1	S	UL	5	3	2	3	2	3	2	1
	A	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
A-2	S	UL	11	3	2	3	2	3	2	1

	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-3	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-4	S	UL	11	3	2	3	2	3	2	1
	A	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
A-5	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	S	UL	11	5	4	5	4	5	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
E	S	UL	5	3	2	3	2	3	1	1
	A	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9,500
F-1	S	UL	11	4	2	3	2	4	2	1
	A	UL	UL	25,000	15,500	19,000	12,000	33,500	14,000	8,500
F-2	S	UL	11	5	3	4	3	5	3	2
	A	UL	UL	37,500	23,000	28,500	18,000	50,500	21,000	13,000
H-1	S	1	1	1	1	1	1	1	1	NP
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	NP
H-2 <sup>d</sup>	S	UL	3	2	1	2	1	2	1	1
	A	21,000	16,500	11,000	7,000	9,500	7,000	10,500	7,500	3,000
H-3 <sup>d</sup>	S	UL	6	4	2	4	2	4	2	1
	A	UL	60,000	26,500	14,000	17,500	13,000	25,500	10,000	5,000
H-4	S	UL	7	5	3	5	3	5	3	2
	A	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
H-5	S	4	4	3	3	3	3	3	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
I-1	S	UL	9	4	3	4	3	4	3	2
	A	UL	55,000	19,000	10,000	16,500	10,000	18,000	10,500	4,500
I-2	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-3 <sup>e</sup>	S	UL	<del>4</del> 2	<del>2</del> NP	<del>1</del> NP	<del>2</del> NP	<del>1</del> NP	<del>2</del> NP	<del>2</del> NP	<del>1</del> NP
	A	UL	<del>UL 15,100</del>	<del>15,000</del> NP	<del>10,000</del> NP	<del>10,500</del> NP	<del>7,500</del> NP	<del>12,000</del> NP	<del>7,500</del> NP	<del>5,000</del> NP
I-4	S	UL	5	3	2	3	2	3	1	1
	A	UL	60,500	26,500	13,000	23,500	13,000	25,500	18,500	9,000
L	S	<u>10</u>	<u>3</u>	<u>3</u>	NP	<u>3</u>	NP	<u>3</u>	<u>3</u>	NP
	A	<u>UL</u>	<u>39,900</u>	<u>18,000</u>	NP	<u>18,000</u>	NP	<u>18,000</u>	<u>14,000</u>	NP
M	S	UL	11	4	4	4	4	4	3	1
	A	UL	UL	21,500	12,500	18,500	12,500	20,500	14,000	9,000
R-1	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
R-2	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
R-3	S	UL	11	4	4	4	4	4	3	3
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
R-4	S	UL	11	4	4	4	4	4	3	2
	A	UL	UL	24,000	16,000	24,000	16,000	20,500	12,000	7,000
S-1	S	UL	11	4	3	3	3	4	3	1
	A	UL	48,000	26,000	17,500	26,000	17,500	25,500	14,000	9,000
S-2 <sup>b, c</sup>	S	UL	11	5	4	4	4	5	4	2
	A	UL	79,000	39,000	26,000	39,000	26,000	38,500	21,000	13,500
U <sup>c</sup>	S	UL	5	4	2	3	2	4	2	1

	A	UL	35,500	19,000	8,500	14,000	8,500	18,000	9,000	5,500
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For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>.

UL = Unlimited, NP = Not permitted.

a. See the following sections for general exceptions to Table 503:

1. Section 504.2, Allowable height increase due to automatic sprinkler system installation.
2. Section 506.2, Allowable area increase due to street frontage.
3. Section 506.3, Allowable area increase due to automatic sprinkler system installation.
4. Section 507, Unlimited area buildings.

b. For open parking structures, see Section 406.3.

c. For private garages, see Section 406.1.

d. See Section 415.5 for limitations.

e. See Section 408.1.1

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**504.2 Automatic sprinkler system increase.** Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the value specified in Table 503 for maximum height is increased by 20 feet (6096 mm) and the maximum number of stories is increased by one. These increases are permitted in addition to the area increase in accordance with Sections 506.2 and 506.3. ~~For Group R buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2, the value specified in Table 503 for maximum height is increased by 20 feet (6096 mm) and the maximum number of stories is increased by one, but shall not exceed 60 feet (18 288 mm) or four stories, respectively.~~

**Exceptions:**

1. Fire areas with an occupancy in Group I-2 of Type IIB, III, IV or V construction.
2. Fire areas with an occupancy in Group H-1, H-2, H-3 or H-5.
3. Fire-resistance rating substitution in accordance with Table 601, Note e.
4. Fire areas with an occupancy in Group L
5. Fire areas with an occupancy in Licensed Group I-1 and R-4

These increases are not permitted in addition to the area increase in accordance with Section 506.3.

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**506.3 Automatic sprinkler system increase.** Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the area limitation in Table 503 is permitted to be increased by an additional 200 percent (*I*<sub>s</sub> = 2) for buildings with more than one story above grade plane and an additional 300 percent (*I*<sub>s</sub> = 3) for buildings with no more than one story above grade plane. ~~These increases are permitted in addition to the height and story increases in accordance with Section 504.2.~~

**Exception:** The area limitation increases shall not be permitted for the following conditions:

1. The automatic sprinkler system increase shall not apply to buildings with an occupancy in Use Group H-1.
2. The automatic sprinkler system increase shall not apply to the floor area of an occupancy in Use Group H-2 or H-3. For mixed-use buildings containing such occupancies, the allowable area shall be calculated in accordance with Section 508.3.3.2, with the sprinkler increase applicable only to the portions of the building not classified as Use Group H-2 or H-3.
3. Fire-resistance rating substitution in accordance with Table 601, Note e.
4. The automatic sprinkler system increase shall not apply to Group L occupancies

These increases are not permitted in addition to the story increases in accordance with Section 504.2.

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**506.4 Area determination.** The maximum area of a building with more than one story above grade plane shall be determined by ~~multiplying~~ *modifying* the allowable area of the first story ( $A_a$ ), as determined in Section 506.1, ~~by the number of stories above grade plane~~ as listed below:

1. For buildings with two *or more* stories above grade plane, multiply by 2;
- ~~2. For buildings with three or more stories above grade plane, multiply by 3; and~~
- ~~3. No story shall exceed the allowable area per story ( $A_a$ ), as determined in Section 506.1, for the occupancies on that story.~~

**Exceptions:**

- ~~1. Unlimited area buildings in accordance with Section 507.~~
- ~~2. The maximum area of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2 shall be determined by multiplying the allowable area per story ( $A_a$ ), as determined in Section 506.1, by the number of stories above grade plane.~~

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**507.3 Sprinklered, one story.** The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

**Exceptions:**

- ~~1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.2 and 903.3.1.1 and NFPA 230.~~
- ~~2.1.~~ The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:
  - ~~2.1.1.~~ Exit doors directly to the outside are provided for occupants of the participant sports areas; and
  - ~~2.1.2.~~ The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.
- ~~3.2.~~ Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
  - ~~3.2.1.~~ All assembly occupancies are separated from other spaces as required for separated uses in Section 508.3.3.4 with no reduction allowed in the fire-resistance rating of the separation based upon the installation of an automatic sprinkler system;
  - ~~3.2.2.~~ Each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.1; and
  - ~~3.2.3.~~ All required exits shall discharge directly to the exterior.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**507.9 Group E buildings.** ~~The area of a one story Group E building of Type II, IIIA or IV construction shall not be limited when the following criteria are met:~~

- ~~1. Each classroom shall have not less than two means of egress, with one of the means of egress being a direct exit to the outside of the building complying with Section 1017.~~
- ~~2. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.~~
- ~~3. The building is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.~~

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**TABLE 508.2 INCIDENTAL USE AREAS**

<b>ROOM OR AREA</b>	<b>SEPARATION AND/OR PROTECTION</b>
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
Refrigerant machinery rooms	1 hour or provide automatic sprinkler system <sup>a</sup>
Parking garage (Section 406.2)	2 hours; or 1 hour and provide automatic fire-extinguishing system
Hydrogen cut-off rooms, not classified as Group H	1-hour in Group B, F, M, S and U occupancies. 2-hour in Group A, E, I and R occupancies.
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic fire-extinguishing system
Laboratories and vocational shops, not classified as Group H, located in Group E or I-2 occupancies	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
<i>Laboratories, vocational shops, and similar areas containing hazardous materials not classified as Group H, located in Group E occupancies</i>	<i>1 hour</i>
Laundry rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
Storage rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
<del>Group I-3 cells equipped with padded surfaces</del>	<del>1 hour</del>
Group I-2 waste and linen collection rooms	1 hour <sup>a</sup>
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system <sup>a</sup>
Stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility standby power, emergency power or uninterrupted power supplies	1-hour in Group B, F, M, S and U occupancies. 2-hour in Group A, E, I and R occupancies. <sup>a</sup>

*a. Fire barrier protection and automatic sprinkler protection required throughout the fire area in I-2 occupancies as indicated.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**508.3.1.3 Separation.** No separation is required between accessory occupancies or the main occupancy.

**Exception:** Group H-2, H-3, H-4, or H-5, I-2, I-2.1 or I-3 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**508.3.2.3 Separation.** No separation is required between occupancies.

**Exception:** Group H-2, H-3, H-4, or H-5, I-2, I-2.1 or I-3 occupancies shall be separated from all other occupancies in accordance with Section 508.3.3.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**TABLE 508.3.3 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

OCCUPANCY	A <sup>e</sup> , E		I		R <sup>d</sup>		F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>		B <sup>b</sup> , F-1, M <sup>b</sup> , S-1		H-1		H-2		H-3, H-4, H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A <sup>e</sup> , E <sup>e</sup>	N	N	<u>1</u> <u>2</u>	2	1	2	N	1	1	2	NP	NP	3	4	2	3 <sup>a</sup>
I	-	-	N	N	<u>1</u> <u>2</u>	NP	<u>1</u> <u>2</u>	2	<u>1</u> <u>2</u> <sup>f</sup>	2	NP	NP	<u>3</u> <u>4</u>	NP	<u>2</u> <u>4</u>	NP
R <sup>d</sup>	-	-	-	-	N	N	1	2	1	2	NP	NP	3	NP	2	NP
F-2, S-2 <sup>c,d</sup> , U <sup>d</sup>	-	-	-	-	-	-	N	N	1	2	NP	NP	3	4	2	3 <sup>a</sup>
B <sup>b</sup> , F-1, M <sup>b</sup> , S-1	-	-	-	-	-	-	-	-	N	N	NP	NP	2	3	1	2 <sup>a</sup>
H-1	-	-	-	-	-	-	-	-	-	-	N	NP	NP	NP	NP	NP
H-2	-	-	-	-	-	-	-	-	-	-	-	-	N	NP	1	NP
H-3, H-4, H-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	NP
<u>L</u>	<u>2</u>	<u>NP</u>	<u>2</u>	<u>NP</u>	<u>4</u>	<u>NP</u>	<u>1</u>	<u>NP</u>	<u>1</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>2</u>	<u>NP</u>	<u>1</u>	<u>NP</u>

For SI: 1 square foot = 0.0929 m<sup>2</sup>.

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.4.2.

b. Occupancy separation need not be provided for storage areas within Groups B and M if the:

1. Area is less than 10 percent of the floor area;
2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or
3. Area is less than 1,000 square feet.

c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.

d. See Section 406.1.4.

e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

f. For Group I and F1 occupancies shall have a 3 hour separation.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**509.2 Group S-2 enclosed or open parking garage with Group A, B, I-1, M, R or S above.** A basement and/or the first story above grade plane of a building shall be considered as a separate and distinct building for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction when all of the following conditions are met:

1. The basement and/or the first story above grade plane is of Type IA construction and is separated from the building above with a horizontal assembly having a minimum 3-hour fire-resistance rating.
2. Shaft, stairway, ramp or escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Table 715.4.

**Exception:** Where the enclosure walls below the horizontal assembly have not less than a 3-hour fire-resistance rating with opening protectives in accordance with Table 715.4, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided:

1. The building above the horizontal assembly is not required to be of Type I construction;
  2. The enclosure connects less than four stories;  
and
  3. The enclosure opening protectives above the horizontal assembly have a minimum 1-hour fire protection rating.
3. The building above the horizontal assembly shall be permitted to have multiple Group A uses, each with an occupant load of less than 300, or Group B, I-1, M, R or S uses.
  4. The building below the horizontal assembly is a Group S-2 enclosed or open parking garage, used for the parking and storage of private motor vehicles.

**Exceptions:**

1. Entry lobbies, mechanical rooms and similar uses incidental to the operation of the building shall be permitted.
2. Multiple Group A uses, each with an occupant load of less than 300, or Group B or M uses shall be permitted, in addition to those uses incidental to the operation of the building (including storage areas), provided that the entire structure below the horizontal assembly is protected throughout by an approved automatic sprinkler system.
5. The maximum building height in feet shall not exceed the limits set forth in Section 503 for the building having the smaller allowable height as measured from the grade plane.

Authority: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143

***509.9 Group I or R.*** Buildings housing protective social-care homes or in occupancies housing inmates who are not restrained need not be of one-hour fire-resistive construction when not more than two stories in height. In no case shall individual floor areas exceed 3,000 square feet (279m<sup>2</sup>). The fire-resistive protection of the exterior walls shall not be less than one hour where such walls are located within 3 feet (914m) of the property line. Openings within such walls are not permitted. Openings in exterior non-rated walls need not be protected.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

## CHAPTER 6 TYPES OF CONSTRUCTION

**(Note: Adopt entire chapter with amendments.)**

**603.1 Allowable materials.** Combustible materials shall be permitted in buildings of Type I or Type II construction in the following applications and in accordance with Sections 603.1.1 through 603.1.3:

1. Fire-retardant-treated wood shall be permitted in:
  - 1.1. Nonbearing partitions where the required fire-resistance rating is 2 hours or less.
  - 1.2. Nonbearing exterior walls where no fire rating is required.
  - 1.3. ~~Roof construction, including girders, trusses, framing and decking.~~

**Exception:** ~~In buildings of Type I construction exceeding two stories in height, fire retardant treated wood is not permitted in roof construction when the vertical distance from the upper floor to the roof is less than 20 feet (6096 mm).~~

2. Thermal and acoustical insulation, other than foam plastics, having a flame spread index of not more than 25.

**Exceptions:**

1. Insulation placed between two layers of noncombustible materials without an intervening airspace shall be allowed to have a flame spread index of not more than 100.
2. Insulation installed between a finished floor and solid decking without intervening airspace shall be allowed to have a flame spread index of not more than 200.
3. Foam plastics in accordance with Chapter 26.
4. Roof coverings that have an A, B or C classification.
5. Interior floor finish and interior finish, trim and millwork such as doors, door frames, window sashes and frames.
6. Where not installed over 15 feet (4572 mm) above grade, show windows, nailing or furring strips and wooden bulkheads below show windows, including their frames, aprons and show cases.
7. Finished flooring applied directly to the floor slab or to wood sleepers that are fireblocked in accordance with Section 717.2.7.
8. Partitions dividing portions of stores, offices or similar places occupied by one tenant only and that do not establish a corridor serving an occupant load of 30 or more shall be permitted to be constructed of fire-retardant-treated wood, 1-hour fire-resistance-rated construction or of wood panels or similar light construction up to 6 feet (1829 mm) in height.
9. Stages and platforms constructed in accordance with Sections 410.3 and 410.4, respectively.
10. Combustible exterior wall coverings, balconies and similar projections and bay or oriel windows in accordance with Chapter 14.
11. Blocking such as for handrails, millwork, cabinets and window and door frames.
12. Light-transmitting plastics as permitted by Chapter 26.
13. Mastics and caulking materials applied to provide flexible seals between components of exterior wall construction.
14. Exterior plastic veneer installed in accordance with Section 2605.2.
15. Nailing or furring strips as permitted by Section 803.4.
16. Heavy timber as permitted by Note d to Table 601 and Sections 602.4.7 and 1406.3.
17. Aggregates, component materials and admixtures as permitted by Section 703.2.2.
18. Sprayed fire-resistant materials and intumescent and mastic fire-resistant coatings, determined on the basis of fire-resistance tests in accordance with Section 703.2 and installed in accordance with Section 1704.10 and 1704.11, respectively.
19. Materials used to protect penetrations in fire-resistance-rated assemblies in accordance with Section 712.
20. Materials used to protect joints in fire-resistance-rated assemblies in accordance with Section 713.
21. Materials allowed in the concealed spaces of buildings of Type I and II construction in accordance with Section 717.5.
22. Materials exposed within plenums complying with Section 602 of the International California Mechanical Code.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**603.1.1 Ducts.** The use of nonmetallic ducts shall be permitted when installed in accordance with the limitations of the International California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**603.1.2 Piping.** The use of combustible piping materials shall be permitted when installed in accordance with the limitations of the ~~International~~ California Mechanical Code and the ~~International~~ California Plumbing Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**603.1.3 Electrical.** The use of electrical wiring methods with combustible insulation, tubing, raceways and related components shall be permitted when installed in accordance with the limitations of the ~~ICC~~ California Electrical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (hours)**

Building Element	TYPE I		TYPE II		TYPE III		TYPE IV <sup>d</sup>	TYPE V	
	A	B	A <sup>e</sup>	B	A <sup>e</sup>	B	HT	A <sup>e</sup>	B
Structure Frame <sup>a</sup>	3	2	1	0	1	0	HT	1	0
Bearing walls									
Exterior <sup>g</sup>	$\frac{4^b}{3}$	$\frac{4^b}{2}$	1	0	$\frac{4^b}{1}$	$\frac{4^b}{0}$	$\frac{4^b}{1/HT}$	1	0
Interior	3	2	1	0	1	0	1/HT	1	0
Nonbearing walls and partitions	See Table 602								
Exterior									
Non bearing walls and partitions Interior <sup>f</sup>	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction including supporting beams and joists	2	2	1	0	1	0	HT	1	0
Roof Construction including supporting beams and joists	$\underline{2}^c$	$1^c$	$1^c$	$0^c$	$1^c$	0	HT	$1^c$	0

- The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connections to the columns shall be considered secondary members and not part of the structural frame.
- ~~Roof supports: Fire resistance ratings of structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.~~ For buildings classified as Group B, F, M, S, or R occupancies, where the fire separation distance is 5 feet (1.6m) or more, the minimum fire-resistance rating of the exterior bearing walls shall be permitted to be 2 hours.
- Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members other than the structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. ~~Fire retardant treated wood members shall be allowed to be used for such unprotected members.~~
- In all occupancies, heavy timber shall be allowed where a 1 hour or less fire-resistance rating is required.
- An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1 hours fire-resistance rated construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.
- Not less than the fire-resistance rating required by other section of this code.
- Not less than the fire-resistance rating based on fire separating distance (see Table 602).

Authority: Health and Safety Code Sections 13108, 13143, 13210  
 References: Health and Safety Code Sections 13143

**TABLE 602  
 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS  
 BASED ON FIRE SEPARATION DISTANCE<sup>a,e</sup>**

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H, L	OCCUPANCY GROUP F-1, M, S-1	OCCUPANCY GROUP A, B, E, F-2, I, R <sup>f</sup> , S-2, U <sup>b,f</sup>	OCCUPANCY GROUP M	OCCUPANCY GROUP F-1, F-2
X < 5 <sup>c</sup>	All	3	2	1	<u>4<sup>g</sup></u>	<u>4<sup>g</sup></u>
5 ≤ X < 10	IA	3	2	1	<u>2</u>	<u>2</u>
	Others	2	1	1	<u>2<sup>g</sup></u>	<u>2<sup>g</sup></u>
10 ≤ X < 30	IA, IB	2	1	1 <sup>d</sup>	<u>1<sup>d</sup></u>	<u>1<sup>d</sup></u>
	IIB, VB	1	0	0	<u>1</u>	<u>1</u>
	Others	1	1	1 <sup>d</sup>	<u>1<sup>d</sup></u>	<u>1<sup>d</sup></u>
X ≥ 30	All	0	0	0	<u>0</u>	<u>0</u>

For SI: 1 foot = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. For special requirements for Group U occupancies see Section 406.1.2
- c. See Section 705.1.1 for party walls.
- d. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- e. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- f. Group R-3 and Group U when used as accessory to Group R-3 shall not be required to have a fire-resistance rating where the fire separation distance is 3 feet or more.
- g. Types II and V construction shall be allowed to have a minimum 1-hour fire-resistance rating.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 17921  
 References: Health and Safety Code Sections 13143

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

**(Note: Adopt entire chapter with amendments.)**

**704.5 Fire-resistance ratings.** Exterior walls shall be fire-resistance rated in accordance with Tables 601 and 602. ~~The fire-resistance rating of exterior walls with a fire separation distance of greater than 5 feet (1524 mm) shall be rated for exposure to fire from the inside.~~ The fire-resistance rating of exterior walls ~~a fire separation distance of 5 feet (1524 mm) or less~~ shall be rated for exposure to fire from both sides.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
 References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC, 504.6.1)

~~504.6.1~~ **705.1.2 Automatic fire sprinklers** ~~Area separation Fire walls shall not be considered to create separate buildings for the purpose of automatic fire sprinkler system requirements as set forth in Chapter 9.~~

**EXCEPTION:** Buildings separated by continuous ~~area separation fire~~ walls of four-hour fire-resistive construction without openings. Buildings required to have automatic fire sprinkler protection as set forth in Section 13113 of the Health and Safety Code are prohibited from using area separation walls in lieu of automatic fire sprinkler protection

**TABLE 705.4  
FIRE WALL FIRE-RESISTANCE RATINGS**

GROUP	FIRE RESISTANCE RATING (hours)
A, B, E, H-4, I, R-1, R-2, U, <u>L</u>	3 <sup>a</sup>
F-1, H-3 <sup>b</sup> , H-5, M, S-1	3
H-1, H-2	4 <sup>b</sup>
F-2, S-2, R-3, R-4	2

- a. Walls shall be not less than 2-hour fire-resistance rated where separating buildings of Type II or V construction.  
b. For Group H-1, H-2 or H-3 buildings, also see Sections 415.4 and 415.5.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**TABLE 706.3.9  
FIRE-RESISTANCE RATING REQUIREMENTS FOR FIRE  
BARRIER ASSEMBLIES BETWEEN FIRE AREAS**

OCCUPANCY GROUP	FIRE-RESISTANCE RATING (hours)
H-1, H-2	4
F-1, H-3, S-1	3
A, B, E, F-2, H-4, H-5, I, M, R, R-2, <u>L</u>	2
U	1

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**707.2 Shaft enclosure required.** Openings through a floor/ceiling assembly shall be protected by a shaft enclosure complying with this Section.

**Exceptions:**

1. A shaft enclosure is not required for openings totally within an individual residential dwelling unit and connecting four stories or less.
2. In other than Groups I-2 and I-3, a A shaft enclosure is not required in a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 for an escalator opening or stairway that is not a portion of the means of egress protected according to Item 2.1 or 2.2:
  - 2.1. Where the area of the floor opening between stories does not exceed twice the horizontal projected area of the escalator or stairway and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. In other than Groups B and M, this application is limited to openings that do not connect more than four stories.
  - 2.2. Where the opening is protected by approved power-operated automatic shutters at every penetrated floor. The shutters shall be of noncombustible construction and have a fire-resistance rating of not less than 1.5 hours. The shutter shall be so constructed as to close immediately upon the actuation of a smoke detector installed in accordance with Section 907.11 and shall completely shut off the well opening. Escalators shall cease operation when the shutter begins to close. The shutter shall operate at a speed of not more than 30 feet per minute (152.4 mm/s) and shall be equipped with a sensitive leading edge to arrest its progress where in contact with any obstacle, and to continue its progress on release there from.
3. A shaft enclosure is not required for penetrations by pipe, tube, conduit, wire, cable and vents protected in accordance with Section 712.4.
4. A shaft enclosure is not required for penetrations by ducts protected in accordance with Section 712.4. Grease ducts shall be protected in accordance with the International California Mechanical Code.
5. In other than Group H occupancies, a shaft enclosure is not required for floor openings complying with the provisions for atriums in Section 404.
6. A shaft enclosure is not required for approved masonry chimneys where annular space protection is provided at each floor level in accordance with Section 717.2.5.
7. In other than Groups I-2, I-2.1 and I-3, a shaft enclosure is not required for a floor opening or an air transfer opening that complies with the following:

- 7.1. Does not connect more than two stories.
- 7.2. Is not part of the required means of egress system, except as permitted in Section 1020.1.
- 7.3. Is not concealed within the building construction.
- 7.4. Is not open to a corridor in Group I and R occupancies.
- 7.5. Is not open to a corridor on nonsprinklered floors in any occupancy.
- 7.6. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures.
- 7.7. Is limited to the same smoke compartment.
- 8. A shaft enclosure is not required for automobile ramps in open and enclosed parking garages constructed in accordance with Sections 406.3 and 406.4, respectively.
- 9. A shaft enclosure is not required for floor openings between a mezzanine and the floor below.
- 10. A shaft enclosure is not required for joints protected by a fire-resistant joint system in accordance with Section 713.
- 11. A shaft enclosure shall not be required for floor openings created by unenclosed stairs or ramps in accordance with Exception 8 or 9 in Section 1020.1.
- 12. Floor openings protected by floor fire doors in accordance with Section 711.8.
- 13. Where permitted by other sections of this code

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**707.14.1 Elevator lobby.** An elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

**Exceptions:**

- 1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
- 3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
- 4. In other than Group I-3, and *high-rise* buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 6. *When approved, e* Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**709.5 Openings.** Openings in a smoke barrier shall be protected in accordance with Section 715.

**Exception:** In Group I-2, where doors are installed across corridors, a pair of opposite-swinging doors without a center mullion *or horizontal sliding doors that comply with section 1008.1.3.3 shall be installed*, shall be installed having vision panels with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested. *Vision panels consisting of fire-rated glazing in approved frames shall be provided in each cross-corridor swinging door and at each cross-corridor horizontal-sliding door in a smoke barrier.* The doors shall be close fitting within operational tolerances, and shall not have undercuts, louvers or grilles. *The Swinging doors shall have head and jamb stops, and astragals or rabbets at meeting edges, and Doors installed across corridors shall be automatic closing by smoke detection in accordance with Section 715.4.7.3. Positive-latching devices are not required. Doors installed across corridors shall comply with Section 1008.1.1.*

**709.8 Ducts and air transfer openings.** Penetrations in a smoke barrier by ducts and air transfer openings shall comply with Section 716 and Section 909.5.2.

**710.2 Materials.** The walls shall be of materials permitted by the building type of construction. In Group I-2 and I-2.1, smoke partitions shall have framing covered with noncombustible materials having an approved thermal barrier with an index of not less than 15 in accordance with FM 4880, UL 1040, NFPA 286 or UL 1715.

**715.4.3 Door assemblies in corridors and smoke barriers.** Fire door assemblies required to have a minimum fire protection rating of 20 minutes where located in corridor walls or smoke-barrier walls having a fire-resistance rating in accordance with Table 715.4 shall be tested in accordance with NFPA 252 or UL 10C without the hose stream test.

**Exceptions:**

1. Viewports that require a hole not larger than 1 inch (25 mm) in diameter through the door, have at least a 0.25-inch-thick (6.4 mm) glass disc and the holder is of metal that will not melt out where subject to temperatures of 1,700°F (927°C).
  2. Corridor door assemblies in occupancies of Group I-2 shall be in accordance with Section 407.3.1.
  3. Unprotected openings shall be permitted for corridors in multitheater complexes where each motion picture auditorium has at least one-half of its required exit or exit access doorways opening directly to the exterior or into an exit passageway.
- 4 (relocated from 332A.1) ~~332A.4~~ Cell or room doors in Group I-3 which open into a required exit corridor within a cell complex. need not comply with Section 1004.3.4.3.2.4.

Authority: Health and Safety Code Sections 13143.6

References: Health and Safety Code Sections 13143

**715.4.5.1 Fire door labeling requirements.** Fire doors shall be labeled showing the name of the manufacturer, the name of the third-party inspection agency, the fire protection rating and, where required for fire doors in exit enclosures and exit passageways by Section 715.4.4, the maximum transmitted temperature end point. Smoke and draft control doors complying with UL 1784 shall be labeled as such. Labels shall be approved and permanently affixed. The label shall be applied at the factory or location where fabrication and assembly are performed.

(Relocated from CBC 332A.1) **Exception:** In Group I-3 doors which are required to be 45 minutes or higher shall be fire-rated assemblies or certified by the manufacturer as being equivalent to the required standard.

Authority: Health and Safety Code Sections 13143.6

References: Health and Safety Code Sections 13143

**715.4.7.3 Smoke-activated doors.** Automatic-closing doors installed in the following locations shall be automatic closing by the actuation of smoke detectors installed in accordance with Section 907.10 or by loss of power to the smoke detector or hold-open device. Doors that are automatic closing by smoke detection shall not have more than a 10-second delay before the door starts to close after the smoke detector is actuated:

1. Doors installed across a corridor.
2. Doors that protect openings in exits or corridors required to be of fire-resistance-rated construction.
3. Doors that protect openings in walls that are capable of resisting the passage of smoke in accordance with Section 508.2.2.1.
4. Doors installed in smoke barriers in accordance with Section 709.5.
5. Doors installed in fire partitions in accordance with Section 708.6.
6. Doors installed in a fire wall in accordance with Section 705.8.
7. Doors installed in shaft enclosures in accordance with Section 707.7.
8. Doors installed in refuse and laundry chutes and access and termination rooms in accordance with Section 707.13.
9. Doors installed in the walls for compartmentation of underground buildings in accordance with Section 405.4.2.
10. Doors installed in the elevator lobby walls of underground buildings in accordance with Section 405.4.3.
11. Doors installed in smoke partitions in accordance with Section 710.5.3.

12. Doors installed in walls required to be fire rated in accordance with Section 508.2.2

13. Doors installed in walls required to be fire rated in accordance with Section 508.3.3

**Exception:** In Group "I-2" occupancies smoke activated doors installed in the following locations shall be automatic closing by actuation of the fire alarm system, or actuation of smoke detectors installed in accordance with Section 907.10, or activation of the sprinkler system installed in accordance with Section 903.1.

715.4.7.3.1 Fire door assemblies required to have a fire-protection rating, which are installed across a corridor, shall be automatic closing in accordance with 715.4.7.3.

**716.2.2 Hazardous exhaust ducts.** Fire dampers for hazardous exhaust duct systems shall comply with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

**716.5.2 Fire Barriers.** Ducts and air transfer openings of fire barriers shall be protected with approved fire dampers installed in accordance with their listing. Ducts and air transfer openings shall not penetrate exits enclosures and exit passageways except as permitted by Section 1020.1.2 and 1021.5, respectively.

**Exceptions:** Fire dampers are not required ~~at penetrations of fire barriers where any of the following apply:~~ where

- ~~1. Penetrations are tested in accordance with ASTM E 119 as part of fire-resistance rated assembly.~~
- ~~2. Ducts are used as part of an approved smoke control system in accordance with Section 909 and where the use of a fire damper would interfere with the operation of a smoke control system.~~
- ~~3. Such walls are penetrated by ducted HVAC systems, have a required fire resistance rating of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. For the purpose of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air handling appliance or equipment to the air outlet and inlet terminals.~~

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

**716.5.4 Fire partitions.** Ducts and air transfer openings that penetrate fire partitions shall be protected with listed fire dampers installed in accordance with their listing.

**Exceptions:** In occupancies other than Group H and Group I, fire dampers are not required where any of the following apply:

1. The partitions are tenant separation or corridor walls in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the duct is protected as a through penetration in accordance with Section 712.
2. Tenant partitions in covered mall buildings where the walls are not required by provisions elsewhere in the code to extend to the underside of the floor or roof deck above.
3. The duct system is constructed of approved materials in accordance with the ~~International~~ California Mechanical Code and the duct penetrating the wall complies with all of the following requirements:
  - 3.1. The duct shall not exceed 100 square inches (0.06 m<sup>2</sup>).
  - 3.2. The duct shall be constructed of steel a minimum of 0.0217 inch (0.55 mm) in thickness.
  - 3.3. The duct shall not have openings that communicate the corridor with adjacent spaces or rooms.
  - 3.4. The duct shall be installed above a ceiling.

- 3.5. The duct shall not terminate at a wall register in the fire-resistance-rated wall.
- 3.6. A minimum 12-inch-long (305 mm) by 0.060-inch-thick (1.52 mm) steel sleeve shall be centered in each duct opening. The sleeve shall be secured to both sides of the wall and all four sides of the sleeve with minimum 1<sup>1</sup>/<sub>2</sub>-inch by 1<sup>1</sup>/<sub>2</sub>-inch by 0.060-inch (38 mm by 38 mm by 1.52 mm) steel retaining angles. The retaining angles shall be secured to the sleeve and the wall with No. 10 (M5) screws. The annular space between the steel sleeve and the wall opening shall be filled with mineral wool batting on all sides.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

**716.5.4.1 Corridors.** A listed smoke damper designed to resist the passage of smoke shall also be provided at each point a duct or air transfer opening penetrates a fire-resistance rated corridor enclosure required to have smoke and draft doors in accordance with Section 715.4.3.

**Exceptions:** ~~1. Smoke damper are not required where the building is equipped throughout with an approved smoke control system in accordance with Section 909, and smoke dampers are not necessary for the operation and control of the system.~~

~~2. Smoke damper are not required in corridor penetrations where the duct is constructed of steel not less than 0.019 inch (0.48mm) in thickness and there are no openings serving the corridor.~~

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**716.6.1 Through penetrations.** In occupancies other than Groups I-2 and I-3, a duct constructed of approved materials in accordance with the International California Mechanical Code that penetrates a fire-resistance-rated floor/ceiling assembly that connects not more than two stories is permitted without shaft enclosure protection, provided a listed fire damper is installed at the floor line or the duct is protected in accordance with Section 712.4. For air transfer openings, see Exception 7 to Section 707.2.

**Exception:** A duct is permitted to penetrate three floors or less without a fire damper at each floor, provided it meets all of the following requirements:

1. The duct shall be contained and located within the cavity of a wall and shall be constructed of steel not less than 0.019 inch (0.48 mm) (26 gage) in thickness.
2. The duct shall open into only one dwelling or sleeping unit and the duct system shall be continuous from the unit to the exterior of the building.
3. The duct shall not exceed 4-inch (102 mm) nominal diameter and the total area of such ducts shall not exceed 100 square inches (0.065 m<sup>2</sup>) in any 100 square feet (9.3 m<sup>2</sup>) of floor area.
4. The annular space around the duct is protected with materials that prevent the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E 119 time-temperature conditions under a minimum positive pressure differential of 0.01 inch (2.49 Pa) of water at the location of the penetration for the time period equivalent to the fire-resistance rating of the construction penetrated.
5. Grille openings located in a ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be protected with a listed ceiling radiation damper installed in accordance with Section 716.6.2.1.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**716.6.2 Membrane penetrations.** Ducts and air transfer openings constructed of approved materials in accordance with the International California Mechanical Code that penetrate the ceiling membrane of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be protected with one of the following:

1. A shaft enclosure in accordance with Section 707.
2. A listed ceiling radiation damper installed at the ceiling line where a duct penetrates the ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly.
3. A listed ceiling radiation damper installed at the ceiling line where a diffuser with no duct attached penetrates the ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly.

Authority: Health and Safety Code Sections 18949

References: Health and Safety Code Sections 13143

**716.6.3 Nonfire-resistance-rated floor assemblies.** Duct systems constructed of approved materials in accordance with the ~~International~~ California Mechanical Code that penetrate nonfire-resistance-rated floor assemblies shall be protected by any of the following methods:

1. A shaft enclosure in accordance with Section 707.
2. The duct connects not more than two stories, the annular space around the penetrating duct is protected with an approved noncombustible material that resists the free passage of flame and the products of combustion.
3. The duct connects not more than three stories, the annular space around the penetrating duct is protected with an approved noncombustible material that resists the free passage of flame and the products of combustion and a fire damper is installed at each floor line.

**Exception:** Fire dampers are not required in ducts within individual residential dwelling units.

Authority: Health and Safety Code Sections 18949

References: Health and Safety Code Sections 13143

**717.3.3 Other groups.** In other groups, draftstopping shall be installed so that horizontal floor areas do not exceed 1,000 square feet (93 m<sup>2</sup>).

**Exception:** ~~Draftstopping is not required in buildings equipped throughout with~~ Where an automatic sprinkler system in accordance with Section 903.3.1.1- is installed, the area between draft stops may be 3,000 square feet (279 m<sup>2</sup>) and the greatest horizontal dimension may be 100 feet (30 480 mm).

**717.4.3 Other groups.** Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet (279 m<sup>2</sup>).

**Exception:** ~~Draftstopping is not required in buildings equipped throughout with~~ Where an automatic sprinkler system in accordance with Section 903.3.1.1- is installed, the area between draft stops may be 9,000 square feet (836 m<sup>2</sup>) and the greatest horizontal dimension may be 100 feet (30 480 mm).

**717.5 Combustible materials in concealed spaces in Type I or II construction.** Combustible materials shall not be permitted in concealed spaces of buildings of Type I or II construction.

**Exceptions:**

1. Combustible materials in accordance with Section 603.
2. Combustible materials exposed within plenums complying with Section 602 of the ~~International~~ California Mechanical Code.
3. Class A interior finish materials classified in accordance with Section 803.
4. Combustible piping within partitions or shaft enclosures installed in accordance with the provisions of this code.
5. Combustible piping within concealed ceiling spaces installed in accordance with the ~~International~~ California Mechanical Code and the ~~International~~ California Plumbing Code.
7. Combustible insulation and covering on pipe and tubing, installed in concealed spaces other than plenums,
8. Complying with Section 719.7.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**719.1 General.** Insulating materials, including facings such as vapor retarders and vapor-permeable membranes, similar coverings, and all layers of single and multilayer reflective foil insulations, shall comply with the requirements of this section. Where a flame spread index or a smoke-developed index is specified in this section, such index shall be determined in accordance with ASTM E 84. Any material that is subject to an increase in flame spread index or smoke-developed index beyond the limits herein established through the effects of age, moisture, or other atmospheric conditions shall not be permitted.

**Exceptions:**

1. Fiberboard insulation shall comply with Chapter 23.
2. Foam plastic insulation shall comply with Chapter 26.
3. Duct and pipe insulation and duct and pipe coverings and linings in plenums shall comply with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**719.7 Insulation and covering on pipe and tubing.** Insulation and covering on pipe and tubing shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 450.

**Exception:** Insulation and covering on pipe and tubing installed in plenums shall comply with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 7A

### MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE

*(Note: Adopt entire chapter with amendments.)*

#### SECTION 701A SCOPE, PURPOSE AND APPLICATION

**701A.1 Scope.** *This chapter applies to building materials, systems and or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area as defined in Section 702A.*

**701A.2 Purpose.** *The purpose of this Chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.*

**701A.3. Application.** *New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after December 1, 2005, shall comply with the following Sections:*

1. **704A.1 – Roofing**
2. **704A.2 – Attic Ventilation**

**701A.3.1 Alternates for materials, design, tests, and methods of construction.** *The enforcing agency is permitted to modify the provisions of this chapter for site-specific conditions in accordance with ~~Sections 104.2-7~~ Appendix Chapter 1, Section 104.10. When required by the enforcing agency for the purposes of granting*

modifications, a fire protection plan shall be submitted in accordance with the California Fire Code, ~~Articles 86A and 86B~~ Chapter 47.

**701A.3.2 New Buildings Located in Any Fire Hazard Severity Zone.** New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.

**701A.3.2.1 Inspection and certification.** Building permit applications and final completion approvals for buildings within the scope and application of this chapter shall comply with the following:

**701A.3.2.2** The local building official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this Chapter.

**701A.3.2.3** The local building official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this Chapter.

**701A.3.2.4** Prior to building permit final approval the property shall be in compliance with the vegetation clearance requirements prescribed in ~~PRC~~ California Public Resources Code 4291 & ~~and~~ CG California Government Code Section 51182.

## **SECTION 702A - DEFINITIONS**

For the purposes of this chapter, certain terms are defined below:

**CDF DIRECTOR** means the Director of the California Department of Forestry and Fire Protection.

**FIRE PROTECTION PLAN** is a document prepared for a specific project or development proposed for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

The Fire Protection Plan shall be in accordance with this chapter and the California Fire Code, ~~Article 86A~~ Chapter 47. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted. Only locally adopted ordinances that have been filed with the California Building Standards Commission ~~in accordance with Section 101.14~~ or the Department of Housing and Community Development in accordance with ~~Section 401.15~~ 101.8 shall apply.

**FIRE HAZARD SEVERITY ZONES** are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code Sections 51175 through 51189. See California Fire Code Article 86.

The California Code of Regulations, Title 14, Section 1280 entitles the maps of these geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

**IGNITION-RESISTANT MATERIAL** is any product which, when tested in accordance with ~~UBC Standard 8-1~~ ASTM E84-05 for a period of 30 minutes, shall have a flame spread of not over 25 and show no evidence of progressive combustion. In addition, the flame front shall not progress more than 10½ feet (3200 mm) beyond the centerline of the burner at any time during the test.

Materials shall pass the accelerated weathering test and be identified as Exterior type, in accordance with ~~UBC Standard 23-4~~ ASTM D2898-94 and ASTM D3201-94. All materials shall bear identification showing the fire performance rating thereof. That identification shall be issued by ICC-ES/ICBO ES or a testing facility recognized by the State Fire Marshal having a service for inspection of materials at the factory.

~~Fire-Retardant-Treated Wood as defined in section 207~~ or noncombustible materials as defined in section ~~245-202~~ shall satisfy the intent of this section.

The enforcing agency may use other definitions of ignition-resistant material that reflect wildfire exposure to building materials and/or their materials performance in resisting ignition.

**LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONE** means an area designated by a local agency upon the recommendation of the CDF Director pursuant to Government Code Sections 51177(c), 51178 and 5118 that is not a state responsibility area and where a local agency, city, county, city and county, or district is responsible for fire protection.

**STATE RESPONSIBILITY AREA** means lands that are classified by the Board of Forestry pursuant to Public Resources Code Section 4125 where the financial responsibility of preventing and suppressing forest fires is primarily the responsibility of the state.

**WILDFIRE** is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources as defined in Public Resources Code Sections 4103 and 4104.

**WILDFIRE EXPOSURE** is one or a combination of radiant heat, convective heat, direct flame contact and burning embers being projected by vegetation fire to a structure and its immediate environment.

**WILDLAND-URBAN INTERFACE FIRE AREA** is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. See Section 706A for the applicable referenced Sections of the Government Code and the Public Resources Code.

## **SECTION 703A – STANDARDS OF QUALITY**

**703A.1 General.** Material, systems, and methods of construction used shall be in accordance with this Chapter.

**703A.2 Qualification by Testing.** Material and material assemblies tested in accordance with the requirements of section 703A shall be accepted for use when the results and conditions of those tests are met. Testing shall be performed by a testing agency approved by the State Fire Marshal or identified by an ICC-ES/ICBO-ES report.

**703A.3 Standards of Quality.** The State Fire Marshal standards listed below and as referenced in this Chapter are located in the California Referenced Standards Code, Part 12 and Chapter 35 of this code.

**SFM 12-7A-1, Exterior Wall Siding and Sheathing**

**SFM 12-7A-2, Exterior Window**

**SFM 12-7A-3, Under Eave**

**SFM 12-7A-4, Decking**

## **SECTION - 704A - MATERIALS, SYSTEMS AND METHODS OF CONSTRUCTION SECTION 704A.1- ROOFS**

### **704A.1 ROOFING**

**704A.1.1 General.** Roofs shall comply with the requirements of Chapter 7A and Chapter 15. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

**704A.1.2 Roof Coverings.** Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fire-stopped with approved materials or have one layer of No. 72 ASTM cap sheet installed over the combustible decking.

**704A.1.3 Roof Valleys.** When provided, valley flashings shall be not less than 0.016-inch (0.41 mm) (No. 28 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36 inches (914 mm) wide underlayment consisting of one layer of No. 72 ASTM cap sheet running the full length of the valley.

**704A.1.5 Roof Gutters.** Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

### **704A.2 Attic Ventilation.**

**704A.2.1 General.** When required by Chapter 15, roof and attic vents shall resist the intrusion of flame and embers into the attic area of the structure, or shall be protected by corrosion resistant, non-combustible wire mesh with ¼ inch (6 mm) openings or its equivalent.

**704A.2.2 Eave or Cornice Vents.** Vents shall not be installed in eaves and cornices.

**Exception:** Eave and cornice vents may be used provided they resist the intrusion of flame and burning embers into the attic area of the structure.

**704A.2.3 Eave Protection.** Eaves and soffits shall meet the requirements of SFM 12-7A-3 or shall be protected by ignition-resistant materials or noncombustible construction on the exposed underside.

### **704A.3 - EXTERIOR WALLS**

**704A.3.1 General.** Exterior walls shall be approved non-combustible or ignition resistant material, heavy timber, or log wall construction or shall provide protection from the intrusion of flames and embers in accordance with standard SFM 12-7A-1.

**704A.3.1.1 Exterior wall coverings.** Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

**704A.3.2 Exterior Wall Openings.** Exterior wall openings shall be in accordance with this section.

**704A.3.2.1 Exterior Wall Vents.** Unless otherwise prohibited by other provisions of this code, vent openings in exterior walls shall resist the intrusion of flame and embers into the structure or vents shall be screened with a corrosion-resistant, non-combustible wire mesh with ¼ inch (6 mm) openings or its equivalent.

**704A.3.2.2 Exterior Glazing and window walls.** Exterior windows, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, or glass block units, or have a fire resistance rating of not less than 20 minutes, when tested according to ASTM E 2010, or conform to the performance requirements of SFM 12-7A-2.

**704A.3.2.3 Exterior door assemblies.** Exterior door assemblies shall conform to the performance requirements of standard SFM 12-7A-1 or shall be of approved noncombustible construction, or solid core wood having stiles and rails not less than 1 3/8 inches thick with interior field panel thickness no less than 1 1/4" thick, or shall have a fire resistance rating of not less than 20 minutes when tested according to ASTM E 2074.

**Exception:** Noncombustible or exterior fire retardant treated wood vehicle access doors are not required to comply with this chapter.

### **704A.4 DECKING, FLOORS AND UNDERFLOOR PROTECTION**

#### **704A.4.1 Decking.**

**704A.4.1.1 Decking Surfaces.** Decking, surfaces, stair treads, risers, and landings of decks, porches, & balconies where any portion of such surface is within 10 feet (3048 mm) of the primary structure shall comply with one of the following methods. The use of paints, coatings, stains, or other surface treatments are not an approved method of protection as required in this Chapter:

1. Shall be constructed of Ignition Resistant Materials and pass the performance requirements of SFM 12-7A-4, Parts A and B.
2. Shall be constructed with heavy timber, exterior fire retardant treated wood or approved non-combustible materials.
3. Shall pass the performance requirements of SFM 12-7A-4, Part A, ~~12-7A-5.7.5, 4~~ 12-7A-4.7.5.1 only with a net peak heat release rate of 25kW/sq-ft for a 40 minute observation period and:
  - a. Decking surface material shall pass the accelerated weathering test and be identified as Exterior type, in accordance with ~~UBC Standard 23-4~~ ASTM E 84 and;
  - b. The exterior wall covering to which it the deck is attached and within 10 (3048 mm) feet of the deck shall be constructed of approved noncombustible or ignition resistant material.

**Exception:** Walls are not required to comply with this sub-section if the decking surface material conforms to ASTM E-84 Class B flame spread.

**704A.4.2 Underfloor and Appendages Protection**

**704A.4.2.1 Underside of Appendages and Floor Projections.** The underside of cantilevered and overhanging appendages and floor projections shall maintain the ignition-resistant integrity of exterior walls, or the projection shall be enclosed to the grade.

**704A.4.2. Unenclosed Underfloor Protection.** Buildings shall have all underfloor areas enclosed to the grade with exterior walls in accordance with section 704A.3.

**Exception:** The complete enclosure of under floor areas may be omitted where the underside of all exposed floors, exposed structural columns, beams and supporting walls are protected as required with exterior ignition-resistant material construction or be heavy timber.

**705A. ANCILLARY BUILDINGS AND STRUCTURES**

**705A.1 Ancillary Buildings and Structures.** When required by the enforcing agency ancillary buildings and structures and detached accessory structures shall comply with the provisions of this Chapter.

Authority: Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.

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

**CHAPTER 8  
INTERIOR FINISHES**

(Note: Adopt entire chapter with amendments.)

**TABLE 803.5  
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY<sup>k</sup>**

GROUP	SPRINKLERED <sup>l</sup>			NONSPRINKLERED <sup>m</sup>		
	Exit enclosures and exit passageways <sup>a,b</sup>	Corridors	Rooms and enclosed spaces <sup>c</sup>	Exit enclosures and exit passageways <sup>a, b</sup>	Corridors	Rooms and enclosed spaces <sup>c</sup>
A-1 & A-2	B	B	C	A	A <sup>d</sup>	B <sup>e</sup>
A-3 <sup>f</sup> , A-4, A-5	B	B	C	A	A <sup>d</sup>	C
B, E, M, R-1, R-4	B	C	C	A	B	C
F	C	C	C	B	C	C
H, L	B	B	C <sup>g</sup>	A	A	B
I-1	B	C	C	A	B	B
I-2	B	B	B <sup>h, i</sup>	A	A	B
I-3	A	A <sup>j</sup>	<del>C</del> B	<del>A</del> —	<del>A</del> —	<del>B</del> —
I-4	B	B	B <sup>h, i</sup>	A	A	B
R-2	C	C	C	B	B	C

R-3	C	C	C	C	C	C
S	C	C	C	B	B	C
U	No Restrictions			No Restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929m<sup>2</sup>.

- a. Class C interior finish materials shall be permitted for wainscoting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.4.1.
- b. In exit enclosures of buildings less than three stories in height of other than Group I-3, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted.
- c. Requirements for rooms and enclosed spaces shall be based upon spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered enclosing spaces and the rooms or spaces on both sides shall be considered one. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
- d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall not be less than Class B materials.
- e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.
- f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
- g. Class B material is required where the building exceeds two stories.
- h. Class C interior finish materials shall be permitted in administrative spaces.
- i. Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less.
- j. Class B materials shall be permitted as wainscoting extending not more than 48 inches above the finished floor in corridors.
- k. Finish materials as provided for in other sections of this code.
- l. Applies when the exit enclosures, exit passageways, corridors or rooms and enclosed spaces are protected by a sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**m. Not Permitted for Group I-3**

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

**804.4 Interior floor finish requirements.** In all *other* occupancies except I-3, interior floor finish and floor covering materials in exit enclosures, exit passageways, corridors and rooms or spaces not separated from corridors by full-height partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux as specified in Section 804.4.1. For Group I-3 Occupancies see Section 804.4.2.

**804.4.1 Minimum critical radial flux.** Interior floor finish and floor covering materials in exit enclosures, exit passageways and corridors shall not be less than Class I in Groups I-2 ~~and I-3~~ and not less than Class II in Groups A, B, E, H, I-4, M, R-1, R-2 and S. In all areas, floor covering materials shall comply with ~~the DOC FF-1 "pill test" (CPSC 16 CFR, Part 1630)~~ ASTM Standard E 648, and having a smoke density rating of less than 450 per ASTM Standard E 84.

**Exception:** Where a building *other than a Group I-3* is equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1 or 903.3.1.2, Class II materials are permitted in any area where Class I materials are required, and materials complying with ~~the DOC FF-1 "pill test" (CPSC 16 CFR, Part 1630)~~ ASTM Standard E 648, and having a smoke density rating of less than 450 per ASTM Standard E 84 are permitted in any area where Class II materials are required.

**804.4.2 Group I-3 Occupancy floor surfaces.** Interior floor finish and floor coverings occupied by inmates or patients whose personal liberties are restrained shall be noncombustible.

**Exception:** Noncombustible floor finish and floor coverings in areas where restraint is not used may have carpet or other floor covering materials applied in areas protected by an automatic sprinkler system and meeting ASTM Standard E 648, and having a smoke density rating of less than 450 per

ASTM Standard E 84. The carpeting and carpet padding shall be tested as a unit in accordance with floor Covering Radiant Panel Test meeting Class I and has a critical radiant flux limit of not less than 0.45 watt per centimeter square. The carpeting and padding shall be identified by a hang-tag or other suitable method as to manufacturer and style and shall indicate the classification of the material based on the limits set forth above.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**806.5 Interior trim.** Material, other than foam plastic used as interior trim shall have a minimum Class B flame spread and 450 smoke-developed index in Group I-3 and for all other occupancies Class C flame spread and smoke-developed index when tested in accordance with ASTM E 84, as described in Section 803.1. Combustible trim, excluding handrails and guardrails, shall not exceed 10 percent of the aggregate wall or ceiling area in which it is located.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

## CHAPTER 9 FIRE PROTECTION SYSTEMS

**(Note: Adopt entire chapter with amendments.)**

**901.2 Fire protection systems.** Fire protection systems shall be installed, repaired, operated and maintained in accordance with this code and the ~~International~~ California Fire Code.

Any fire protection system for which an exception or reduction to the provisions of this code has been granted shall be considered to be a required system.

**Exception:** Any fire protection system or portion thereof not required by this code shall be permitted to be installed for partial or complete protection provided that such system meets the requirements of this code.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**901.3 Modifications.** No person shall remove or modify any fire protection system installed or maintained under the provisions of this code or the ~~International~~ California Fire Code without approval by the building official.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**901.5 Acceptance tests.** Fire protection systems shall be tested in accordance with the requirements of this code and the ~~International~~ California Fire Code. When required, the tests shall be conducted in the presence of the building official. Tests required by this code, the ~~International~~ California Fire Code and the standards listed in this code shall be conducted at the expense of the owner or the owner's representative. It shall be unlawful to occupy portions of a structure until the required fire protection systems within that portion of the structure have been tested and approved.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**901.6.2 Fire alarm systems.** Fire alarm systems required by the provisions of Section 907.2 of this code and Section 907.2 of the ~~International~~ California Fire Code shall be monitored by an approved supervising station in accordance with Section 907.14.

- Exceptions:**
1. Single- and multiple-station smoke alarms required by Section 907.2.10.
  2. ~~Smoke detectors in~~ Group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.4
  3. Supervisory service is not required for automatic sprinkler systems in one- and two-family dwellings.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

### Section 902.1 Definitions.

**[F] AVERAGE AMBIENT SOUND LEVEL.** The root mean square, A-weighted sound pressure level measured over a 24-hour period, or the time any person(s) present, or whichever time period is less.

**[F] DETECTOR, HEAT.** A fire detector that senses heat ~~produced by burning substances, either abnormally high temperature or rate- of- rise or both.~~ Heat is the energy produced by combustion that causes substances to rise in temperature.

**[F] FIRE ALARM CONTROL UNIT.** A system component that receives inputs from automatic and manual fire alarm devices and ~~may be is~~ capable of supplying power to detection devices and transponder(s) or off-premises transmitter(s). The control unit ~~may be is~~ capable of providing a transfer of power to the notification appliances and transfer of condition to relays or devices.

**FIRE APPLIANCE.** The apparatus or equipment provided or installed for use in the event of an emergency.

**[F] MULTIPLE-STATION SMOKE ALARM.** Two or more single-station alarm devices that are capable of interconnection such that actuation of one causes the appropriate alarm signal to operate in all interconnected alarms. ~~all integral or separate audible alarms to operate.~~

**[F] SMOKE ALARM.** A single- or multiple-station alarm responsive to smoke, ~~and not connected to a system.~~

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50

References: Health and Safety Code Sections 13143

**[F]903.2 Where required.** Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section.

**Exceptions:**

1. Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ceiling assemblies.

2. Automatic fire sprinkler protection for Fixed Guideway Transit Systems shall be as per Chapter 433.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.2 Group E.** An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m<sup>2</sup>) in fire area.
2. Throughout every portion of educational buildings below the level of exit discharge.

**Exception:** An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

3. All new public school campus buildings as defined in Section 202.
4. All new permanent portable building as defined in Section 202.
5. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

*Note 904.2.4.4.1.3 [For SFM] Fire-Resistive Substitution for New Campus. A new public school campus as defined in Section 202 shall be entitled to include in the design and construction documents all of the applicable fire-resistive construction substitutions as permitted in ~~Section 508~~ by this code.*

Authority Cited: Health and Safety Code Sections 13108, 13143 and Education Code Section 17074.50.

References: Health and Safety Code Sections 13143.

**[F] 903.2.5 Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

**Exceptions:**

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed in Group I-1 facilities.
2. Those areas exempted by 407.5.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.5.1 Group I-3 .** *Every building, or portion thereof, where inmates are restrained shall be protected by an automatic sprinkler system conforming to NFPA 13. The main sprinkler control valve or valves and all other control valves in the system shall be locked in the open position and electrically supervised so that at least an audible and visual alarm will sound at a constantly attended location when valves are closed. The sprinkler branch piping serving cells may be embedded in the concrete construction.*

**EXCEPTION:** *Sprinklers are not required in cells housing two or fewer inmates and the building shall be considered sprinklered throughout when all the following criteria are met:*

1. *Automatic fire sprinklers shall be mounted outside the cell a minimum of 6 feet (1829 mm) on center and 12 inches (305 mm) from the wall with quick response sprinkler heads. Where spacing permits, the head shall be centered over the cell door opening.*
2. *The maximum amount of combustibles, excluding linen and clothing, shall be maintained at three pounds per inmate.*
3. *For local detention facilities, each individual housing cell shall be provided with a two-way inmate or sound-actuated audio monitoring system for communication directly to the control station serving the cell(s).*
4. *The provisions of the exception in Section 804.4.2 shall not apply.*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.6.1 High-piled storage.** An automatic sprinkler system shall be provided in accordance with the ~~International~~ California Fire Code in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**[F] 903.2.7 Group R** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

**Exceptions:** 1. Detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories above grade plane in height with a separate means of egress, unless specifically required by other sections of this Code.

2. Group U private garages accessory to a Group R-3 occupancy.

3. Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor, and not housing clients above the second floor.

4. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.

5. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

Authority Cited: Health and Safety Code Sections 13143, 13113, 13143.6, 17921

References: Health and Safety Code Sections 13143.

**[F] 903.2.11 During construction.** Automatic sprinkler systems required during construction, alteration and demolition operations shall be provided in accordance with the International California Fire Code.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**[F] 903.2.12.1 Ducts conveying hazardous exhausts.** Where required by the International California Mechanical Code, automatic sprinklers shall be provided in ducts conveying hazardous exhaust, or flammable or combustible materials.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] TABLE 903.2.13  
ADDITIONAL REQUIRED SUPPRESSION SYSTEMS**

SECTION	SUBJECT
914.2.1	Covered malls
914.3.1	High rise buildings
402.8	Covered malls
403.2, 403.3	High-rise buildings
404.3	Atriums
405.3	Underground structures
407.5	Group I-2
410.6	Stages
411.4	Special amusement buildings
412.2.5, 412.2.6	Aircraft hangars
415.6.2.4	Group H-2
416.4	Flammable finishes
417.4	Drying rooms

507	Unlimited area buildings
508.2	Incidental use areas
1025.6.2.3	Smoke-protected assembly seating
<u>430</u>	<u>Horse Racing Stables</u>
<u>431</u>	<u>Pet Kennels</u>
<u>439</u>	<u>Public Libraries</u>
<del>IFC-CFC</del>	Sprinkler system requirements as set forth in Section 903.2.13 of the <del>International</del> California Fire Code

Authority: Health and Safety Code Sections 13143, 122155

References: Health and Safety Code Sections 13143

**[F] 903.2.14 Motion Picture Production Studio Sound Stages, Approved Production Facilities and Production Locations.**

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.14.1 Existing Sound Stages and Approved Production Facilities.** All existing sound stages and approved production facilities equipped with an automatic fire sprinkler system shall be maintained in accordance with the provisions of California Fire Code Chapter 9.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.14.2 New Sound Stages.** All new sound stages shall be equipped with an approved automatic fire sprinkler system. The system shall be installed in accordance with the provisions of the California Fire Code Chapter 9 and shall meet the minimum design requirements of an Extra Hazard, Group 2 system.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] 903.2.15 Automatic sprinkler system – Existing high-rise buildings.** Regardless of any other provisions of these regulations, every existing high-rise building of Type II-B, Type III-B of Type V-B construction shall be provided with an approved automatic sprinkler system conforming to NFPA 13.

Authority Cited: Health and Safety Code Sections 13143, 13211.

References: Health and Safety Code Sections 13211

**[F] 903.2.15.1 Existing R-1 High-rise Buildings Fire-Extinguishing Systems.** See Section 3411.13.3.3.

Authority: Health and Safety Code Sections 13210, 13211

References: Health and Safety Code Sections 13211

**Relocated from 904.2.6.4, 2001 CBC)**

**904.2.6.4**~~[For SFM] Group H, Division 8 Occupancies~~ **[F] 903.2.16 Group L Occupancies.** An automatic sprinkler system shall be installed throughout buildings housing Group H, ~~Division 8~~ L Occupancies. Sprinkler system design for research laboratories and similar areas of a ~~Division 8~~ Group L Occupancy shall not be less than that required for Ordinary Hazard Group 3 ~~2~~ with a design area of not less than 3,000 square feet (279 m<sup>2</sup>).

*In mixed occupancies, portions of floors or buildings not classified as Group H, ~~Division 8~~ L Occupancies shall be provided with sprinkler protection designed of not less than that required for Ordinary Hazard Group 1 with a design area of not less than 3,000 square feet (279 m<sup>2</sup>).*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

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

Authority: Health and Safety Code Sections 13113, 13143  
References: Health and Safety Code Sections 13143

**[F] 903.3.5 Water supplies.** Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with Health and Safety Code 13114.7

Authority: Health and Safety Code Sections 13143, 13113, 13114.7  
References: Health and Safety Code Sections 13143

**[F] 903.5 Testing and maintenance.** Sprinkler systems shall be tested and maintained in accordance with the ~~International~~ California Fire Code

Authority: Health and Safety Code Sections 13143, 13113  
References: Health and Safety Code Sections 13143

**[F] 904.2.1 Commercial hood and duct systems.** Each required commercial kitchen exhaust hood and duct system required by the ~~International~~ California Fire Code or the ~~International~~ California Mechanical Code to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 904.3.1 Electrical wiring.** Electrical wiring shall be in accordance with this code or the ~~ICC~~ California Electrical Code.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 904.5 Wet-chemical systems.** Wet-chemical extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 17A and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195.

**[F] 904.6 Dry-chemical systems.** Dry-chemical extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 17 and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195.

**[F] 904.7 Foam systems.** Foam-extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 11 and NFPA 16 and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195.

**[F] 904.8 Carbon dioxide systems.** Carbon dioxide extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 12 and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195.

**[F] 904.9 Halon systems.** Halogenated extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 12A and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195.

**[F] 904.10 Clean-agent systems.** Clean-agent fire-extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with Title 19 CCR, Chapter 5 and NFPA 2001 and their listing.

Authority Cited: Health and Safety Code Sections 13195.  
References: Health and Safety Code Sections 13195

**[F] 904.11 Commercial cooking systems.** ~~The automatic fire extinguishing system for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Pre-engineered automatic dry and wet chemical extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. Other types of automatic fire extinguishing systems shall be listed and labeled for specific use as protection for commercial cooking operations. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire extinguishing systems of the following types shall be installed in accordance with the referenced standard indicated, as follows:~~

- ~~1. Carbon dioxide extinguishing systems, NFPA 12.~~
- ~~2. Automatic sprinkler systems, NFPA 13.~~
- ~~3. Foam-water sprinkler system or foam-water spray systems, NFPA 16.~~
- ~~4. Dry-chemical extinguishing systems, NFPA 17.~~
- ~~5. Wet-chemical extinguishing systems, NFPA 17A.~~

Commercial cooking equipment that produce grease laden vapors shall be provided with a Type I Hood, in accordance with the California Mechanical Code, and an automatic fire extinguishing system that is listed and labeled for its intended use as follows:

1. Wet chemical extinguishing system, complying with UL 300. All existing dry chemical and wet chemical extinguishing systems shall comply with UL 300, no later than the second required servicing of the system following the effective date of this section or January 2008, which ever occurs first.
2. Carbon dioxide extinguishing systems.
3. Automatic fire sprinkler systems.

**Exception** Public schools kitchens, without deep-fat fryers, shall be upgraded to a UL 300 compliant system during state funded modernization projects that are under the jurisdiction of the Division of the State Architect

All systems shall be installed in accordance with the California Mechanical Code, appropriate adopted standards, their listing and the manufacturers' installation instructions.

**Exception:** Factory-built commercial cooking recirculating systems that are tested, listed, labeled and installed in accordance with UL 710B, and listed, labeled and installed in accordance with Section 304.1 of the International Mechanical Code.

Authority Cited: Health and Safety Code Sections 13195.

References: Health and Safety Code Sections 13195.

**[F] 905.1 General.** Standpipe systems shall be provided in new buildings and structures in accordance with this section. Fire hose threads used in connection with standpipe systems shall be approved and shall be compatible with fire department hose threads. The location of fire department hose connections shall be approved. In buildings used for high-piled combustible storage, fire protection shall be in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13108, 13195

References: Health and Safety Code Sections 13195

**[F]905.3 Required installations.** Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.7 10.1 and in the locations indicated in Sections 905.4, 905.5 and 905.6. Standpipe systems are allowed to be combined with automatic sprinkler systems.

**Exception:** Standpipe systems are not required in Group R-3 occupancies.

Authority Cited: Health and Safety Code Sections 13195.

References: Health and Safety Code Sections 13195.

**[F] 905.3.6 Helistops and heliports.** Buildings with a helistop or heliport that are equipped with a standpipe shall extend the standpipe to the roof level on which the helistop or heliport is located in accordance with Section 1107.5 of the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 905.3.8 Smokeproof enclosures.** For smokeproof enclosures see Section 909.20.2.3.

Authority: Health and Safety Code Sections 13210, 13143, 13108

References: Health and Safety Code Sections 13143

**[F] 905.3.9 Wet Standpipes.** Housing units within cell complexes where 50 or more inmates are restrained, shall be provided with Class I standpipes. In addition, Class I standpipes shall be located so that it will not be necessary to extend hose lines through interlocking security doors and any doors in smoke-barrier walls, horizontal exit walls and area or occupancy separation walls. Standpipes located in cell complexes may be placed in secured pipe chases.

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

**[F]905.3.10 Fixed Guideway Transit Systems.** Underground stations shall be provided with a class III standpipe system designed to comply with the following:

1. Automatically supply ~~the required flow at~~ 65 pounds per square inch (psi) for each 1 1/2-inch (38 mm) outlet.
2. Supply a 250 gpm (946 L/m) flow to each of the two most remote 2 1/2 inch (64 mm) outlets when pressurized through the fire department connection(s).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F]905.3.10.1** All other stations shall be provided with a class I manual wet standpipe system; a manual dry class I standpipe system may be allowed in areas subject to freezing.

**Exception:** Open at-grade stations with unrestricted fire department access need not be provided with a standpipe system.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 905.5 Location of Class II standpipe hose connections.** Class II standpipe hose connections shall be accessible and shall be located so that all portions of the building are within 30 feet (9144 mm) of a listed variable stream fog nozzle attached to 100 feet (30 480 mm) of hose.

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

**[F] 906.1 General.** Portable fire extinguishers shall be provided in occupancies and locations as required by the International California Fire Code.

Authority: Health and Safety Code Sections 13160, 13190, 14143  
References: Health and Safety Code Sections 13143

**[F]907.1.2 Equipment.** Systems and their components shall be California State Fire Marshal listed and approved for the purpose for which they are installed.

Authority Cited: Health and Safety Code Sections 13114, 13143.  
References: Health and Safety Code Sections 13143.

**[F] 907.1.3 Fire-walls** For the purpose of Section 907 fire walls shall not define separate buildings.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**[F] 907.1.4. Fire alarm use** A fire alarm system shall not be used for any purpose other than fire warning or mass notification unless approved by the authority having jurisdiction.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**[F] 907.2 Where required.** An approved manual, automatic or manual and automatic fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.9, unless other requirements are provided by another section of this code. Where automatic sprinkler protection installed in accordance with Section 903.3.1.1 or 903.3.1.2 is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.

The automatic fire detectors shall be smoke detectors. Where ambient conditions prohibit installation of automatic smoke detection, other automatic fire detection shall be allowed where approved.

A minimum of one fire alarm box shall be installed for each fire alarm system at a location approved by the authority having jurisdiction.

**Exception:** Fire alarm systems dedicated to elevator recall control and supervisory service.

Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**[F]907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more.** Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with NFPA 72. Group A occupancies with an occupant load of 10,000 or more, see Section 907.2.1.3.

**Exception:** Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 907.2.1.3 Public address system.** Pursuant to Health and Safety Code Section 13108.9, a public address system with an emergency backup power system shall be required for all buildings or structures constructed on or after July 1, 1991, which are intended for public assemblies of 10,000 or more persons.

Existing buildings or structures intended for public assemblies of 10,000 or more persons, which, on or after January 1, 1991 have or subsequently have installed a public address system, shall have an emergency backup power system for the public address system.

Authority: Health and Safety Code Sections 13108.9  
References: Health and Safety Code Sections 13143

**[F] 907.2.3 Group E.** A manual *and automatic* fire alarm system shall be installed in Group E Occupancies—*with an occupant load of 50 or more persons or containing more than one classroom or one or more rooms used for day care purposes.* When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

**Exceptions:**

~~1. Group E occupancies with an occupant load of less than 50.~~

~~2.1~~ Manual fire alarm boxes are not required in Group E occupancies where all the following apply:

~~2.1.1.~~ Interior corridors are protected by smoke detectors with alarm verification.

~~2.1.2.~~ Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved detection devices.

~~2.1.3.~~ Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

~~2.1.4.~~ Off-premises monitoring is provided.

~~2.1.5.~~ The capability to activate the evacuation signal from a central point is provided.

~~2.1.6.~~ In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the building official.

~~3.2~~ Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.1 System connection** *When more than one fire alarm control unit is used at the school campus, they shall be interconnected and shall operate all ~~indicating devices~~ notification appliances.*

**EXCEPTION:** *Interconnection of fire alarm control units is not required when:*

- 1. Buildings that are separated a minimum of 20 feet (6096 mm) and in accordance with the California Building Code,*
- 2. There is a method of communication between each classroom and the school administrative office approved by the fire authority having jurisdiction.*

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.2 School Fire Alarms.** *Except as provided in Section ~~4006.2.4.1~~ 907.3 every building used for educational purposes, regardless of occupancy classification shall be provided with an approved fire alarm system. This provision shall apply to, but shall not necessarily be limited to, every elementary school, high school, community college and university.*

**EXCEPTION:** *Privately owned trade or vocational schools or any firm or company which provides educational facilities and instructions for its employees.*

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.3 Notification.** *The system notification shall be consistent with the requirements for audible and visible notification requirements of Section 907 and ~~the~~ NFPA 72 as amended in Chapter 35. Audible notification shall*

comply with the American National Standards Institute (ANSI) S3.41 Emergency Evacuation Signal. An audible alarm notification appliance shall be mounted on the exterior of buildings to alert occupants in and around the playground area.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.4 *Annunciation.* Annunciation of the fire alarm system shall comply with the requirements of Section 907.8.**

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.5 *Supervising Station.* Fire alarm systems shall transmit the alarm, supervisory and trouble signals to an approved supervising station in accordance with NFPA 72. The supervising station shall be listed as either UUFX (Central Station) or UUJS (remote & proprietary) by the Underwriters Laboratory Inc. (UL) or shall comply with the requirements of standard, FM 3011 Approval Standard for Central Station Service for Fire Alarm and Protective Equipment Supervision, 1999 edition.**

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.6 *PUBLIC SCHOOL –SMOKE DETECTORS.***

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.6.1 *Automatic Detection.* Smoke detectors shall be used as the primary method of automatic alarm initiation except in areas where the environment or ambient conditions exceed smoke detector installation guidelines; another method of automatic detection shall be used. In areas containing sprinklers, heat detectors where installed in lieu of smoke detectors may be omitted. Smoke detectors shall be designed, installed and maintained in accordance with Section 907 and NFPA 72 as amended in Article 94 Chapter 35.**

*Smoke detectors shall be located at the ceiling of every room and area. In buildings provided with an approved automatic fire sprinkler system Where the ceiling creates a “ceiling-plenum” or a space above the ceiling for non-environmental air, automatic sprinklers shall be installed to protect such spaces of buildings, ~~that house and or serve students from kindergarten through twelfth grade (K-12) and are sited on a new public school campus as defined in section 215.~~*

*Heat detectors shall be installed in such spaces where sprinklers are not installed. Heat detectors shall be installed and maintained in accordance with Section 907 and NFPA 72 as amended in Article 94 Chapter 35.*

*Where the ceiling is attached directly to the underside of the roof structure, automatic smoke detectors shall be installed on the ceiling only. Smoke detectors are not required in non-accessible areas as defined in Section 240 202.*

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.7 *PUBLIC SCHOOL – AUTOMATIC FIRE ALARM SYSTEM REQUIREMENTS.***

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.7.1 *New Public School Campus.*** On or after July 1, 2002, a State Fire Marshal approved and listed automatic fire alarm system shall be provided on all new public school campus as defined in ~~§~~Section ~~245~~ 202. The approved fire alarm system shall be both automatic and manual and maintained in accordance with Section 907 ~~the California Electrical Code~~ and Article ~~94~~ Chapter 45. At least one manual box shall be installed for the purpose of manually initiating the fire alarm system.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.7.2 *Modernization Project.*** A State Fire Marshal approved and listed fire alarm system shall be provided in all modernization projects as defined in Section ~~244~~ 202. The approved fire alarm system shall be both automatic and manual and maintained in accordance with Section 907 ~~the California Electrical Code~~ and Article ~~94~~ Chapter 35. When the requirements of this section are met, manual fire alarm boxes are not required throughout the modernization project. At least one manual box shall be installed for the purpose of manually initiating the fire alarm system.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.8 *PORTABLE BUILDINGS –AUTOMATIC FIRE ALARM SYSTEM REQUIRMENTS***

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.8.1 *Permanent-Portable Buildings.*** A portable building that is used to serve or house students from kindergarten through twelfth grade (K-12) and is certified as a permanent building on a new public school campus by the public school administration shall comply with the requirements of Section ~~4006.2.4.4.1~~ 907.2.3.7.1.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.8.2 *Permanent-Portable Building Modernization Project.*** A permanent-portable building to undergo modernization efforts, and is used to serve or house students from kindergarten through twelfth grade (K-12) that is certified as a permanent building by the public school administration shall comply with the requirements of Section ~~4006.2.4.4.2~~ 907.2.3.7.2.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.3.8.3 *Exempted Portable Building.*** A portable building as defined in Section ~~247~~ 202 that is certified by the public school administration as being sited on campus for less than three years is not required to install an automatic fire detection system ~~automatic alarm~~ or automatic sprinkler system.

Authority: Health and Safety Code Sections 13108, 13143 Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

**[F] 907.2.5 Group H.** A manual fire alarm system shall be installed in Group H-5 occupancies and in occupancies used for the manufacture of organic coatings. An automatic smoke detection system shall be installed for highly toxic gases, organic peroxides and oxidizers in accordance with Chapters 37, 39 and 40, respectively, of the International California Fire Code.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.6 Group I.** A manual fire alarm system shall be installed in Group I occupancies. An electrically supervised, automatic smoke detection system shall be provided in accordance with Sections 907.2.6.1 and 907.2.6.2.

~~**Exception:** Manual fire alarm boxes in resident or patient sleeping areas of Group I-1 and I-2 occupancies shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.3.1 are not exceeded. Large family day care.~~

Authority Cited: Health and Safety Code Sections 1502, 1569.72, 13131, 13143.6.  
References: Health and Safety Code Sections 13143.6.

**[F] 907.2.6.1 Group I-1 Occupancies**

Authority Cited: Health and Safety Code Sections 1502, 1569.72, 13131, 13143.6.  
References: Health and Safety Code Sections 13143.6.

**[F] 907.2.6.1.1 Group I-1 Occupancies. Licensed Group I-1 Occupancies housing more than six non-ambulatory, elderly clients shall be provided with an approved manual and automatic fire alarm system.**

**Exception:** Buildings housing non-ambulatory clients on the first story only, and which are protected throughout by all the following:

1. An approved and supervised automatic sprinkler system, which upon activation will initiate the fire alarm system to notify all occupants.
2. A manual fire alarm system in accordance with this section.

Authority Cited: Health and Safety Code Sections 1502, 1569.72, 13143.6 13131.5, 13143.6.  
References: Health and Safety Code Sections 13131.5.

**[F] 907.2.6.1.2 Group I-1.** Corridors, habitable spaces other than sleeping units and kitchens, and waiting areas that are open to corridors shall be equipped with an automatic smoke detection system.

**Exceptions:**

1. Smoke detection in habitable other than sleeping spaces is not required where the facility is equipped throughout with an automatic sprinkler system.
2. Smoke detection is not required for exterior balconies.

Authority Cited: Health and Safety Code Sections 1502, 1569.72, 13143.6 13131, 13143.6.  
References: Health and Safety Code Sections 13143.

~~**[F] 907.2.6.2 Group I-2, Group I 2.1** Corridors in nursing homes (both intermediate care and skilled nursing facilities), detoxification facilities and spaces permitted to be open to the corridors by Section 407.2 of the International Building Code shall be equipped with an automatic fire detection system. Hospitals shall be equipped with smoke detection as required in Section 407.2 of the International Building Code.~~

**Exceptions:**

1. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each patient sleeping unit and shall provide an audible and visual alarm at the nursing station attending each unit.

2. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping unit doors are equipped with automatic door closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function. An approved manual and automatic fire alarm system shall be provided for Group I-2 and I-2.1 occupancies. Audible appliances shall be used in non-patient areas. Visible appliances may be used in lieu of audible appliances in patient-occupied areas. Audible appliances placed in patient areas shall be only chimes or similar sounding appliances for alerting staff. An automatic smoke detection system shall be provided.

**Exceptions:**

1. Heat detectors may be used in closets, unusable space under floor areas, storage rooms, bathrooms, attics, kitchens, laundry rooms and rooms of similar use.

2. When an entire facility is used for the housing of persons, none of whom are physically or mentally handicapped or non-ambulatory, and are between the ages of 18 and 64, the buildings or structures comprising such facility shall be exempt from the provisions of this subsection relating to the installation of an automatic fire alarm system.

In occupancies housing non-ambulatory persons where restraint is practiced, staff and attendants shall be provided and housed or located in such a manner that such supervisory personnel will also be alerted upon activation of any detector required by this section.

Automatic closing doors shall comply with Section 715.4.7.3.

Authority Cited: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143.

**[F]907.2.6.2.1**

Smoke detectors shall be installed in patient and client sleeping rooms. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and visual alarm at the respective nurses' station. A nurse call system listed for this function is an acceptable method of providing the audible and visual alarm at the respective nurses station.

**Exception:** In rooms equipped with existing automatic door closers having integral smoke detector, the integral detector may substitute for the room smoke detector, provided it meets all the required alerting function.

Operation of the smoke detector shall not include any alarm verification feature.

Authority: Health and Safety Code Sections 13113, 13131, 13143.6

References: Health and Safety Code Sections 13143

**[F] 907.2.6.3.3 Smoke detectors.** An approved automatic smoke detection system shall be installed throughout resident housing areas, including sleeping units and contiguous day rooms, group activity spaces and other common spaces normally accessible to residents.

**Exceptions:** ~~4. Other approved smoke detection arrangements providing equivalent protection including, but not limited to, placing detectors in exhaust ducts from cells or behind protective guards listed for the purpose are allowed when necessary to prevent damage or tampering. may be used to prevent damage or tampering or for other purposes provided the function of detecting any fire is fulfilled and the location of the detectors is such that the speed of detection will be equivalent to that provided by the spacing and location required in accordance with NFPA 72 as referenced in Chapter 35. This may include the location of detectors in return air ducts from cells, behind grilles or in other locations.~~

Spot type, combination duct and open area smoke detectors may be used when located not more than 14 inches (356mm) from the return air grill. For initiation and annunciation purposes, these detectors may be combined in groups of four. The fire code official having jurisdiction, however, must approve the proposed equivalent performance of the design.

~~2. Sleeping units in Use Conditions 2 and 3.~~

~~3. Smoke detectors are not required in sleeping units with four or fewer occupants in smoke compartments that are equipped throughout with an approved automatic sprinkler system sleeping unit has an exit directly to a public way, exit court or yard.~~

Authority: Health and Safety Code Sections 13143,13108

References: Health and Safety Code Sections 13143

**[F] 907.2.6.3.4 System annunciation** A staff alerting fire alarm shall sound at all staff control stations on the floor of activation and an audible and visual signal shall be indicated on an annunciator at the facility control center upon activation of any automatic extinguishing system, automatic detection system, or any smoke detector or manual actuating or initiating device. In addition, where there are staff-control stations on the floor, an audible, visual and manual alarm shall be located in each staff control station.

Fire and trouble signals of fire alarm systems and sprinkler water-flow and supervisory signals of extinguishing systems shall be annunciated in an area designated as the facility control center which shall be constantly attended by staff personnel. All such signals shall produce both an audible signal and visual display at the facility control center indicating the building, floor zone or other designated area from which the signal originated in accordance with Section 907.8.

All local detention facilities within the scope of Section 6031.4 of the Penal Code shall have a automatic smoke detection system. A manual fire alarm-initiating device shall be installed in all guard control stations and shall be capable of alerting personnel in a central control point to the presence of fire or smoke within the facility.

Authority: Health and Safety Code Sections 13143 and Penal Code Section 6031.4

References: Health and Safety Code Sections 13143

**[F] 907.2.6.4. Large family day-care.** Every large family day-care home shall be provided with at least one manual device at a location approved by the authority having jurisdiction. Such device shall actuate a fire alarm signal, which shall be audible throughout the facility at a minimum level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel or be electrically supervised or provided with emergency power. Such device or devices shall be attached to the structure and may be of any type acceptable to the enforcing agent, provided that such devices are distinctive in tone and are audible throughout the structure.

Authority Cited: Health and Safety Code Sections 1597.46,

References: Health and Safety Code Sections 1597.46.

**[F] 907.2.8 Group R-1 and Group R-4.** Fire alarm systems shall be installed in Group R-1 and Group R-4 occupancies as required in Sections 907.2.8.1 through 907.2.8.34.

Authority Cited: Health and Safety Code Section 13143

References: Health and Safety Code Section 13143.

**[F] 907.2.8.4 Fire alarm systems in Group R-4 occupancies.** An approved manual and automatic fire alarm system shall be installed in Group R-4 occupancies.

**Exceptions:**

1. Protective social care occupancies housing persons none of whom are physically or mentally handicapped or nonambulatory and which provide supervisory services such as alcoholism or drug

abuse recovery or treatment facilities., halfway houses operated by the California Department of Corrections, and similar facilities and are provided with a manual fire alarm box which will actuate a distinctive fire alarm signal that can be heard throughout the facility.  
2 Protective social care facilities provided with an automatic sprinkler system which complies with Chapter 9 and are provided with a manual fire alarm box which will actuate a distinctive fire alarm signal that can be heard throughout the facility.

**[F] 907.2.10 Single- and multiple-station smoke alarms.** Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with the provisions of this code and the household fire-warning equipment provisions of NFPA 72.

*Relocated from CFC 1006.2.9.1.6-Exception [For SFM] For Group R occupancies. A fire alarm system with smoke detectors located in accordance with this section ~~the CBC~~ may be installed in lieu of smoke alarms. Upon actuation of the detector, only those notification appliances in the dwelling unit or guest room where the detector is actuated shall activate.*

Authority Cited: Health and Safety Code Sections 13108, 13143.  
References: Health and Safety Code Sections 13143.

**[F] 907.2.10.1.1 Group R-1.** Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

1. In sleeping areas.
2. In every room in the path of the means of egress from the sleeping area to the door leading from the sleeping unit.
3. In each story within the sleeping unit, including basements. For sleeping units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. In apartment complexes and other multiple-dwelling complexes, a smoke alarm shall be installed in the common stairwells.

Authority Cited: Health and Safety Code Sections 13108, 13143.  
References: Health and Safety Code Sections 13143.

**[F]907.2.10.1.2 Groups R-2, R-3, R-3.1, R-4 and I-1.** Single- or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-3.1, R-4 and I-1 regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. In apartment complexes and other multiple-dwelling complexes, a smoke alarm shall be installed in the common stairwells.
5. In a Group R-3.1 occupancies licensed for 24-hour care, smoke alarms shall be provided throughout the habitable areas of the dwelling unit.

Authority Cited: Health and Safety Code Sections 13108, 13143.  
References: Health and Safety Code Sections 13143.

**[F] 907.2.10.1.4 Group I-4 Occupancies.** Large family day-care homes shall be equipped with State Fire Marshal approved and listed single station residential type smoke alarms.

Authority Cited: Health and Safety Code Sections 1569.72, 13143.6.

References: Health and Safety Code Sections 13143.

**907.2.10.1.5 Group R-3.1** *In all facilities housing a bedridden client, smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall be electrically interconnected so as to cause all smoke alarms to sound a distinctive alarm signal upon actuation of any single smoke alarm. Such alarm signal shall be audible throughout the facility at a minimal level of 15 db above ambient noise level. These devices need not be interconnected to any other fire alarm device, have a control panel, or be electrically supervised or provided with emergency power.*

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**907.2.10.5** *(Relocated from 2001 CBC 310.16) ~~310.16 [For SFM] Group R, Division 3 Occupancies.~~*

Authority Cited: Health and Safety Code Sections 13143, 13113.7 & 13113.8

References: Health and Safety Code Sections 13143.

**907.2.10.5.1** *(Relocated from 2001 CBC 310.16.3.1) ~~310.16.1 [For SFM] Existing Buildings housing Group R, Division 3 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.*

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**907.2.10.5.1.2** *(Relocated from 2001 CBC 310.16.2) ~~310.16.2 [For SFM] For purposes of clarification, Health and Safety Code section 13113.7 is repeated.~~*

*(a) Except as otherwise provided in this section, a smoke detector, approved and listed by the State Fire Marshal pursuant to Section 13114, shall be installed, in accordance with the manufacturer's instructions in each dwelling intended for human occupancy within the earliest applicable time period as follows:*

*(1) For all dwelling units intended for human occupancy, upon the owner's application on or after January 1, 1985, for a permit for alterations, repairs, or additions, exceeding one thousand dollars (\$1,000).*

*(2) For all other dwelling units intended for human occupancy on or after January 1, 1987.*

*However, if any local rule, regulation, or ordinance, adopted prior to the compliance dates specified in paragraphs (1) and (2) requires installation in a dwelling unit intended for human occupancy of smoke detector, which receive their power from the electrical system of the building and requires compliance with the local rule, regulation, or ordinance at a date subsequent to the dates specified in this section, the compliance date specified in the rule, regulation, or ordinance shall, but only with respect to the dwelling units specified in this section, take precedence over the dates specified in this section.*

*The State Fire Marshal may adopt regulations exempting dwellings intended for human occupancy with fire sprinkler systems from the provisions of this section, if he or she determines that a smoke detector is not reasonably necessary for fire safety in the occupancy.*

*Unless prohibited by local rules, regulations, or ordinances, a battery-operated smoke detector which otherwise meets the standards adopted pursuant to Section 13114 for smoke detectors, satisfies the requirements of this section.*

*(b) "Dwelling units intended for human occupancy," as used in this section, includes a duplex, lodging house, apartment complex, hotel, motel, condominium, stock cooperative, time-share project, or dwelling unit of a multiple-unit dwelling complex. For the purpose of this part, "dwelling units intended for human occupancy" does not include*

manufactured homes as defined in Section 18007, mobile homes as defined in Section 18008, and commercial coaches as defined in 18001.8.

(c) The owner of each dwelling unit subject to this section shall supply and install smoke detectors required by this section in the locations and in the manner set forth in the manufacturer's instructions, as approved by the State Fire Marshal's regulations. In the case of apartment complexes and other multiple-dwelling complexes, a smoke detector shall be installed in the common stairwells. All fire alarm warning systems supplemental to the smoke detector shall also be listed by the State Fire Marshal.

(d) A high rise structure, as defined in subdivision (b) of Section 13210 and regulated by Chapter 3 (commencing with Section 13210), and which is used for purposes other than as dwelling units intended for human occupancy, is exempt from the requirements of this section.

(e) The owner shall be responsible for testing and maintaining detectors in hotels, motels, lodging houses, and common stairwells of apartment complexes and other multiple dwelling complexes.

An owner or the owner's agent may enter any dwelling unit, efficiency dwelling unit, guest room, and suite owned by the owner for the purpose of installing, repairing, testing, and maintaining single station smoke detectors required by this section. Except in cases of emergency, the owner or owner's agent shall give the tenants of each such unit, room, or suite reasonable notice in writing of the intention to enter and shall enter only during normal business hours. Twenty-four hours shall be presumed to be reasonable notice in absence of evidence to the contrary.

The smoke detector shall be operable at the time that the tenant takes possession. The apartment complex tenant shall be responsible for notifying the manager or owner if the tenant becomes aware of an inoperable smoke detector within his or her unit. The owner or authorized agent shall correct any reported deficiencies in the smoke detector and shall not be in violation of this section for a deficient smoke detector when he or she has not received notice of the deficiency.

(f) A violation of this section is an infraction punishable by a maximum fine of two hundred dollars (\$200) for each offense.

(g) This section shall not affect any rights which the parties may have under any other provision of law because of the presence or absence of a smoke detector.

(h) This section shall not apply to the installation of smoke detectors in single-family dwellings or factory-built housing which is regulated by Section 13113.8, as added by Assembly Bill No. 2285 of the 1983-84 Regular Session.

Authority Cited: Health and Safety Code Sections 13143.

References: Health and Safety Code Sections 13143.

**907.2.10.5.3** (Relocated from 2001 CBC 310.16.3) ~~310.16.3 [For SFM]~~ For purposes of clarification, Health and Safety Code section 13113.8 is repeated.

(a) On and after January 1, 1986, every single-family dwelling and factory-built housing, as defined in Section 19971, which is sold shall have an operable smoke detector. The detector shall be approved and listed by the State Fire Marshal and installed in accordance with the State Fire Marshal's regulations. Unless prohibited by local rules, regulations, or ordinances, a battery-operated smoke detector shall be deemed to satisfy the requirements of this section.

(b) On and after January 1, 1986, the transferor of any real property containing a single-family dwelling, as described in subdivision (a), whether the transfer is made by sale, exchange, or real property sales contract, as defined in Section 2985 of the Civil Code, shall deliver to the transferee a written statement indicating that the transferor is in compliance with this section. The disclosure statement shall be either included in the receipt for deposit in a real estate transaction, an addendum attached thereto, or a separate document.

(c) The transferor shall deliver the statement referred to in subdivision (b) as soon as practicable before the transfer of title in the case of a sale or exchange, or prior to execution of the contract where the transfer is by a real property sales contract, as defined in Section 2985. or purposes of this subdivision, "delivery" means delivery in person or by mail to the transferee or transferor, or to any person authorized to act for him or her in the transaction, or to additional transferees who have requested delivery from the transferor in writing. Delivery to the spouse of a transferee or transferor shall be deemed delivery to a transferee or transferor, unless the contract states otherwise.

(d) This section does not apply to any of the following:

(1) Transfers which are required to be preceded by the furnishing to a prospective transferee of a copy of a public report pursuant to Section 11018.1 of the Business and Professions Code.

(2) Transfers pursuant to court order, including, but not limited to, transfers ordered by a probate court in the administration of an estate, transfers pursuant to a writ of execution, transfers by a trustee in bankruptcy, transfers by eminent domain, or transfers resulting from a decree for specific performance.

(3) Transfers to a mortgagee by a mortgagor in default, transfers to a beneficiary of a deed of trust by a trustor in default, transfers by any foreclosure sale after default, transfers by any foreclosure sale after default in an obligation

secured by a mortgage, or transfers by a sale under a power of sale after a default in an obligation secured by a deed of trust or secured by any other instrument containing a power of sale.

(4) Transfers by a fiduciary in the course of the administration of a decedent's estate, guardianship, conservatorship, or trust.

(5) Transfers from one co-owner to one or more co-owners.

(6) Transfers made to a spouse, or to a person or persons in the lineal line of consanguinity of one or more of the transferors.

(7) Transfers between spouses resulting from a decree of dissolution of a marriage, from a decree of legal separation, or from a property settlement agreement incidental to either of those decrees.

(8) Transfers by the Controller in the course of administering the Unclaimed Property Law provided for in Chapter 7 (commencing with Section 1500) of Title 10 of Part 3 of the Code of Civil Procedure.

(9) Transfers under the provisions of Chapter 7 (commencing with Section 3691) or Chapter 8 (commencing with Section 3771) of Part 6 of Division 1 of the Revenue and Taxation Code.

(e) No liability shall arise, nor any action be brought or maintained against, any agent of any party to a transfer of title, including any person or entity acting in the capacity of an escrow, for any error, inaccuracy, or omission relating to the disclosure required to be made by a transferor pursuant to this section.

However, this subdivision does not apply to a licensee, as defined in Section 10011 of the Business and Professions Code, where the licensee participates in the making of the disclosure required to be made pursuant to this section with actual knowledge of the falsity of the disclosure.

(f) Except as otherwise provided in this section, this section shall not be deemed to create or imply a duty upon a licensee, as defined in Section 10011 of the Business and Professions Code, or upon any agent of any party to a transfer of title, including any person or entity acting in the capacity of an escrow, to monitor or ensure compliance with this section.

(g) No transfer of title shall be invalidated on the basis of a failure to comply with this section, and the exclusive remedy for the failure to comply with this section is an award of actual damages not to exceed one hundred dollars (\$100), exclusive of any court costs and attorney's fees.

(h) Local ordinances requiring smoke detectors in single-family dwellings may be enacted or amended. However, the ordinances shall satisfy the minimum requirements of this section.

(i) For the purposes of this section, "single-family dwelling" does not include a manufactured home as defined in Section 18007, a mobile home as defined in Section 18008, or a commercial coach as defined in Section 18001.8.

(j) This section shall not apply to the installation of smoke detectors in dwellings intended for human occupancy, as defined in and regulated by Section 13113.7 of the Health and Safety Code, as added by Senate Bill No. 1448 in the 1983-84 Regular Session.

Authority: Health and Safety Code Sections 13113.7, 13113.8, 13143

References: Health and Safety Code Sections 13143

**[F]907.2.12 High-rise buildings.** ~~High-rise buildings with a floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department building access shall be provided with an automatic fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.2.12.2.~~

**Exceptions:** 1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412.

2. Open parking garages in accordance with Section 406.3.

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1.

4. Low-hazard special occupancies in accordance with Section 503.1.1.

5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.

Authority Cited: Health and Safety Code Sections 13143, 13210.

References: Health and Safety Code Sections 13143.

**[F] 907.2.12.2 Emergency voice/alarm communication system.** The operation of any automatic fire detector, sprinkler water-flow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation on a minimum of the alarming floor, the floor above and the floor below in accordance with the building's fire safety and evacuation plans required by Section 404 of the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949

References: Health and Safety Code Sections 13143

**[F] 907.2.14 High-piled combustible storage areas.** An automatic fire detection system shall be installed throughout high-piled combustible storage areas where required by the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**[F] 907.2.15 Delayed egress locks.** Where delayed egress locks or devices are installed on means of egress doors in accordance with Section 1008.1.8.6, an automatic smoke ~~or heat~~ detection-system shall be installed as required by ~~this section~~ and Section 1008.1.8.6.

Authority: Health and Safety Code Sections 1569.698, 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.15.1.** In other than Group I Occupancies and Group R-4 Occupancies for single-story buildings smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces. For multiple-story buildings smoke detectors shall be installed throughout all occupied areas and mechanical/electrical spaces for the story where ~~special~~ delayed egress ~~control~~ devices are installed. Additional detectors are required on adjacent stories where occupants of those stories utilize the same exit egress.

Authority: Health and Safety Code Sections 1569.698, 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.15.2 For Group I Occupancies.** Smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke-compartments where delayed egress devices are installed. Additional detectors are required in adjacent smoke-compartments where occupants of those compartments utilize the same exit egress.

Authority: Health and Safety Code Sections 1569.698, 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.15.3 For Group R-4 Occupancies licensed as residential care facilities for the elderly, and housing clients with Alzheimer's disease or dementia residential facilities.** Smoke detectors shall be installed at ceilings throughout all occupiable rooms and areas and mechanical/electrical rooms and spaces.

Authority: Health and Safety Code Sections 1569.698, 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.16 Aerosol storage uses.** Aerosol storage rooms and general-purpose warehouses containing aerosols shall be provided with an approved manual fire alarm system where required by the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**[F] 907.2.24 Motion Picture Production Studio Sound Stages and Approved Production Facilities**

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.24.1 Sound Stages -Solid-ceiling Sets and Platforms.** All interior solid-ceiling sets over 600 square feet (55.7 m<sup>2</sup>) in area, and platforms (when provided) over 600 square feet (55.7 m<sup>2</sup>) in area and which exceed 3 feet (914 mm) in height shall be protected by one of the following:

1. An approved and listed heat detector system. Heat detectors shall be spaced 30 feet (9144 mm) on center or as required by the manufacturer's installation instructions. Detectors shall be connected to an approved and listed central, proprietary or remote station service or a local alarm which will give an audible signal at a constantly attended location. Such system shall be installed in accordance with CFC Chapter Article 9.
2. The ceiling shall be positioned to allow for the operation of the building's automatic fire sprinkler system after rehearsal, videotaping, filming, or broadcasting of programs has been completed for the day.
3. An approved fire watch.
4. Special hazards shall be reviewed by the Fire Code Official (see Additional Fire Protection Systems, CFC Section 901.4.3).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.24.2 Production Locations -Solid-ceiling Sets and Platforms.** In buildings with existing fire protection systems and where production intends to construct solid-ceiling sets over 600 square feet (55.7 m<sup>2</sup>) in area, and platforms over 600 square feet (55.7 m<sup>2</sup>) in area and which exceed 3 feet (914 mm) in height shall be protected by one of the following:

1. An approved and listed heat detector system. Heat detectors shall be spaced 30 feet (9144 mm) on center or as required by the manufacturer's installation instructions. Detectors shall be connected to an approved and listed central, proprietary or remote station service or a local alarm which will give an audible signal at a constantly attended location. Such system shall be installed in accordance with CFC Chapter 9.
2. The ceiling shall be positioned to allow for the operation of the building's automatic fire sprinkler system after rehearsal, videotaping, filming, or broadcasting of programs has been completed for the day.
3. An approved fire watch.
4. Special hazards shall be reviewed by the authority having jurisdiction (see additional fire protection systems, CFC Section 901.4.3).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.24.3 Fire Alarm Control Units.** Fire alarm control units shall be California State Fire Marshal listed and shall be utilized in accordance with their listing. Control units may be temporarily supported by sets, platforms or pedestals.

Authority: Health and Safety Code Sections 13114  
References: Health and Safety Code Sections 13143

**[F] 907.2.24.4 Heat Detectors.** Heat detection required by this section shall be defined as a portable system as it is intended to be reinstalled when platforms or sets are changed.

Heat detectors shall be secured to standard outlet boxes which may be temporarily supported by sets, platforms or pedestals. Heat detectors shall be provided for solid-ceiling sets and platforms where required by California Fire Code, Section 4605.3 and 4611.14, .

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**907.2.25 Group C Occupancies (Every organized camp).**

Authority: Health and Safety Code Sections 18897.3  
References: Health and Safety Code Sections 18897.3

**[F] 907.2.25.1 General.** Every building and structure used or intended for sleeping purposes shall be provided with an automatic smoke-detector system.

- Exceptions:** 1. Buildings and structures in existence and in operation prior to January 11, 1985.  
2. Tents, tent structures and buildings and structures that do not exceed 25 ft (7620mm) in any lateral dimensions and where such building or structure is not more than one story.

Authority: Health and Safety Code Sections 18897.3  
References: Health and Safety Code Sections 13143

**[F] 907.2.25.2 Camp Fire Alarm.** Every organized camp shall provide and maintain a device or devices suitable for sounding a fire alarm. Such device or devices may be of any type acceptable to the enforcing agency provided they are distinctive in tone from all other signaling devices or systems and shall be audible throughout the camp premises. When an automatic fire alarm system is provided, as required by Section 440.6.6, all signaling devices required by this section shall be of the same type as that used in the automatic system.

Authority: Health and Safety Code Sections 18897.3  
References: Health and Safety Code Sections 13143

**[F] 907.2.26 Fixed Guideway Transits Systems Fire Alarm and Communication Systems.**

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.26.1 General.** Every fixed guideway transit station shall be provided with an approved fire alarm system. The alarm and communication systems shall be proprietary, designed and installed so that damage to any one speaker will not render any paging zone of the system inoperative.

**Exception:** Open stations.

The voice alarm and public address system may be a combined system. When approved by the fire department, a communications system may be combined with the voice alarm system and the public address system. Such combined systems shall meet the requirements of the California Electric Code.

**[F] 907.2.26.2 System components.** Each station fire alarm system shall consist of:

1. Fire alarm control panel unit at a location as permitted by the authority having jurisdiction.
2. An alarm annunciator(s). The annunciator(s) shall be located at a point acceptable to the authority having jurisdiction. The annunciator(s) shall indicate the type of device and general location of alarm. All alarm, supervisory and trouble signals shall be transmitted to the local annunciator(s) and the (Operations Control Center (OCC)).
3. Manual fire alarm boxes ~~pull stations~~ shall be provided throughout passenger platforms and stations.

**Exception:** Voice alarm reporting devices (emergency telephones) may be used in lieu of manual fire alarm boxes ~~pull stations~~ as permitted by the authority having jurisdiction.

*Such devices shall provide two-way communication between the OCC and each device. Such devices shall be located as required for manual fire alarm pull boxes, and shall be distinctly identified by signs, coloring, or other means acceptable to the authority having jurisdiction.*

4. *Automatic smoke detectors in all ancillary spaces.*

**Exceptions:** 1. *Ancillary spaces protected by an approved fixed automatic extinguishing system; or*  
2. *Ancillary spaces protected by quick-response sprinklers.*

5. *Automatic control of exiting components.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.26.3 Combined voice alarm/public address system.** *Each station shall be provided with a one-way paging system(s) capable of transmitting voice, tape or electronically generated messages to all areas of the station. The system(s) shall be configured such that the messages can be initiated from either the Emergency Management Panel (EMP) or the OCC.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.26.4 Emergency telephones.** *A dedicated emergency phone system shall be provided in all underground stations to facilitate direct communications for emergency response between remote locations and the EMP.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.26.4.1** *The remote phones shall be located at ends of station platforms, each hose outlet connection and station valve rooms.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.2.26.4.2** *Provisions shall be made in the design of this system for extensions of the system to the next passenger station or guideway portal.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**907.2.27 Winery Caves.** *An approved manual fire alarm system conforming to the provisions of Section 907.2.1 Article 10, Section 1007.2.2 shall be provided in all Type 3 winery caves.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**(Relocated for 305.9.3, 2001 CBC)**

**[F] 907.2.28 Group L** *A manual fire alarm system shall be installed throughout buildings containing a Group L Occupancy.*

Authority: Health and Safety Code Sections 13143, 13210, 13108,  
References: Health and Safety Code Sections 13143

**Relocated from CBC Chapter 35, Section 3505.1, Subsection 2-8.2.4.**

**[F] 907.3.1 Location.** Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each exit. Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200 feet (60 960 mm).

***Exception:*** *When individual dwelling units are served by a single exit stairway, additional boxes at other than the ground floor may be omitted.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.3.5 Operation.**

Manual fire alarm boxes shall be operable with one hand including boxes with protective covers.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.3.6 Protective covers.** The fire code official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless approved. Each cover shall not exceed a combined projection over 4 inches (102 mm) from the surface of the wall into walks, halls, corridors, passageways or isles.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.5 Wiring.** Wiring shall comply with the requirements of this code or the ~~ICC~~ California Electrical Code and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.6 Activation.** Where an alarm notification system is required by another section of this code, it shall be activated by:

1. A ~~required~~ automatic fire alarm system.
2. Sprinkler water-flow devices.
3. ~~Required~~ manual fire alarm boxes.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.8 Zones.** Fire alarm systems shall be divided into zones where required by this section. For the purposes of annunciation and notification, zoning shall be in accordance with the following:

1. Where the fire-protective signaling system serves more than one building, each building shall be considered as a separate zone.
2. Each floor of a building shall be considered as a separate zone.
3. Each section of floor of a building that is separated by fire walls or by horizontal exits shall be considered as a separate zone.
4. Each zone shall not exceed 22,500 square feet (2090 m<sup>2</sup>). The length of any zone shall not exceed 300 feet (91 440 mm) in any direction.

**Exception:** Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13.

5. Annunciation shall be further divided into zones where deemed necessary by the authority having jurisdiction.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**[F] 907.8.1 Annunciation.** Alarm, supervisory and trouble signals shall be annunciated in the main control unit by means of an audible signal and a visual display in accordance with NFPA 72. Identification of the type of alarm and supervisory initiating devices, such as manual, automatic, sprinkler waterflow, sprinkler valve supervisory, fire-pump supervisory, etc., shall be separately indicated.

**Exception:** Group R, 3 Occupancies.

Authority: Health and Safety Code Sections 13143,  
References: Health and Safety Code Sections 13143

**[F] ~~907.8.1~~ 907.8.2 Zoning indicator Annunciator Panel** An annunciator ~~zoning indicator~~ panel complying with 907.8.1 and the associated controls shall be provided in an approved remote location where deemed necessary by the Authority Having Jurisdiction. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible alarm-silencing switch.

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

**[F] 907.8.2 907.8.3 High-rise buildings.** In high-rise buildings with a floor used for human occupancy that is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle building access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

Authority: Health and Safety Code Sections 13143, 13210, 13108  
References: Health and Safety Code Sections 13143

**[F] 907.8.4 Notification Zoning.** Upon activation of initiating devices where occupant notification is required for evacuation, all notification zones shall operate simultaneously throughout the building.

**Exceptions:**

1. High-rise buildings as permitted in Section 907.2.12.2.
2. Hospitals and convalescent facilities with staff alerting notification appliances or voice / alarm communication, zoning shall be in accordance with the approved fire plan.

3. Detention facilities

4. Upon approval by the fire code official in buildings which are sprinklered throughout, specific notification zoning shall be permitted where the notification zones are separated by a minimum of a 2 hour fire barrier and 2 hour fire-resistive floor assembly. The system shall have the capability to activate all other notification zones by automatic and manual means.

5. Upon approval by the fire code official in buildings which are sprinklered throughout, specific notification zoning shall be permitted where the activated initiating device or fire extinguishing system is separated from any non-active notification zones by a minimum of 300 ft horizontal distance. The system shall have the capability to activate all other notification zones by automatic and manual means.

Authority: Health and Safety Code Sections 13143, 13210, 13108

References: Health and Safety Code Sections 13143

**[F] 907.9.1 Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.9.1.1 through 907.9.1.4 ~~5~~.

**Exceptions:**

1. In other than Group I-2 and I-2.1, visible alarm notification appliances are not required in alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

2. Visible alarm notification appliances shall not be required in ~~exits as defined in Section 1002.1~~ enclosed exit stairways, exterior exit stairs, and exterior exit ramps.

Authority: Health and Safety Code Sections 13143, 13108

References: Health and Safety Code Sections 13143

*(Relocated from 2001 CBC, 3505.1 Sec. 4.4.5)*

**[F] 907.9.1.1 Public and common use areas.** Visible alarm notification appliances shall be provided in public use areas and common use areas including but not limited to:-

~~3505.1 Sec. 4.4.5 Notification Appliances for the Hearing Impaired. Approved visible alarm notification appliances for the hearing impaired shall be installed in the following areas:~~

1. Sanitary facilities including Restrooms, bathrooms and showrooms
2. Corridors
3. Music practice rooms
4. Band rooms
5. Gymnasiums
6. Multipurpose rooms
7. Occupational shops
8. Occupied rooms where ambient noise impairs hearing of the fire alarm
9. Lobbies
10. Meeting rooms
11. Any other areas for common use Classrooms

~~**Note:** This section is also adopted by the Division of the State Architect, Access Compliance, for buildings not regulated by the State Fire Marshal.~~

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**[F] 907.9.1.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with ~~ICC-A117-1~~ NFPA 72.

Authority: Health and Safety Code Sections 13143, 13108

References: Health and Safety Code Sections 13143

**[F]907.9.1.5 Group I-1, R-3.1 and R-4 Protective social care facilities which house persons which are hearing impaired, shall be provided with notification appliances for the hearing impaired installed in accordance with NFPA 72 and which shall activated upon initiation of the fire alarm system or the smoke alarms.**

Authority: Health and Safety Code Section 13143  
References: Health and Safety Code Section 13143

**[F] 907.9.2 Audible alarms.** Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: ~~70~~ 75 dBA in occupancies in Groups R and I-1; 90 dBA in mechanical equipment rooms and 60 dBA in other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be ~~120~~ 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than ~~105~~ 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

In group I-2 occupancies, audible appliances placed in patient areas shall be only chimes or similar sounding devices for alerting staff.

**Exception:** Visible alarm notification appliances shall be allowed in lieu of audible alarm notification appliances in ~~critical care~~ patient areas of Group I-2 occupancies.

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

**907.9.2.1 Audible Alarm Signal.** The audible signal shall be the standard fire alarm evacuation signal, ANSI S3.41 Audible Emergency Evacuation Signal, "three pulse temporal pattern", as described in NFPA 72.

**Exception:** The use of the existing evacuation signaling scheme shall be permitted where approved by the authority having jurisdiction.

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

**[F] 907.10 Fire safety functions.** Automatic fire detectors utilized for the purpose of performing fire safety functions shall be connected to the building's fire alarm control ~~panel~~ unit where a fire alarm system is ~~required~~ installed by Section 907.2. Detectors shall, upon actuation, perform the intended function and activate the alarm notification appliances or a visible and audible supervisory signal at a constantly attended location. In buildings not required to be equipped with a fire alarm system, the automatic fire detector shall be powered by normal electrical service and, upon actuation, perform the intended function. The detectors shall be located in accordance with NFPA 72.

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

**[F] 907.11 Duct smoke detectors.** Duct smoke detectors shall be connected to the building's fire alarm control ~~panel~~ unit when a fire alarm system is provided. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location. Duct smoke detectors shall not be used as a substitute for required open-area detection.

**Exceptions:** 1. The supervisory signal at a constantly attended location is not required where duct smoke

detectors activate the building's alarm notification appliances.

2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

Authority: Health and Safety Code Sections 13143, 13108

References: Health and Safety Code Sections 13143

**[F] 907.14 Monitoring.** Fire alarm systems required by this chapter or the ~~International~~ California Fire Code shall be monitored by an approved supervising station in accordance with NFPA 72.

**Exception:** Supervisory service is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.10.
2. ~~Smoke detectors in~~ Group I-3 occupancies shall be monitored in accordance with Section 907.2.6.3.
3. Automatic sprinkler systems in one- and two-family dwellings.

Authority: Health and Safety Code Sections 13143, 13108

References: Health and Safety Code Sections 13143

**[F] 907.16 Acceptance tests.** Upon completion of the installation of the fire alarm system, alarm notification appliances and circuits, alarm-initiating devices and circuits, supervisory-signal initiating devices and circuits, signaling line circuits, ~~and~~ primary and secondary power supplies, fire safety function control devices and interfaces, and off-site monitoring equipment shall be tested in accordance with NFPA 72.

**[F]** Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**907.19 Inspection, testing and maintenance.** The maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] 908.6 Refrigerant detector.** Machinery rooms shall contain a refrigerant detector with an audible and visual alarm. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The alarm shall be actuated at a value not greater than the corresponding TLV-TWA values for the refrigerant classification indicated in the ~~International~~ California Mechanical Code. Detectors and alarms shall be placed in approved locations.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**[F] 909.1 Scope and purpose.** This section applies to mechanical or passive smoke control systems when they are required by other provisions of this code. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat-venting provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the ~~International~~ California Mechanical Code.

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

**[F] 909.5.2 Opening protection.** Openings in smoke barriers shall be protected by self-closing devices or automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by fire door assemblies complying with Section 715.4.3.

**Exceptions:**

1. Passive smoke control systems with automatic-closing devices actuated by spot-type smoke detectors listed for releasing service installed in accordance with Section 907.10. When used in a Group I-2, such detectors shall activate the fire alarm system.
2. Fixed openings between smoke zones that are protected utilizing the airflow method in other than Group I-2.
3. In Group I-2, where doors are installed across corridors, a pair of opposite-swinging doors without a center mullion or horizontal sliding doors that comply with section 1008.1.3.3 shall be installed. ~~shall be installed having vision panels with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested.~~ Vision panels consisting of fire-rated glazing in approved frames shall be provided in each cross-corridor swinging door and at each cross-corridor horizontal-sliding door in a smoke barrier. The doors shall be close fitting within operational tolerances, and shall not have undercuts, louvers or grilles. ~~The Swinging~~ doors shall have head and jamb stops, and astragals or rabbets at meeting edges, and Doors installed across corridors shall be automatic closing by smoke detection in accordance with Section 715.4.7.3. Positive-latching devices are ~~not~~ required. Doors installed across corridors shall comply with Section 1008.1.1.
4. Group I-3.
5. Openings between smoke zones with clear ceiling heights of 14 feet (4267 mm) or greater and bank-down capacity of greater than 20 minutes as determined by the design fire size.
6. In Group I-2, smoke damper activation may be accomplished by a fire alarm control unit provided that an open area smoke detection system is provided within all areas served by an HVAC system.

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

**[F] 909.10.2 Ducts.** Duct materials and joints shall be capable of withstanding the probable temperatures and pressures to which they are exposed as determined in accordance with Section 909.10.1. Ducts shall be constructed and supported in accordance with the ~~International~~ California Mechanical Code. Ducts shall be leak tested to 1.5 times the maximum design pressure in accordance with nationally accepted practices. Measured leakage shall not exceed 5 percent of design flow. Results of such testing shall be a part of the documentation procedure. Ducts shall be supported directly from fire-resistance-rated structural elements of the building by substantial, noncombustible supports.

**Exception:** Flexible connections (for the purpose of vibration isolation) complying with the ~~International~~ California Mechanical Code, that are constructed of approved fire-resistance-rated materials.

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

**[F] 909.11 Power systems.** The smoke control system shall be supplied with two sources of power. Primary power shall be from the normal building power system. Secondary power shall be from an approved standby source complying with the ~~ICC~~ California Electrical Code. The standby power source and its transfer switches shall be in a separate room from the normal power transformers and switch gear and shall be enclosed in a room constructed of not less than 1-hour fire barriers ventilated directly to and from the exterior. Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with this code or the ~~ICC~~ California Electrical Code.

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

**[F] 909.12.1 Wiring.** In addition to meeting requirements of the ~~ICC~~ *California Electrical Code*, all wiring, regardless of voltage, shall be fully enclosed within continuous raceways.

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

**[F] 909.16.1 Smoke control systems.** Fans within the building shall be shown on the fire-fighter's control panel. A clear indication of the direction of airflow and the relationship of components shall be displayed. Status indicators shall be provided for all smoke control equipment, annunciated by fan and zone, and by ~~pilot lamp type~~ approved indicators as follows:

1. Fans, dampers and other operating equipment in their normal status—WHITE.
2. Fans, dampers and other operating equipment in their off or closed status—RED.
3. Fans, dampers and other operating equipment in their on or open status—GREEN.
4. Fans, dampers and other operating equipment in a fault status—YELLOW/AMBER.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**[F] 909.16.3 Control action and priorities.** The firefighter's control panel actions shall be as follows:

1. ON-OFF and OPEN-CLOSE control actions shall have the highest priority of any control point within the building. Once issued from the fire-fighter's control panel, no automatic or manual control from any other control point within the building shall contradict the control action. Where automatic means are provided to interrupt normal, non-emergency equipment operation or produce a specific result to safeguard the building or equipment (i.e., duct freeze stats, duct smoke detectors, high-temperature cutouts, temperature-actuated linkage and similar devices), such means shall be capable of being overridden by the fire-fighter's control panel. The last control action as indicated by each fire-fighter's control panel switch position shall prevail. In no case shall control actions require the smoke control system to assume more than one configuration at any one time.

**Exception:** Power disconnects required by the ~~ICC~~ *California Electrical Code*.

2. Only the AUTO position of each three-position fire-fighter's control panel switch shall allow automatic or manual control action from other control points within the building. The AUTO position shall be the NORMAL, non-emergency, building control position. Where a fire-fighter's control panel is in the AUTO position, the actual status of the device (on,off, open, closed) shall continue to be indicated by the status indicator described above. When directed by an automatic signal to assume an emergency condition, the NORMAL position shall become the emergency condition for that device or group of devices within the zone. In no case shall control actions require the smoke control system to assume more than one configuration at any one time.

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

**[F] 909.20 Smokeproof enclosures.** Where required by Section 1020.1.7, a smokeproof enclosure shall be constructed in accordance with this section. A smokeproof enclosure shall consist of an enclosed interior exit stairway that conforms to Section 1020.1 and an open exterior balcony or ventilated vestibule meeting the requirements of this section. Where access to the roof is required by the ~~International~~ *California Fire Code*, such access shall be from the smokeproof enclosure where a smokeproof enclosure is required.

Authority: Health and Safety Code Sections 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.2.1 Vestibule doors.** *The door assembly from the building into the vestibule shall be a 90-minute fire door assembly complying with Section 715.4.4. The door assembly from the vestibule to the stairway shall not have less than a 20-minute fire protection rating and complying with the requirements for a smoke door assembly in accordance with Section 715.4.3. The door shall be installed in accordance with NFPA-105.*

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.2.42 Door closers.** Doors in a smokeproof enclosure shall be self- or automatic closing by actuation of a smoke detector installed at the floor-side entrance to the smokeproof enclosure. The actuation of the smoke detector on any door shall activate the closing devices on all doors in the smokeproof enclosure at all levels. Smoke detectors shall be installed in accordance with Section 907.10.

Authority: Health and Safety Code Sections 13143, 13108, 13210  
References: Health and Safety Code Sections 13143

**909.20.2.3 Standpipes.** *Fire department standpipe connections and valves serving the floor shall be within the vestibule and located in such a manner so as not to obstruct egress where hose lines are connected and charged.*

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.3 Pressure differences.** *The minimum pressure differences within the vestibule with the doors closed shall be 0.05-inch water gage (12.44 Pa) positive pressure relative to the fire floor and 0.05-inch water gage (12.44 Pa) negative pressure relative to the exit enclosure. No pressure difference is required relative to a nonfire floor.*

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.3 4 Natural ventilation alternative.** The provisions of Sections 909.20.3-4.1 ~~through~~ and 909.20.3-3 4.2 shall apply to ventilation of smokeproof enclosures by natural means.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.3-4.1 Balcony doors.** Where access to the stairway is by way of an open exterior balcony, the door assembly into the enclosure shall be a fire door assembly in accordance with Section 715.4.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

~~**909.20.3.2 Vestibule doors.** Where access to the stairway is by way of a vestibule, the door assembly into the vestibule shall be a fire door complying with Section 715.4. The door assembly from the vestibule to the stairway shall have not less than a 20 minute fire protection rating complying with Section 715.4.~~

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.3.3 4.2 Vestibule ventilation.** Each vestibule shall have a minimum net area of 16 square feet (1.5 m<sup>2</sup>) of opening in a wall facing an outer court, yard or public way that is at least 20 feet (6096 mm) in width.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

~~**909.20.4 Mechanical ventilation alternative.** The provisions of Sections 909.20.4.1 through 909.20.4.4 shall apply to ventilation of smokeproof enclosures by mechanical means.~~

~~**909.20.4.1 Vestibule doors.** The door assembly from the building into the vestibule shall be a fire door assembly complying with Section 715.4.3. The door assembly from the vestibule to the stairway shall not have less than a 20-minute fire protection rating and meet the requirements for a smoke door assembly in accordance with Section 715.4.3. The door shall be installed in accordance with NFPA 105.~~

~~**909.20.4.2 Vestibule ventilation.** The vestibule shall be supplied with not less than one air change per minute and the exhaust shall not be less than 150 percent of supply. Supply air shall enter and exhaust air shall discharge from the vestibule through separate, tightly constructed ducts used only for that purpose. Supply air shall enter the vestibule within 6 inches (152 mm) of the floor level. The top of the exhaust register shall be located at the top of the smoke trap but not more than 6 inches (152 mm) down from the top of the trap, and shall be entirely within the smoke trap area. Doors in the open position shall not obstruct duct openings. Duct openings with controlling dampers are permitted where necessary to meet the design requirements, but dampers are not otherwise required.~~

~~**909.20.4.2.1 Engineered ventilation system.** Where a specially engineered system is used, the system shall exhaust a quantity of air equal to not less than 90 air changes per hour from any vestibule in the emergency operation mode and shall be sized to handle three vestibules simultaneously. Smoke detectors shall be located at the floor-side entrance to each vestibule and shall activate the system for the affected vestibule. Smoke detectors shall be installed in accordance with Section 907.10.~~

~~**909.20.4.3 Smoke trap.** The vestibule ceiling shall be at least 20 inches (508 mm) higher than the door opening into the vestibule to serve as a smoke and heat trap and to provide an upward moving air column. The height shall not be decreased unless approved and justified by design and test.~~

~~**909.20.4.4 Stair shaft air movement system.** The stair shaft shall be provided with a dampered relief opening and supplied with sufficient air to maintain a minimum positive pressure of 0.10 inch of water (25 Pa) in the shaft relative to the vestibule with all doors closed.~~

~~**909.20.5 Stair pressurization alternative.** Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the vestibule is not required, provided that interior exit stairways are pressurized to a minimum of 0.15 inch of water (37 Pa) and a maximum of 0.35 inch of water (87 Pa) in the shaft relative to the building measured with all stairway doors closed under maximum anticipated stack pressures.~~

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

**909.20.6 5 Ventilating equipment.** The activation of ventilating equipment required by ~~the alternatives in Sections 909.20.4.3 and 909.20.5~~ shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure and upon activation of the automatic controls required by Section 909.12.3. When the closing device for the stair shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.10.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**909.20.6 5.1 Ventilation systems.** Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment and ductwork shall comply with one of the following:

1. Equipment and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by 2-hour fire barriers.
2. Equipment and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by 2-hour fire barriers.
3. Equipment and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by 2-hour fire barriers.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

**[F] 910.2.2 High-piled combustible storage.** Buildings and portions thereof containing high-piled combustible stock or rack storage in any occupancy group in accordance with Section 413 and the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

### Table 910.3

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929m<sup>2</sup>.

- a. Requirements for rack storage heights in excess of those indicated shall be in accordance with Chapter 23 of the ~~International~~ California Fire Code. For solid-piled storage heights in excess of those indicated, an approved engineered design shall be used.
- b. The distance specified is the maximum distance from any vent in a particular draft curtained area to walls or draft curtains which form the perimeter of the draft curtained area.
- c. Where draft curtains are not required, the vent-area-to-floor-area ratio shall be calculated based on a minimum draft curtain depth of 6 feet (Option 1).
- d. "H" is the height of the vent, in feet, above the floor.

Authority: Health and Safety Code Sections 13108, 13143, 13210  
References: Health and Safety Code Sections 13143

## FIRE COMMAND CENTER

**[F]911.1 Features.** Where required by other sections of this code and in all buildings classified as high-rise buildings by the ~~International~~ Building Code, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. The fire command center shall be separated from the remainder of the building by not less than a 1-hour fire barrier constructed in accordance with Section 706 of the ~~International~~ Building Code or horizontal assembly constructed in accordance with Section 711 of the ~~International~~ Building Code, or both. The room shall be a minimum of 96 square feet (9 m<sup>2</sup>) with a minimum dimension of 8 feet (2438 mm). A layout of the fire command center and all features required by this section to be contained therein shall be submitted for approval prior to installation. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system unit.
2. The fire department communications system.
3. Fire-detection and alarm system annunciator system.
4. Annunciator visually indicating the location of the elevators and whether they are operational.

5. Status indicators and controls for air-handling 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 water-flow 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.
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. (Relocated from 2001 CBC, 403.6.2) **403.6.2 Annunciation identification.** *[For SFM] Central control stations Fire command centers shall not be used for the housing of any boiler, heating unit, generator, combustible storage, or similar hazardous equipment or storage.*~~

Authority: Health and Safety Code Sections 13210  
References: Health and Safety Code Sections 13210

**[F] 912.3. Access.** Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object for a minimum of 3 feet (914 mm).  
**Exception:** *When acceptable to the fire authority having jurisdiction, fire department connections for Group I-3 detention facilities may be located inside all security walls or fences on the property.*

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

**[F] 912.5 Backflow protection.** The potable water supply to automatic sprinkler and standpipe systems shall be protected against backflow as required by the Health and Safety Code 13114.7 ~~International Plumbing Code.~~

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

## CHAPTER 10 MEANS OF EGRESS

**(Note: Adopt entire chapter with amendments.)**

**[F]1001.3 Maintenance.** Means of egress shall be maintained in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

### SECTION 1002

**PHOTOLUMINESCENT** *is the property of emitting light as the result of absorption of visible light, which continues for a length time after excitation.*

**SELF-LUMINOUS** means powered continuously by a self-contained power source other than a battery or batteries, such as radioactive tritium gas. A self-luminous sign is independent of external power supplies or other energy for its operation.

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

**1003.1 Applicability.** The general requirements specified in Sections 1003 through 1013 shall apply to all three elements of the means of egress system, in addition to those specific requirements for the exit access, the exit and the exit discharge detailed elsewhere in this chapter.

**Exception:** *Exiting requirements for Fixed Guideway Transit Systems shall be as per Section 433.3.*

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

**1003.2 Ceiling height.** The means of egress shall have a ceiling height of not less than 7 feet 6 inches (2286 mm).

**Exceptions:**

1. Sloped ceilings in accordance with Section 1208.2.
2. Allowable projections in accordance with Section 1003.3.
3. Stair headroom in accordance with Section 1009.2.
4. Door height in accordance with Section 1008.1.1.
5. *In Group I-2, I-2.1 and I-3 occupancies, corridors and exit passageways shall have a ceiling height of not less than 8 feet (2439mm).*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1003.3 Protruding objects.** Protruding objects shall comply with the requirements of Sections 1003.3.1 through 1003.3.4.

**Exception:** *In Group I-2 and Group I-2.1 occupancies, protruding objects shall not extend more than 12 inches (305 mm) below the minimum ceiling height required by Section 1003.2.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1003.3.3.1 Horizontal projections for Group I-2 occupancies.** *Structural elements, fixtures or furnishings shall not project horizontally from either side more than 1-1/2 inches (38 mm) into the required width of an exit access corridor serving any area caring for one or more nonambulatory or bedridden persons.*

**Exceptions:**

1. *Handrails are permitted to protrude 3.5 inches (89 mm) from the wall.*
2. *Alcohol-based hand-rub dispensers are permitted to protrude 4 inches.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1003.5 Elevation change.** Where changes in elevation of less than 12 inches (305 mm) exist in the means of egress, sloped surfaces shall be used. Where the slope is greater than one unit vertical in 20 units horizontal (5-percent

slope), ramps complying with Section 1010 shall be used. Where the difference in elevation is 6 inches (152 mm) or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

**Exceptions:**

1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2 and R-3 and Groups S and U at exterior doors not required to be accessible by Chapter 11.
2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1009.3, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.
3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1025.11 and the aisle is provided with a handrail complying with Section 1025.13.

Any change in elevation in a corridor *or exit passageway* serving non-ambulatory persons in Group I-2 *and Group I-2.1* occupancies shall be by means of a ramp or sloped walkway.

Authority: Health and Safety Code Sections 13143  
 References: Health and Safety Code Sections 13143

**TABLE 1005.1 EGRESS WIDTH PER OCCUPANT SERVED**

OCCUPANCY	WITHOUT SPRINKLER SYSTEM		WITH SPRINKLER SYSTEM <sup>a</sup>	
	Stairways (inches per occupant)	Other egress components (inches per occupant)	Stairways (inches per occupant)	Other egress components (inches per occupant)
Occupancies other than those listed below	0.3	0.2	0.2	0.15
Hazardous: H-1, H-2, H-3 and H-4	<del>0.7</del> NA	<del>0.4</del> NA	<del>0.3</del> 0.7	<del>0.2</del> 0.4
Institutional: I-2	NA	NA	0.3	0.2

For SI: 1 inch = 25.4 mm.

a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Authority Cited: Health and Safety Code Sections 13143.  
 References: Health and Safety Code Sections 13143.

**1006.1 Illumination required.** The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

**Exceptions:**

1. Occupancies in Group U.
2. Aisle access ways in Group A.
3. Dwelling units and sleeping units in Groups R-1, R-2 and R-3.
4. Sleeping units of Group I occupancies *and Group R-4*.

Authority: Health and Safety Code Sections 1569.72, 13133, 13143, 13143.6  
 References: Health and Safety Code Sections 13143

**1007.1 Accessible means of egress required.** Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Section 1015.1 or 1019.1 from any accessible space, each accessible portion of the space shall be served by ~~not less than two~~ accessible means of egress *in at least the same number as required by Section 1015.1 or 1019.1. In addition to the requirements of this chapter, means of egress, which provide access to,*

or egress from, buildings for persons with disabilities, shall also comply with the requirements of Chapters 11A or 11B as applicable.

**Exceptions:**

1. Accessible means of egress are not required in alterations to existing buildings.
2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1007.3, 1007.4 or 1007.5.
3. In assembly spaces with sloped floors, one accessible means of egress is required from a space where the common path of travel of the accessible route for access to the wheelchair spaces meets the requirements in Section 1025.8.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**1007.6.1 Size.** Each area of refuge shall be sized to accommodate ~~one~~ two wheelchair spaces that are not less than ~~of~~ 30 inches by 48 inches (762 mm by 1219 mm). The total number of such 30-inch by 48-inch (762 mm by 1219 mm) spaces per story shall be not less than one for every 200 persons of calculated occupant load served by the area of rescue refuge, for each 200 occupants or portion thereof, based on the occupant load of the area of refuge and areas served by the area of refuge. Such wheelchair spaces shall not reduce the required means of egress width. Access to any of the required wheelchair spaces in an area of refuge shall not be obstructed by more than one adjoining wheelchair space

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

~~1114B.2.4~~**1007.9 [For SFM] Alarms/emergency warning systems/accessibility.** *If emergency warning systems are required, they shall activate a means of warning the hearing impaired. Emergency warning systems as part of the fire-alarm system shall be designed and installed in accordance with NFPA 72 as amended in Chapter 35.*

Authority: Health and Safety Code Sections 13108, 13114, 13143

References: Health and Safety Code Sections 13143

**1008.1.1 Size of doors.** The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 32 inches (813 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. Means of egress doors in a Group I-2 occupancy used for the movement of beds and litter patients shall provide a clear width not less than ~~41.5~~ 44 inches (1054 mm). The height of doors shall not be less than 80 inches (2032 mm).

**EXCEPTIONS:**

1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in Group R-2 and R-3 occupancies.
2. Door openings to resident sleeping units in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m<sup>2</sup>) in area shall not be limited by the minimum width.
4. Width of door leaves in revolving doors that comply with Section 1008.1.3.1 shall not be limited.
5. Door openings within a dwelling unit or sleeping unit shall not be less than 78 inches (1981 mm) in height.
6. Exterior door openings in dwelling units and sleeping units, other than the required exit door, shall not be less than 76 inches (1930 mm) in height.

7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be an Accessible unit, Type A unit or Type B unit .
8. Door openings required to be accessible within Type B units shall have a minimum clear width of 31.75 inches (806 mm) .

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**1008.1.1.1 Projections into clear width.** There shall not be projections into the required clear width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

**Exception:** *In a Group I-2 occupancy, there shall be no projections into the clear width of doors used for the movement of beds and litter patients in the means of egress .*

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**1008.1.2 Door swing.** Egress doors shall be side-hinged swinging.

**Exceptions:**

1. Private garages, office areas, factory and storage areas with an occupant load of 10 or less.
2. Group I-3 occupancies used as a place of detention.
3. Critical or intensive care patient rooms within suites of health care facilities.
4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.
5. In other than Group H occupancies, revolving doors complying with Section 1008.1.
6. In other than Group H occupancies, horizontal sliding doors complying with Section 1008.1.3.3 are permitted in a means of egress.
7. Power-operated doors in accordance with Section 1008.1.3.2.
8. Doors serving a bathroom within an individual sleeping unit in Group R-1.  
Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons or a Group H occupancy.
9. In a Group I-2 occupancy, all required exterior egress doors shall open in the direction of egress regardless of the occupant load served.
10. In I-2 and I-2.1 occupancies, exit doors serving an occupant load of 10 or more, may be of the pivoted or balanced type.

The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15-pound (67 N) force. Forces shall be applied to the latch side.

Authority: Health and Safety Code Sections 13108, 13143

References: Health and Safety Code Sections 13143

**1008.1.3.4 Access-controlled egress doors.** The entrance doors in a means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, M, R-1 and R-2, that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke detection system installed in accordance with Section 907, are permitted to be equipped with an approved entrance and egress access control system which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.

2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—~~independent of the access control system electronics~~—and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, ~~if provided~~, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, ~~if provided~~, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, ~~E~~ or M shall not be secured from the egress side during periods that the building is open to the general public.

Authority: Health and Safety Code Sections 13108, 13143  
References: Health and Safety Code Sections 1314

**1008.1.8.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapters 11A or 11B shall not require tight grasping, tight pinching or twisting of the wrist to operate.

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

**1008.1.8.6 Delayed egress locks.** Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 ~~or~~ and an approved automatic smoke ~~or heat~~ detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through ~~6~~ 9 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit. Delayed egress devices shall conform to all of the following:

1. The doors unlock upon actuation of the automatic sprinkler system or automatic ~~fire~~ smoke detection system.
2. The doors unlock upon loss of electrical power controlling the lock or lock mechanism, to any one of the following:
  - 2.1 The egress-control device itself.
  - 2.2 The smoke detection system.
  - 2.3 Means of egress illumination as required by Section 1006.
3. The door locks shall have the capability of being unlocked by a signal from ~~the fire command center~~, a switch located in an approved location.
4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only. The time delay established for each egress-control device shall not be field adjustable.

**Exception:** ~~Where approved,~~ In facilities housing Alzheimer's or dementia clients, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: ~~PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECOMDS. "KEEP PUSHING. THIS DOOR WILL OPEN IN 15 [30] SECONDS. ALARM WILL SOUND"~~ Sign lettering shall be at least 1 inch (25mm) in height and shall have a stroke of not less than 1/8 inch (3.2 mm). (Relocated from 2001 CBC 1003.3.1.10) A tactile sign shall also be provided in Braille and raised characters, which complies with Section 1117B.5.1.1.
6. Emergency lighting shall be provided at the door.
7. Actuation of the panic bar or other door-latching hardware shall activate an audible signal at the door.
8. The unlatching shall not require more than one operation.

9. Regardless of the means of deactivation, relocking of the egress-control device shall be by manual means only at the door.

Authority Cited: Health and Safety Code Sections 13108, 13143, 13210.  
References: Health and Safety Code Sections 13143.

**1008.1.9 Panic and fire exit hardware.** Where panic and fire exit hardware is installed, it shall comply with the following:

1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.
2. The maximum unlatching force shall not exceed 15 pounds (67 N).

Each door in a means of egress from a Group A<sub>1</sub> or E, I-2 or I-2.1 occupancy having an occupant load of 50 or more and any Group H occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

**Exception:** A main exit of a Group A occupancy in compliance with Section 1008.1.8.3, Item 2.

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide that contain overcurrent devices, switching devices or control devices with exit access doors must be equipped with panic hardware and doors must swing in the direction of egress. In addition, assembly areas not classified as an assembly occupancy, with an occupant of 50 or more, shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

If balanced doors are used and panic hardware is required, the panic hardware shall be the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1009.1 Stairway width.** The width of stairways shall be determined as specified in Section 1005.1, but such width shall not be less than 44 inches (1118 mm). See Section 1007.3 for accessible means of egress stairways.

**Exceptions:**

1. Stairways serving an occupant load of less than 50 shall have a width of not less than 36 inches (914 mm).
2. Spiral stairways as provided for in Section 1009.8.
3. Aisle stairs complying with Section 1025.
4. Where an incline platform lift or stairway chairlift is installed on stairways serving occupancies in Group R-3, or within dwelling units in occupancies in Group R-2, a clear passage width not less than 20 inches (508 mm) shall be provided. If the seat and platform can be folded when not in use, the distance shall be measured from the folded position.

Means of egress stairs in a Group I-2 occupancy used for the movement of beds and litter patients shall provide a clear width not less than 44 inches (1118 mm).

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1009.4 Stairway landings.** There shall be a floor or landing at the top and bottom of each stairway. The width of landings shall not be less than the width of stairways they serve. Every landing shall have a minimum dimension measured in the direction of travel equal to the width of the stairway. Such dimension need not exceed 48 inches (1219 mm) where the stairway has a straight run.

**Exceptions:**

1. Aisle stairs complying with Section 1025.
2. Doors opening onto a landing shall not reduce the landing to less than one-half the required width. When fully open, the door shall not project more than 7 inches (178 mm) into a landing.
3. In Group R-3 occupancies a floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.

Authority: Health and Safety Code Sections 13143, 17921

References: Health and Safety Code Sections 13143

**1009.10 Handrails.** Stairways shall have handrails on each side and shall comply with Section 1012. Where glass is used to provide the handrail, the handrail shall also comply with Section 2407 of the ~~International~~ California Building Code.

**Exceptions:**

1. Aisle stairs complying with Section 1025 provided with a center handrail need not have additional handrails.
2. Stairways within dwelling units, spiral stairways and aisle stairs serving seating only on one side are permitted to have a handrail on one side only.
3. Decks, patios and walkways that have a single change in elevation where the landing depth on each side of the change of elevation is greater than what is required for a landing do not require handrails.
4. ~~In Group R-3 occupancies, a change in elevation consisting of a single riser at an entrance or egress door does not require handrails.~~ a continuous run of treads or flight of stairs with less than four risers does not require handrails.
5. Changes in room elevations of only one riser within dwelling units and sleeping units in Group R-2 and R-3 occupancies do not require handrails.

Authority: Health and Safety Code Sections 13143, 17921

References: Health and Safety Code Sections 13143

**1011.1 Where required.** Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. Access to exits shall be marked by readily visible exit signs in cases where the exit or the path of egress travel is not immediately visible to the occupants. Exit sign placement shall be such that no point in a corridor is more than 100 feet (30 480 mm) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.

**Exceptions:**

1. Exit signs are not required in rooms or areas that require only one exit or exit access.
2. Main exterior exit doors or gates that are obviously and clearly identifiable as exits need not have exit signs where approved by the building official.
3. Exit signs are not required in occupancies in Group U and individual sleeping units or dwelling units in Group R-1, R-2 or R-3.
4. Exit signs are not required in ~~sleeping areas in occupancies in~~ Group I-3 occupancies where inmates are housed, or held.
5. In occupancies in Groups A-4 and A-5, exit signs are not required on the seating side of vomitories or openings into seating areas where exit signs are provided in the concourse that are readily apparent from the vomitories. Egress lighting is provided to identify each vomitory or opening within the seating area in an emergency.

Authority Cited: Health and Safety Code Sections 13108, 13143, 13210.

References: Health and Safety Code Sections 13143.

**1011.3 Tactile exit signs.** A tactile sign stating EXIT and complying with ICC A117.1 shall be provided adjacent to each door to an egress stairway, an exit passageway and the exit discharge.

(Relocated from 2001 CBC 1003.2.8.6)

**1003.2.8.6 [For SFM] Tactile exit signage.** For the purposes of Section 1011.3, the term "tactile exit signs" shall mean those required signs that comply with Section 1117B.5.1.1

Relocated from 2001 CBC 1003.2.8.6.1)

**1003.2.8.6.1 [For SFM] Where required.** Tactile exit signs shall be required at the following locations:

Tactile exit signs shall be required at the following locations:

1. Each grade-level exterior exit door shall be identified by a tactile exit sign with the word, "EXIT".
2. Each exit door 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:
  - A. "EXIT STAIR DOWN"
  - B. "EXIT RAMP DOWN"
  - C. "EXIT STAIR UP"
  - D. "EXIT RAMP UP"
3. Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure that does not utilize a stair or ramp, 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, shall be identified by a tactile exit sign with the words, "EXIT ROUTE".
5. Each exit door through a horizontal exit shall be identified by a tactile exit sign with the words, "TO EXIT".

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1011.6 Floor-level exit signs.** Where exit signs are required by Chapter 10, additional approved floor-level exit signs which are internally or externally illuminated, photoluminescent or self-luminous shall be provided in all interior corridors of Groups A, E, I, R-1, R-2 and R-4 Occupancies.

**Exceptions:**

1. Where path marking complying with Section 1011.7 is provided.
2. Group I-3 Occupancies.

The bottom of the sign shall not be less than 6 inches (152 mm) or more than 8 inches (203 mm) above the floor level and shall indicate the path of exit travel. For exit and exit-access doors, the sign shall be on the door or adjacent to the door with the closest edge of the sign or marker within 4 inches (102 mm) of the door frame.

Authority: Health and Safety Code Sections 13143, 17920.8

References: Health and Safety Code Sections 13143

**1011.7 Path marking.** When exit signs are required by Chapter 10, approved path marking shall be installed at floor level or no higher than 8 inches (203 mm) above the floor level in all interior corridors of Groups A, E, I, R-1, R-2 and R-4 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 and shall comply with Section 1011.5.3.

**Exceptions:**

- 1 Where floor level exit signs complying with Section 1011.6 are provided.
2. Group I-3 Occupancies.

Authority: Health and Safety Code Sections 13143, 17920.8

References: Health and Safety Code Sections 13143

**1012.7 Projections.** On ramps, the clear width between handrails shall be 36 inches (914 mm) minimum. Projections into the required width of stairways and ramps at each handrail shall not exceed 4.5 inches (114 mm) at or below the handrail height. Projections into the required width shall not be limited above the minimum headroom height required in Section 1009.2.

In Group I-2 occupancy, on ramps and stairways used for the movement of bed and litter patients, the clear width between handrails shall be 44 inches (1118 mm) minimum.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1014.2 Egress through intervening spaces.** Egress through intervening spaces shall comply with this section.

1. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas are accessory to the area served, are not a high-hazard occupancy and provide a discernible path of egress travel to an exit.

**Exception:** Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy when the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

2. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

**Exceptions:**

1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.

2. Means of egress are not prohibited through stockrooms in Group M occupancies when all of the following are met:

2.1. The stock is of the same hazard classification as that found in the main retail area;

2.2. Not more than 50 percent of the exit access is through the stockroom;

2.3. The stockroom is not subject to locking from the egress side; and

2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by full or partial height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

3. An exit access shall not pass through a room that can be locked to prevent egress.

4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

3. Exits shall not pass through any room subject to locking except in Group I 3 occupancies classified as detention facilities.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1014.2.2 Group I-2.** Habitable rooms or suites in Group I-2 occupancies shall have an exit access door leading directly to a corridor.

**Exceptions:**

1. Rooms with exit doors opening directly to the outside at ground level.

2. Patient sleeping rooms are permitted to have one intervening room if the intervening room is not used as an exit access for more than eight patient beds.

3. Special nursing suites are permitted to have one intervening room where the arrangement allows for direct and constant visual supervision by nursing personnel.

4. For rooms other than patient sleeping rooms located within a suite, exit access travel from within the suite shall be permitted through one intervening room where the travel distance to the exit access door is not greater than 100 feet (30 480 mm).

5. For rooms other than patient sleeping rooms located within a suite, exit access travel from within the suite shall be permitted through two intervening rooms where the travel distance to the exit access door is not greater than 50 feet (15 240 mm).

Suites of sleeping rooms shall not exceed 5,000 square feet (465 m<sup>2</sup>). Suites of rooms other than patient sleeping rooms shall not exceed 10,000 square feet (929 m<sup>2</sup>). Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1,000 square feet (93m<sup>2</sup>) shall have at least two exit access doors remotely located from each other. Any room or suite of rooms other than patient sleeping rooms of more than 2,500 square feet (232 m<sup>2</sup>) shall have at least two access doors remotely located from each other. The travel distance between any point in a Group I-2 occupancy and an exit access door in the room shall not exceed 50 feet (15 240 mm). The travel distance between any point in a suite of sleeping rooms and an exit access door of that suite shall not exceed 100 feet (30 480 mm).

Each suite of rooms shall be separated from the remainder of the building by not less than a one-hour fire barrier.

Egress for portions of the building outside the suite shall not require passage through the suite.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1014.2.2.1 Basement exits.** All rooms below grade shall have not less than one exit access that leads directly to an exterior exit door opening directly to an exit discharge at grade plane or the public way.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1015.1 Exit or exit access doorways required.** Two exits or exit access doorways from any space shall be provided where one of the following conditions exists:

1. The occupant load of the space exceeds the values in Table 1015.1.
2. The common path of egress travel exceeds the limitations of Section 1014.3.
3. Where required by Sections 1015.3, 1015.4 and 1015.5.
4. (relocated from CBC1004.2.3.3) ~~**1004.2.3.3 From individual spaces.** **EXCEPTIONS [For SFM]:** Every assembly building as defined in Chapter 2 shall be provided with not less than two remotely located exits. ~~2. In holding cells, such as are found in courthouse buildings, a minimum of two means of egress shall be provided when the occupant load is more than 20.~~~~

**Exception:** Group I-2 occupancies shall comply with Section 1014.2.2.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1015.5 Refrigerated rooms or spaces.** Rooms or spaces having a floor area of 1,000 square feet (93 m<sup>2</sup>) or more, containing a refrigerant evaporator and maintained at a temperature below 68°F (20°C), shall have access to not less than two exits or exit access doors.

Travel distance shall be determined as specified in Section 1016.1, but all portions of a refrigerated room or space shall be within 150 feet (45 720 mm) of an exit or exit access door where such rooms are not protected by an approved automatic sprinkler system. Egress is allowed through adjoining refrigerated rooms or spaces.

**Exception:** Where using refrigerants in quantities limited to the amounts based on the volume set forth in the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
 References: Health and Safety Code Sections 13143

Authority: Health and Safety Code Sections 13113, 13143  
 References: Health and Safety Code Sections 13143

**1015.7 General** *Every story or basement of a large family day-care home shall be provided with two exits which are remotely located from each other. Every required exit shall be of a size to permit the installation of a door not less than 32 inches (813 mm) in clear width and not less than 6 feet 8 inches (2,032 mm) in height. A manually operated horizontal sliding door may be used as one of the two required exits.*

*Where basements are used for day-care purposes, one of the two required exits shall provide access directly to the exterior without entering the first story. The second exit from the basement may either pass through the story above or exit directly to the exterior.*

*Rooms used for day-care purposes shall not be located above the first story.*

**Exception:** *Buildings equipped with an automatic sprinkler system throughout and which have at least one of the required exits providing access directly to the exterior. NFPA 13R may be used in large family day-care homes. The sprinkler omissions Section 2-6 of NFPA 13R shall not apply unless approved by the authority having jurisdiction.*

*Exit doors, including manually operated horizontal sliding doors, shall be openable from the inside without use of a key or any special knowledge or effort.*

*Table 1019.1 and 1019.2 are not applicable to this occupancy classification.*

**TABLE 1016.1  
 EXIT ACCESS TRAVEL DISTANCE<sup>a</sup>**

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

- a. See the following sections for modifications to exit access travel distance requirements:  
 Section 402: For the distance limitation in malls.  
 Section 404: For the distance limitation through an atrium space.  
 Section 1016.2 For increased limitations in Groups F-1 and S-1.  
 Section 1025.7: For increased limitation in assembly seating.  
 Section 1025.7: For increased limitation for assembly open-air seating.  
 Section 1019.2: For buildings with one exit.  
 Chapter 31: For the limitation in temporary structures.

- 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.

Authority: Health and Safety Code Sections 1597.46, 1597.54, 13143 17921  
 References: Health and Safety Code Sections 13143

**TABLE 1017.1 CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system <sup>c</sup>
H-1, H-2, H-3, <u>L</u>	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A <sup>d</sup> , B, E, F, M, S, U	Greater than 30	1	<del>0</del> 1
R	Greater than 10	Not Permitted	<del>0.5</del> 1
I-2 <sup>a</sup> , I-4	<del>All</del> <u>Greater than 6</u>	Not Permitted	<del>0</del> 1
I-1, I-3	<del>All</del> <u>Greater than 6</u>	Not Permitted	1 <sup>b</sup>

- a. For requirements for occupancies in Group I-2, see Section 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. See Section 1025.2

Authority: Health and Safety Code Sections 13108, 13113, 13143  
 References: Health and Safety Code Sections 13143

**1017.2 Corridor width.** The minimum corridor width shall be as determined in Section 1005.1, but not less than 44 inches (1118 mm).

**Exceptions:**

1. Twenty-four inches (610 mm)—For access to and utilization of electrical, mechanical or plumbing systems or equipment.
2. Thirty-six inches (914 mm)—With a required occupant capacity of less than 50.
3. Thirty-six inches (914 mm)—Within a dwelling unit.
4. Seventy-two inches (1829 mm)—In Group E with a corridor having a required capacity of 100 or more.
5. Seventy-two inches (1829 mm)—In corridors serving surgical Group I, health care centers for ambulatory patients receiving outpatient medical care, which causes the patient to be not capable of self-preservation.
6. Ninety-six inches (2438 mm)—In Group I-2 in areas where required for bed movement.

(Relocated from 2001 CBC 1007.5.3)

7. ~~Hallways~~ Corridors serving any area caring for one or more nonambulatory persons shall not be less than 8 feet (2438 mm) in width.

~~**EXCEPTION:** 8. Hallways serving surgical areas of Group I, Division 1.2 Occupancies shall not be less than 6 feet (1829 mm) in width.~~

Authority: Health and Safety Code Sections 13108, 13113, 13143  
 References: Health and Safety Code Sections 13143

**1017.4 Air movement in corridors.** Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.  
**Exceptions:**

1. Use of a corridor as a source of makeup air for exhaust systems in small rooms of 30 sq feet or less that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, ~~smoking lounges~~ and janitor closets, shall be permitted, provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.
2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.
3. ~~Where located within tenant spaces of 1,000 square feet (93 m<sup>2</sup>) or less in area, utilization of corridors for conveying return air is permitted.~~ Where corridors are not required to be fire resistive rated construction.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1017.4.1 Corridor ceiling.** Use of the space between the corridor ceiling and the floor or roof structure above as a return air plenum is permitted for one or more of the following conditions:

1. The corridor is not required to be of fire-resistance-rated construction;
2. The corridor is separated from the plenum by fire-resistance-rated construction;
3. The air-handling system serving the corridor is shut down upon activation of the air-handling unit smoke detectors required by the International California Mechanical Code.
4. The air-handling system serving the corridor is shut down upon detection of sprinkler waterflow where the building is equipped throughout with an automatic sprinkler system; or
5. The space between the corridor ceiling and the floor or roof structure above the corridor is used as a component of an approved engineered smoke control system.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**1017.5 Corridor continuity.** Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms.

**Exceptions:**

1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.
2. In fully sprinklered office buildings, corridors may lead through enclosed elevator lobbies if all areas of the building have access to at least one required exit without passing through the elevator lobby.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

**TABLE 1019.2 BUILDINGS WITH ONE EXIT**

OCCUPANCY	MAXIMUM HEIGHT OF BUILDING ABOVE GRADE PLANE	MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE
A, B <sup>d</sup> , E <sup>e</sup> , F, M, U	1 Story	49 occupants and 75 feet travel distance
H-2, H-3	1 Story	3 occupants and 25 feet travel distance
H-4, H-5, I, R	1 Story	10 occupants and 75

		feet travel distance
<i>I-2</i>	<i>1 Story</i>	<i>8 occupants and 50 feet travel distance</i>
S <sup>a</sup>	1 Story	29 occupants and 100 feet travel distance
B <sup>b</sup> , F, M, S <sup>a</sup>	2 Stories	30 occupants and 75 feet travel distance
R-2	2 Stories <sup>c</sup>	4 dwelling units and 50 feet travel distance

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1020.1 Enclosures required.** Interior exit stairways and interior exit ramps shall be enclosed with fire barriers constructed in accordance with Section 706 or horizontal assemblies constructed in accordance with Section 711, or both. Exit enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more and not less than 1 hour where connecting less than four stories. The number of stories connected by the exit enclosure shall include any basements but not any mezzanines. An exit enclosure shall not be used for any purpose other than means of egress.

**Exceptions:**

1. In all occupancies, other than Group H and I occupancies, a stairway is not required to be enclosed when the stairway serves an occupant load of less than 10 and the stairway complies with either Item 1.1 or 1.2. In all cases, the maximum number of connecting open stories shall not exceed two.
  - 1.1. The stairway is open to not more than one story above the story at the level of exit discharge;
  - or
  - 1.2. The stairway is open to not more than one story below the story at the level of exit discharge.
2. Exits in buildings of Group A-5 where all portions of the means of egress are essentially open to the outside need not be enclosed.
3. Stairways serving and contained within a single residential dwelling unit or sleeping unit in Group R-1, R-2 or R-3 occupancies are not required to be enclosed.
4. Stairways that are not a required means of egress element are not required to be enclosed where such stairways comply with Section 707.2.
5. Stairways in open parking structures that serve only the parking structure are not required to be enclosed.
6. Stairways in Group I-3 occupancies, as provided for in Section 408.3.6.1, are not required to be enclosed.
7. Means of egress stairways as required by Section 410.5.3 are not required to be enclosed.
8. In other than Group H and I occupancies, a maximum of 50 percent of egress stairways serving one adjacent floor are not required to be enclosed, provided at least two means of egress are provided from both floors served by the unenclosed stairways. Any two such interconnected floors shall not be open to other floors. Unenclosed exit stairways shall be remotely located as required in Section 1015.2.
9. In other than Group H and I occupancies, interior egress stairways serving only the first and second stories of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 are not required to be enclosed, provided at least two means of egress are provided from both floors served by the unenclosed stairways. Such interconnected stories shall not be open to other stories. Unenclosed exit stairways shall be remotely located as required in Section 1015.2.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1020.1.6.1 - Sign details.** *The provisions of this section shall apply to signs required by Section 1019.1.6*

**1020.1.6.1.1 Size.** *Signs shall be a minimum 12 inches (305mm) by 12 inches (305mm).*

**1020.1.6.1.2 Stairway location.** *The stairway location, such as STAIR NO. 1 or WEST STAIR, shall be placed at the top of the sign in 1-inch-high (25.4 mm) block lettering with ¼-inch (6.4mm) strokes.*

**1020.1.6.1.3 Upper terminus.** *The stairway's upper terminus, such as ROOF ACCESS or NO ROOF ACCESS, shall be placed under the stairway identification in 1-inch-high (25.4mm) block lettering with ¼-inch (6.4mm) strokes.*

**1020.1.6.1.4 Floor level numbering.** *The floor level number shall be placed in the middle of the sign in 5-inch-high (127mm) lettering with ¾-inch (19mm) strokes. The mezzanine levels shall have the letter "M" preceding the floor level. Basement levels shall have the letter "B" preceding the floor number.*

**1020.1.6.1.5 Lower terminus.** *The lower and upper terminus of the stairway shall be placed at the bottom of the sign in 1-inch-high (25.4mm) block lettering with ¼-inch (6.4mm) strokes.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 1003.3.3.13.1)

**1020.1.6.2 ~~1003.3.3.13.1~~ [For SFM] Tactile stair level identification sign.** *Tactile stair level identification signs that comply with 1117B.5.1 Item 1 shall be located at each floor level landing in all enclosed stairways in buildings two or more stories in height to identify the floor level. At exit discharge level, the sign shall include a raised five pointed star located to the left of the identifying floor level. The outside diameter of the star shall be the same as the height of the raised characters.*

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1020.1.7 Smokeproof enclosures.** In buildings required to comply with Section 403 or 405 of the *International California Building Code*, each of the exits *enclosures* of a building that serves stories where the floor surface is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access or more than 30 feet (9144 mm) below the level of exit discharge serving such floor levels shall be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1020.1.7.1 Enclosure exit.** A smokeproof enclosure or pressurized stairway shall exit into a public way or into an exit passageway, yard or open space having direct access to a public way. The exit passageway shall be without other openings and shall be separated from the remainder of the building by 2-hour fire-resistance-rated construction.

**Exceptions:**

1. Openings in the exit passageway serving a smokeproof enclosure are permitted where the exit passageway is protected and pressurized in the same manner as the smokeproof enclosure, and openings are protected as required for access from other floors.
2. Openings in the exit passageway serving a pressurized stairway are permitted where the exit passageway is protected and pressurized in the same manner as the pressurized stairway.
- 3-2 A smokeproof enclosure or pressurized stairway shall be permitted to egress through areas on the level of discharge or vestibules as permitted by Section 1024.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1020.1.7.2 Enclosure access.** Access to the stairway within a smokeproof enclosure shall be by way of a vestibule or an open exterior balcony.

~~**Exception:** Access is not required by way of a vestibule or exterior balcony for stairways using the pressurization alternative complying with Section 909.20.5.~~

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1021.2 Width.** The width of exit passageways shall be determined as specified in Section 1005.1 but such width shall not be less than 44 inches (1118 mm), except that exit passageways serving an occupant load of less than 50 shall not be less than 36 inches (914 mm) in width.

The required width of exit passageways 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) on each side.

The clear width of exit passageways in a Group I-2 occupancy used for the movement of beds and litters shall be 44" (1118) minimum.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1023.2 Use in a means of egress.** Exterior exit ramps and stairways shall not be used as an element of a required means of egress for Group I-2 occupancies. For occupancies in other than Group I-2, exterior exit ramps and stairways shall be permitted as an element of a required means of egress for buildings not exceeding six stories above grade plane or ~~having occupied floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access~~ buildings defined as a high-rise.

Authority: Health and Safety Code Sections 13143, 13210, 13108  
References: Health and Safety Code Sections 13143

**1024.6 Access to a public way.** The exit discharge shall provide a direct and unobstructed access to a public way.

**Exception:** Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

1. The area shall be of a size to accommodate at least 5 square feet (0.28 m<sup>2</sup>) for each person.
2. For other than Group E buildings, the area shall be located on the same lot at least 50 feet (15 240 mm) away from the building requiring egress. For Group E buildings, the area shall be located on the same lot at least 50 feet (15 240 mm) away from any building.
3. The area shall be permanently maintained and identified as a safe dispersal area.
4. The area shall be provided with a safe and unobstructed path of travel from the building.

Authority: Health and Safety Code Sections 13143, Public Education Code 32020  
References: Health and Safety Code Sections 13143

**1025.1 General.** All Occupancies in Group A including those which contain seats, tables, displays, equipment or other material shall comply with this section.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1025.2 Assembly main exit.** For Group A occupancies where the space or establishment has an occupant load of 100 or more and less than 300, the space or establishment shall have at least one of the required means of egress directly to an exit, or through a lobby to an exit, or to a one hour rated corridor to an exit or continuous through a one hour rated lobby to an exit. Group A occupancies that have an occupant load of greater than 300 shall be provided with a main exit. The main exit shall be of sufficient width to accommodate not less than one-half of the occupant load, but such width shall not be less than the total required width of all means of egress leading to the exit. Where the building is classified as a Group A occupancy, the main exit shall front on at least one street or an unoccupied space of not less than ~~10 feet (3048 mm)~~ 20 feet (6096mm) in width that adjoins a street or public way.

**Exception:** In assembly occupancies where there is no well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total width of egress is not less than 100 percent of the required width. At least one exit shall front on at least one street or an unoccupied space of not less than 20 feet in width that adjoins a street or public way.

Group A occupancies that have a occupant load greater than 300 shall be provided with at least .20 inch total exit width for each occupant served.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1025.3 Assembly other exits.** In addition to having access to a main exit, each level in a Group A occupancy having an occupant load greater than 300 shall be provided with additional means of egress that shall provide an egress capacity for at least one-half of the total occupant load served by that level and comply with Section 1015.2. Where other exits are required, at least one-half of the other required means of egress shall be directly to an exit, or through a lobby to an exit, or to a one hour rated corridor to an exit.

**Exception:** In assembly occupancies where there is no well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building, provided that the total width of egress is not less than 100 percent of the required width. At least one exit shall front an at least one street or an unoccupied space of not less than 20 feet in width that adjoins a street or public way.

Group A occupancies that have a occupant load greater than 300 shall be provided with at least 0.2 inch total exit width for each occupant served.

Authority: Health and Safety Code Sections 13143  
References: Health and Safety Code Sections 13143

**1025.6.4 Public address system.** See section 907.2.1.3.

Authority: Health and Safety Code Sections 13108.9  
References: Health and Safety Code Sections 13143

**1025.9.1 Minimum aisle width.** The minimum clear width for aisles shall be as shown:

1. Forty-eight inches (1219 mm) for aisle stairs having seating on each side.  
**Exception:** Thirty-six inches (914 mm) where the aisle serves less than 50 seats.
2. Thirty-six inches (914 mm) for aisle stairs having seating on only one side.
3. Twenty-three inches (584 mm) between an aisle stair handrail or guard and seating where the aisle is subdivided by a handrail.

4. Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

**Exceptions:**

1. Thirty-six inches (914 mm) where the aisle serves less than 50 seats.
2. Thirty inches (762 mm) where the aisle does not serve more than 14 seats.

5. Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.

**Exceptions:**

1. Thirty inches (762 mm) where the aisle does not serve more than 14 seats.
2. Twenty-three inches (584 mm) between an aisle stair handrail and seating where an aisle does not serve more than five rows on one side.

6. Libraries with open book stacks shall have main aisles not less than 44 inches (1118 mm) in width, and side, range and end aisles not less than 36 inches (914 mm) in width.

Authority: Health and Safety Code Sections 13143

References: Health and Safety Code Sections 13143

*(Relocated from 2001 CBC, 1006.3.2.2)*

**1025.10 Clear width of aisle accessways serving seating.** Where seating rows have 14 or fewer seats, the minimum clear aisle accessway width shall not be less than 12 inches (305mm) measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind. Where chairs have automatic or self-rising seats, the measurement shall be made with seats in the raised position. Where any chair in the row does not have an automatic or self-rising seat, the measurements shall be made with the seat in the down position. For seats with folding tablet arms, row spacing shall be determined with the tablet arm down.

**EXCEPTION [For SFM]:** When tablet arm chairs are used, the minimum clear width of 12 inches (305 mm) between rows may be measured with tablet arms in the stored position only where all tablet arms are raised manually in one motion to a vertical position and fall to the stored position by force of gravity.

**1026.1 General.** In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R and I-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

**Exceptions:**

~~1. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.~~

~~2. In other than Group R-3 occupancies, sleeping rooms provided with a door to a fire resistance-rated corridor having access to two remote exits in opposite directions.~~

~~3.1.~~ The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.

~~4.2.~~ Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue windows.

~~5.3.~~ High-rise buildings in accordance with Section 403.

~~6.4.~~ Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that ~~opens~~ provides access to a public way.

~~7.5.~~ Basements without habitable spaces and having no more than 200 square feet (18.6 m<sup>2</sup>) in floor area shall not be required to have emergency escape windows.

Authority: Health and Safety Code Sections 13143, 17921

References: Health and Safety Code Sections 13143

**1026.4 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 ~~without the use of keys or tools~~. 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 1026.2 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 ~~in existing buildings~~, smoke alarms shall be installed in accordance with Sections 907.2.10 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 ~~the standards of the California Building Standards Code (CBC), 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 903.2.7 and designed in accordance with NFPA 13 may have openable windows permanently restricted to a maximum 4-inch (102mm) open position.*

Authority: Health and Safety Code Sections 13143, 17921

References: Health and Safety Code Sections 13143

**1027.1 General** Every story or basement of a large family day-care home shall be provided with two exits which are remotely located from each other. Every required exit shall be of a size to permit the installation of a door not less than 32 inches (813 mm) in clear width and not less than 6 feet 8 inches (2,032 mm) in height. A manually operated horizontal sliding door may be used as one of the two required exits.

Where basements are used for day-care purposes, one of the two required exits shall provide access directly to the exterior without entering the first story. The second exit from the basement may either pass through the story above or exit directly to the exterior.

Rooms used for day-care purposes shall not be located above the first story.

**Exception:** Buildings equipped with an automatic sprinkler system throughout and which have at least one of the required exits providing access directly to the exterior. NFPA 13R may be used in large family day-care homes. Section 2-6 of NFPA 13R shall not apply unless approved by the authority having jurisdiction.

Exit doors, including manually operated horizontal sliding doors, shall be openable from the inside without use of a key or any special knowledge or effort.

Table 1019.1 and 1019.2 are not applicable to this occupancy classification.

Authority: Health and Safety Code Sections 1597.46, 1597.54, 13143 17921

References: Health and Safety Code Sections 13143

## **CHAPTER 11 ACCESSIBILITY**

**(Note: This chapter will not be printed in the California Building Code.)**

Authority: Health and Safety Code Sections 13143, 18949

**CHAPTER 11A  
HOUSING ACCESSIBILITY**

(Note: Adopt only those sections listed in the matrix adoption table.)

**SECTION 1118A EGRESS AND AREAS FOR EVACUATION ASSISTANCE.** *See Section 1007.*

~~**1118A.1 General.** In buildings or portions of buildings required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided. Areas for evacuation assistance shall comply with the requirements of this Code and shall adjoin an accessible route of travel complying with this Code.~~

~~**Exceptions:**~~

- ~~1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.~~
- ~~2. Areas of evacuation assistance are not required in alterations of existing buildings except when the alteration or addition is subject to the provisions of this Chapter as specified in Section 1102A.2.~~

~~**1118A.2 Areas for Evacuation Assistance.**~~

~~**1118A.2.1 Location and Construction.** An area for evacuation assistance shall be one of the following:~~

- ~~1. A portion of a stairway landing within a smoke proof enclosure, complying with Section 1005.3.3.~~
- ~~2. A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20 feet (6096 mm) of the area for evacuation assistance shall be protected with fire assemblies having a three-fourths-hour fire protection rating.~~
- ~~3. A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure.~~
- ~~4. A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4.~~
- ~~5. A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies.~~
- ~~6. When approved by the building official, an area or room, which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight fitting smoke and draft control assemblies having a fire protection rating of not less than 20 minutes and shall be self-closing or automatic closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.~~
- ~~7. An elevator lobby complying with Section 1118A.3.~~

~~**1118A.2.2 Size.** Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30 inches by 48 inches (762 mm by 1219 mm). The area for evacuation assistance shall not encroach on any required exit width. The total number of such 30-inch by 48-inch (762 mm by 1219 mm) areas per story shall not be less than one for every 200 persons of calculated occupant load served by the area for evacuation assistance.~~

~~**Exceptions:** The building official may reduce the minimum number of 30-inch by 48-inch (762 mm by 1219 mm) areas to one for each area for evacuation assistance on floors where the occupant load is less than 200.~~

~~1118A.2.3 Adjacent Stairway Width. Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48 inches (1219 mm) between handrails.~~

~~1118A.2.4 Two-Way Communication.~~

~~1118A.2.5 Identification. Each area for evacuation assistance shall be identified by a sign with the "International Symbol of Accessibility" and text that clearly reads, "AREA FOR EVACUATION ASSISTANCE." The sign shall be illuminated when exit sign illumination is required. In each area for evacuation assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system.~~

~~1118A.3 Area for Evacuation Assistance, High Rise Alternative. Within a building of any height or occupancy constructed in accordance with the requirements of Sections 403.1 through 403.10, an area for evacuation assistance may be located in the elevator lobby when:~~

- ~~1. The area for evacuation assistance complies with the requirements for size, two-way communication and identification as specified in Section 1118A.2; and~~
- ~~2. Elevator shafts and adjacent lobbies are pressurized as required for smoke-proof enclosures in Section 1005.3.3. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the building official. Pressurization equipment and its ductwork within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction.~~

~~1118A.4 Emergency Warning Systems/ Accessibility Requirements. Emergency warning systems as part of the fire alarm system shall be designed and installed in accordance with NFPA 72 as amended in Chapter 35.~~

~~1118A.5 Emergency Egress. Accessible routes serving any accessible space or element shall also serve as a means of egress for emergencies or connect to an accessible place of refuge. Such accessible routes and places of refuge shall comply with the requirements established by the enforcement agency.~~

Authority: Health and Safety Code Sections 13143, 17921, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 11B  
ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS,  
COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING**

(Note: Adopt only those Sections listed in the matrix adoption table.)

~~1114B.2 Egress and Areas for Evacuation Assistance, of Refuge.~~

~~1114B.2.1 [For SFM] General. In buildings or facilities, or portions of buildings or facilities, required to be accessible, accessible means of egress shall be provided in the same number as required for exits by Chapter 10. When an exit required by Chapter 10 is not accessible, an area for evacuation assistance shall be provided.~~

~~Areas for evacuation assistance shall comply with the requirements of this code and shall adjoin an accessible route of travel complying with this code.~~

~~**Exceptions:**~~

- ~~1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.~~
- ~~2. In alterations of existing buildings, areas of evacuation assistance are not required.~~

~~**EXCEPTIONS:** 1. Areas of evacuation assistance are not required in buildings or facilities having a supervised automatic sprinkler system.~~

~~2. In alterations of existing buildings, areas of evacuation assistance are not required.~~

~~1114B.2.2 [For SFM] Areas for evacuation assistance.~~

**1114B.2.2.1 [For SFM] Location and construction.** An area for evacuation assistance shall be one of the following:

- ~~1. [For SFM] A portion of a stairway landing within a smokeproof enclosure, complying with Section 1005.3.3.~~
- ~~2. [For SFM] A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the exterior exit balcony complies with Section 1006.3. Openings to the exterior of the building located within 20 feet (6096 mm) of the area for evacuation assistance shall be protected with fire assemblies having a three-fourths-hour fire protection rating.~~
- ~~3. [For SFM] A portion of a one-hour fire-resistive corridor complying with Section 1004.3.4 located immediately adjacent to an exit enclosure.~~
- ~~4. [For SFM] A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required by Section 1004.3.4.~~
- ~~5. [For SFM] A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building by not less than one-hour fire-resistive door assemblies.~~
- ~~6. [For SFM] When approved by the building official, an area or room which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight-fitting smoke- and draft-control assemblies having a fire protection rating of not less than 20 minutes and shall be self-closing or automatic-closing. The area or room shall be provided with an exit directly to an exit enclosure. When the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.~~
- ~~7. [For SFM] An elevator lobby complying with Section 1114B.2.3.~~

**1114B.2.2.2 [For SFM] Size.** Each area for evacuation assistance shall provide at least two accessible areas that are not less than 30 inches by 48 inches (762 mm by 1219 mm). The area for evacuation assistance shall not encroach on any required exit width. The total number of such 30-inch by 48-inch (762 mm by 1219 mm) areas per story shall not be less than one for every 200 persons of calculated occupant load served by the area for evacuation assistance.

**EXCEPTION:** The building official may reduce the minimum number of 30-inch by 48-inch (762 mm by 1219 mm) areas to one for each area for evacuation assistance on floors where the occupant load is less than 200.

**1114B.2.2.3 [For SFM] Adjacent stairway width.** Each stairway adjacent to an area for evacuation assistance shall have a minimum clear width of 48 inches (1219 mm) between handrails.

**1114B.2.2.5 [For SFM] Identification.** Each area for evacuation assistance shall be identified by a sign which states AREA FOR EVACUATION ASSISTANCE and the International symbol of accessibility. The sign shall be illuminated when exit sign illumination is required. In each area for evacuation assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system.

**1114B.2.3 [For SFM] Area for evacuation assistance, high-rise alternative.** Within a building of any height or occupancy constructed in accordance with the requirements of Sections 403.1 through 403.10, an area for evacuation assistance may be located in the elevator lobby when:

- ~~1. The area for evacuation assistance complies with the requirements for size, two-way communication and identification as specified in Section 1114B.2.2; and~~
- ~~2. Elevator shafts and adjacent lobbies are pressurized as required for smoke-proof enclosures in Section 1005.3.3. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the building official. Pressurization equipment and its ductwork within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction.~~

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

## CHAPTER 12 INTERIOR ENVIRONMENT

(Note: Adopt only those Sections listed in the matrix adoption table.)

**1203.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the International California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.2.1 Openings into attic.** Exterior openings into the attic space of any building intended for human occupancy shall be covered with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material that will prevent the entry of birds, squirrels, rodents, snakes and other similar creatures. The openings therein shall be a minimum of  $\frac{1}{8}$  inch (3.2 mm) and shall not exceed  $\frac{1}{4}$  inch (6.4 mm). Where combustion air is obtained from an attic area, it shall be in accordance with Chapter 7 of the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.3.2 Exceptions.** The following are exceptions to Sections 1203.3 and 1203.3.1:

1. Where warranted by climatic conditions, ventilation openings to the outdoors are not required if ventilation openings to the interior are provided.
2. The total area of ventilation openings is permitted to be reduced to  $\frac{1}{1,500}$  of the under-floor area where the ground surface is treated with an approved vapor retarder material and the required openings are placed so as to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited.
3. Ventilation openings are not required where continuously operated mechanical ventilation is provided at a rate of 1.0 cubic foot per minute (cfm) for each 50 square feet (1.02 L/s for each 10 m<sup>2</sup>) of crawl-space floor area and the ground surface is covered with an approved vapor retarder.
4. Ventilation openings are not required when the ground surface is covered with an approved vapor retarder, the perimeter walls are insulated and the space is conditioned in accordance with the ~~International~~ California Energy Conservation Code.
5. For buildings in flood hazard areas as established in Section 1612.3, the openings for under-floor ventilation shall be deemed as meeting the flood opening requirements of ASCE 24 provided that the ventilation openings are designed and installed in accordance with ASCE 24.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.4.2 Contaminants exhausted.** Contaminant sources in naturally ventilated spaces shall be removed in accordance with the ~~International~~ California Mechanical Code and the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.4.2.1 Bathrooms.** Rooms containing bathtubs, showers, spas and similar bathing fixtures shall be mechanically ventilated in accordance with the ~~International~~ California Mechanical Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.5 Other ventilation and exhaust systems.** Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the ~~International~~ California Mechanical Code or the ~~International~~ California Fire Code shall be provided as required by both codes.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1206.3.3 Court drainage.** The bottom of every court shall be properly graded and drained to a public sewer or other approved disposal system complying with the ~~International~~ California Plumbing Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**1203.5 Other ventilation and exhaust systems.** Ventilation and exhaust systems for occupancies and operations involving flammable or combustible hazards or other contaminant sources as covered in the ~~International~~ California Mechanical Code or the ~~International~~ California Fire Code shall be provided as required by both codes.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 13 ENERGY EFFICIENCY

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 14 EXTERIOR WALLS

**(Note: Adopt entire chapter without amendments.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

**(Note: Adopt entire chapter with amendments.)**

**1503.4 Roof drainage.** Design and installation of roof drainage systems shall comply with the ~~International~~ California Plumbing Code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**~~1505.1.1~~ ~~1503.1~~ ~~[For SFM]~~ Roof Coverings within Very High Fire Hazard Severity Zones.** *The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A-as defined in the Uniform Building Code.*

**EXCEPTION:** *The requirements shall not apply in any jurisdiction that adopts the model ordinance approved by the State Fire Marshal pursuant to Section 51189 of the Government Code or an*

ordinance that substantially conforms to the model ordinance and transmits a copy to the State Fire Marshal.

**1505.1.2 ~~1503.2~~ [For SFM] Roof Coverings within State Responsibility Areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B as defined in the Uniform Building Code.

**EXCEPTION:** Areas designated as moderate fire hazard severity zones.

**1505.1.3 ~~1503.3~~ [For SFM] Roof Coverings in All Other Areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class C as defined in the Uniform Building Code.

**1505.1.4 ~~1503.4~~ [For SFM] Roofing Requirements a Wildland-Urban Interface Fire Area.** Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall also comply with Chapter 7A.

**1505.6 Fire-retardant-treated wood shingles and shakes.** Fire-retardant-treated wood shakes and shingles shall be treated by impregnation with chemicals by the full-cell vacuum pressure process, in accordance with AWWPA C1. Each bundle shall be marked to identify the manufactured unit and the manufacturer, and shall also be labeled to identify the classification of the material in accordance with the testing required in Section 1505.1, the treating company and the quality control agency. **SECTION 1502. DEFINITIONS [For SFM] FIRE-RETARDANT SHAKES AND SHINGLES** are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A, B or C roofs

(Relocated from 2001 CBC 1504.2.1) **~~1504.2.1 [For SFM] Fire-retardant-treated shakes and shingles.~~** Fire-retardant-treated wood shakes and shingles shall comply with ~~ICBO-ES Acceptance Criteria AC107 ICC-ES EG107~~ and with the weathering requirements contained in Health and Safety Code Section 13132.7 (j). Each bundle shall bear labels from an ICBO accredited quality control agency identifying their roof-covering classification and indicating their compliance with ~~ICBO-ES AC107 ICC-ES EG107~~ and with the weathering requirements contained in Health & Safety Code Section 13132.7 (j).

Health and Safety Code Section 13132.7 (j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

(1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.

(2) The materials have passed at least five years of the 10-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with standard 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal.

Authority: Health and Safety Code Sections 13132.7  
References: Health and Safety Code Sections 13132.7

**TABLE 1505.1a,b**  
**MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION**

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	C <sup>e</sup>	B	C <sup>e</sup>	B	B	C <sup>e</sup>

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929m<sup>2</sup>.

a. Unless otherwise required in accordance with the ~~International Wildland-Urban Interface Code Chapter 7A~~ or due to the location of the building within a fire district in accordance with Appendix D.

b. Nonclassified roof coverings shall be permitted on buildings of Group R-3 and Group U occupancies, where there is a minimum fire-separation distance of 6 feet measured from the leading edge of the roof.

~~c. Buildings that are not more than two stories in height and having not more than 6,000 square feet of projected roof area and where there is a minimum 10 foot fire separation distance from the leading edge of the roof to a lot line on all sides of the building, except for street fronts or public ways, shall be permitted to have roofs of No. 1 cedar or redwood shakes and No. 1 shingles.~~

Authority: Health and Safety Code Sections 13143, 13108.5(a) and 18949.2(b) and (c) and Government Code Section 51189.

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

## CHAPTER 16 STRUCTURAL DESIGN

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

## CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

**(Note: Adopt only those Sections listed in the matrix adoption table.)**

**1704.1 General.** Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in Section 109.

### **Exceptions:**

1. Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statutes and regulations governing the professional registration and certification of engineers or architects.
3. Unless otherwise required by the building official, special inspections are not required for occupancies in Group R-3 ~~as applicable in Section 101.2~~ and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

## CHAPTER 18 SOILS AND FOUNDATIONS

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 19  
CONCRETE**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

**CHAPTER 20  
ALUMINUM**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

**CHAPTER 21  
MASONRY**

**(Note: Adopt only those Sections listed in the matrix adoption table.)**

**2113.9.1 Spark arrestors.** ~~Where a spark arrestor is installed on a masonry chimney, the spark arrestor shall meet all of the following requirements:~~

- ~~1. The net free area of the arrestor shall not be less than four times the net free area of the outlet of the chimney flue it serves.~~
- ~~2. The arrestor screen shall have heat and corrosion resistance equivalent to 19-gage galvanized steel or 24-gage stainless steel.~~
- ~~3. Openings shall not permit the passage of spheres having a diameter greater than 1/2 inch (13 mm) nor block the passage of spheres having a diameter less than 3/8 inch (11 mm).~~
- ~~4. The spark arrestor shall be accessible for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.~~ (Relocated from 2001 CBC 3102.3.8a) **3102.3.8a [For SFM] Spark arrestor.** *All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrestor. The net free area of the spark arrestor shall not be less than four times the net free area of the outlet of the chimney. The spark arrestor screen shall have heat and corrosion resistance equivalent to 12 gage wire, 19 gage galvanized wire or 24 gage stainless steel. Openings shall not permit the passage of spheres having a diameter larger than 1/2 inch (12.7 mm) and shall not block the passage of spheres having a diameter of less than 3/8 inch (9.5 mm).*

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

**2113.11.1.2 Gas appliances.** Flue lining systems for gas appliances shall be in accordance with the ~~International Fuel-Gas~~ California Mechanical Code.

**2113.15 Flue area (appliance).** Chimney flues shall not be smaller in area than the area of the connector from the appliance. Chimney flues connected to more than one appliance shall not be less than the area of the largest connector plus 50 percent of the areas of additional chimney connectors.

**Exceptions:**

1. Chimney flues serving oil-fired appliances sized in accordance with NFPA 31.
2. Chimney flues serving gas-fired appliances sized in accordance with the ~~International Fuel Gas~~ California Mechanical Code.

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 22  
STEEL**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 23  
WOOD**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 24  
GLASS AND GLAZING**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 25  
GYPSUM BOARD AND PLASTER**

**(Note: This Chapter is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**CHAPTER 26  
PLASTIC**

**(Note: Adopt the entire Chapter without amendments.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 27 ELECTRICAL

(Note: Adopt entire Chapter with amendments.)

**2701.1 Scope.** This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of the ~~ICC~~ California Electrical Code.

**[F] 2702.1 Installation.** Emergency and standby power systems required by this code or the ~~International~~ California Fire Code shall be installed in accordance with this code, NFPA110 and 111.

**[F] 2702.2.9 Membrane structures.** Standby power shall be provided for auxiliary inflation systems in accordance with Section 3102.8.2. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with the ~~International~~ California Fire Code.

**[F] 2702.2.11 Highly toxic and toxic materials.** Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with the ~~International~~ California Fire Code.

**[F] 2702.2.12 Organic peroxides.** Standby power shall be provided for occupancies with silane gas in accordance with the ~~International~~ California Fire Code.

**[F] 2702.2.13 Pyrophoric materials.** Emergency power shall be provided for occupancies with silane gas in accordance with the ~~International~~ California Fire Code.

**[F] 2702.3 Maintenance.** Emergency and standby power systems shall be maintained and tested in accordance with the ~~International~~ California Fire Code.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 28 MECHANICAL SYSTEMS

(Note: Adopt only those Sections listed in the matrix adoption table.)

**2801.1 Scope.** Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the ~~International Mechanical Code and the International Fuel Gas Code~~ California Mechanical Code. Masonry chimneys, fireplaces and barbecues shall comply with the ~~International~~ California Mechanical Code and Chapter 21 of this code.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**2802** (Relocated from 2001 CBC 3102.3.8a) ~~3102.3.8a [For SFM]~~ **Spark Arrester.** *All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. The net free area of the spark arrester shall not be less than four times the net free area of the outlet of the chimney. The spark arrester screen shall have heat and corrosion resistance equivalent to 12 gage wire, 19 gage galvanized wire or 24 gage stainless steel. Openings shall not permit the passage of spheres having a diameter larger than 1/2 inch (12.7 mm) and shall not block the passage of spheres having a diameter of less than 3/8 inch (9.5 mm).*

Authority: Health and Safety Code Sections 13108, 13210, 13143, 17921  
References: Health and Safety Code Sections 13143

## CHAPTER 29 PLUMBING SYSTEMS

(Note: This Chapter is not adopted.)

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 30 ELEVATORS AND CONVEYING SYSTEMS

(Note: Adopt entire chapter with amendments.)

**3004.3.1 Reduced vent area.** Where mechanical ventilation conforming to the ~~International~~ *California Mechanical Code* is provided, a reduction in the required vent area is allowed provided that all of the following conditions are met:

1. The occupancy is not in Group R-1, R-2, I-1 or I-2 or of a similar occupancy with overnight sleeping quarters.
2. The vents required by Section 3004.2 do not have outside exposure.
3. The hoistway does not extend to the top of the building.
4. The hoistway and machine room exhaust fan is automatically reactivated by thermostatic means.
5. Equivalent venting of the hoistway is accomplished.

Authority: Health and Safety Code Sections 18949  
References: Health and Safety Code Sections 13143

**3006.5 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 ~~3-9.4-6.15.4~~, 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.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 31 SPECIAL CONSTRUCTION

(Note: Adopt only those Sections listed the matrix adoption table.)

**3102.1 General.** The provisions of this section shall apply to air-supported, air-inflated, membrane-covered cable and membrane-covered frame structures, collectively known as membrane structures, erected for a period of 180 days or longer. Those erected for a shorter period of time shall comply with the ~~International~~ *California Fire Code*. Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants, greenhouses and similar facilities not used for human occupancy, are required to meet only the requirements of Sections 3102.3.1 and 3102.7.

**3103.1 General.** The provisions of this section shall apply to structures erected for a period of less than 180 days. Tents and other membrane structures erected for a period of less than 180 days shall comply with the ~~International~~ *California Fire Code*. Those erected for a longer period of time shall comply with applicable sections of this code.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 32 ENCROACHMENT INTO PUBLIC RIGHT-OF-WAY

(Note: Adopt the entire Chapter without amendments.)

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION

(Note: Adopt the entire Chapter with amendments.)

**3309.2 Fire hazards.** The provisions of this code and the ~~International~~ California Fire Code shall be strictly observed to safeguard against all fire hazards attendant upon construction operations.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

## CHAPTER 34 EXISTING STRUCTURES

(Note: Adopt only those Sections listed the matrix adoption table.)

**3401.3 Compliance with other codes.** Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the ~~International California Fire Code, International Fuel Gas Code, International California Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International California Mechanical Code, International Residential Code and ICC California Electrical Code.~~ The Office of the State Fire Marshal does not adopt the International Property Maintenance Code.

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

**3401.4 (CBC 310.16) Existing Group R-3 Occupancies.** For smoke alarm requirements in existing buildings see Section 907.2.10.5.

Authority: Health and Safety Code Sections 13113.1, 13113.8  
References: Health and Safety Code Sections 13143

**3410.6.8 Automatic fire detection.** Evaluate the smoke detection capability based on the location and operation of automatic fire detectors in accordance with Section 907 and the ~~International California Mechanical Code~~. Under the categories and occupancies in Table 3410.6.8, determine the appropriate value and enter that value into Table 3410.7 under Safety Parameter 3410.6.8, Automatic Fire Detection, for fire safety, means of egress and general safety.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

**3410.6.8.1 Categories.** The categories for automatic fire detection are:

1. Category a — None.
2. Category b — Existing smoke detectors in HVAC systems and maintained in accordance with the ~~International~~ *California Fire Code*.
3. Category c — Smoke detectors in HVAC systems. The detectors are installed in accordance with the requirements for new buildings in the ~~International~~ *California Mechanical Code*.
4. Category d — Smoke detectors throughout all floor areas other than individual sleeping units, tenant spaces and dwelling units.
5. Category e — Smoke detectors installed throughout the fire area.

Authority: Health and Safety Code Sections 18949.2

References: Health and Safety Code Sections 13143

### **SECTION 3411** **EXISTING GROUP R-1 and Group R-2 OCCUPANCIES**

**3411.1 Scope.** *The provisions of this section are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings classified as Group R Occupancies. Additions or alterations to an existing building classified as a Group R Occupancy shall conform to the requirements of this Section.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

*Relocated from 2001 CBC Section 310.14*

**[For SFM] 310.4 3411.1.1 Application.** *In accordance with Health and Safety Code Section 13143.2, the provisions of Section ~~310.14.3 through 310.14.14~~ 3411.2 through 3411.12 shall only apply to multiple-story structures existing on January 1, 1975, let for human habitation, including, and limited to, apartment houses, hotels, and motels wherein rooms used for sleeping are let above the ground floor.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

*Relocated from 2001 CBC Section 310.14.2*

**[For SFM] 310.14.2 3411.2 Number of exits.** *Exit access shall be provided as per Chapter 10, Section 1014. Every apartment and every other sleeping room shall have access to not less than two exits- when the occupant load is 10 or more (exits need not be directly from the apartment or sleeping room). A fire escape as specified herein may be used as one required exit.*

*Subject to approval of the authority having jurisdiction, a ladder device as specified herein may be used in lieu of a fire escape when the construction feature or the location of the building on the property cause the installation of a fire escape to be impractical.*

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

*Relocated from 2001 CBC Section 310.14.3*

**[For SFM] 310.14.3 3411.3 Stair Construction.** *All stairs shall have a minimum run of 9 inches (229 mm) and a maximum rise of 8 inches (203 mm) and a maximum width exclusive of handrails of 30 inches (762 mm). Every*

stairway shall have at least one handrail. A landing having a minimum horizontal dimension of 30 inches (762 mm) shall be provided at each point of access to the stairway.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.4

**[For SFM] 310.14.4 3411.4 Interior Stairways.** Every interior stairway shall be enclosed with walls of not less than one-hour fire-resistive construction. Where existing partitions form part of a stairwell enclosure, wood lath and plaster in good condition will be acceptable in lieu of one-hour fire-resistive construction. Doors to such enclosures shall be protected by a self-closing door equivalent to a solid wood door with a thickness of not less than 1-3/4 inches (44.5 mm).

Enclosures shall include all landings between flights and any corridors, passageways or public rooms necessary for continuous exit to the exterior of the buildings. The stairway need not be enclosed in a continuous shaft if cut off at each story by the fire-resistive construction required by this subsection for stairwell enclosures. Enclosures shall not be required if an automatic sprinkler system is provided for all portions of the building except bedrooms, apartments and rooms accessory thereto. Interior stairs and vertical openings need not be enclosed in two-story buildings.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.5

**[For SFM] 310.14.5 3411.5 Exterior Stairways.** Exterior stairways shall be non-combustible or of wood of not less than 2-inch (51 mm) nominal thickness with solid treads and risers.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.6

**[For SFM] 310.14.6 3411.6 Fire escapes,** exit ladder devices. Fire escapes may be used as one means of egress if the pitch does not exceed 60 degrees, the width is not less than 18 inches (457 mm), the treads are not less than 4 inches (102mm) wide, and they extend to the ground or are provided with counterbalanced stairs reaching to the ground. Access shall be by an opening having a minimum dimension of 29 inches (737 mm) when open. The sill shall not be more than 30 inches (762 mm) above the floor and landing.

A ladder device, when used in lieu of a fire escape, shall conform to ~~UBC Standard 10-3~~ Section 3411.6.1 and the following:

Serves an occupant load of nine people or less or a single dwelling unit or hotel room.

The building does not exceed three stories in height.

The access is adjacent to an opening as specified for emergency egress or rescue or from a balcony.

The device does not pass in front of any building opening below the unit being served.

The availability of activating the ladder device is accessible only to the opening or balcony served.

The device as installed will not cause a person using it to be within 12 feet (3658 mm) of exposed energized high-voltage conductors.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.7

**[For SFM] 310.14.7 3411.7 Doors and Openings.** Exit doors and openings shall meet the requirements of Sections ~~1003.3.1.5, 1003.3.1.8, 1003.3.1.9 and 1004.3.4.3.2~~ 1008.1.2, 1008.8.1.8, 1008.1.9, and 708.6. Doors shall not reduce the required width of stairway more than 6 inches (152 mm) when open. Transoms and openings other than doors from corridors to rooms shall be fixed closed and shall be covered with a minimum of 3/4-inch (19 mm) plywood or 1/2-inch (13 mm) gypsum wallboard or equivalent material.

**Exceptions:**

1. Existing solid-bonded wood-core doors 13/8 inches thick (34.9 mm), or their equivalent may be continued in use.
2. Where the existing frame will not accommodate a door complying with Section ~~1004.3.4.3.2~~ 708.6, a 3/8 -inch-thick (35 mm) solid-bonded wood-core door may be used.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.8

**[For SFM] 310.14.8 3411.8 Exit Signs.** Every exit doorway or change of direction of a corridor shall be marked with a well-lighted exit sign having letters at least 5 inches (127 mm) high.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.9

**[For SFM] 310.14.9 3411.9 Enclosure of vertical openings.** Elevators, shafts, ducts and other vertical openings shall be enclosed as required for stairways in Section ~~310.14.5~~ 3411.5 or by wired glass set in metal frames. Doors shall be noncombustible or as regulated in Section ~~310.14.5~~ 3411.5.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.10

**[For SFM] 310.14.10 3411.10 Separation of occupancies.** Occupancy separations shall be provided as specified in Section ~~302~~ 508. Lobbies and public dining rooms, not including cocktail lounges, shall not require a separation if the kitchen is so separated from the dining room. Every room containing a boiler or central heating plant shall be separated from the rest of the building by not less than a one-hour fire-resistive occupancy separation.

**Exception:** A separation shall not be required for such rooms with equipment serving only one dwelling unit.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.11

**[For SFM] 310.14.11 3411.11 Equivalent protection.** In lieu of the separation of occupancies required by Section ~~310.14.10~~ 3411.10, equivalent protection may be permitted when approved by the enforcement agency.

**Exception:** The provisions of Sections ~~310.14.2~~ 3411.3 through ~~310.14.10~~ 3411.11 above shall not apply to any existing apartment house, hotel or motel having floors (as measured from the top of the floor surface) used for human occupancy located more than 75 feet (22 860 mm) above the lowest floor level having

building access which is subject to the provisions of ~~Chapter 4~~ Section 3412, California Building Code, relating to existing high-rise buildings.

Note: In accordance with Health and Safety Code Section 17920.7, the provisions of Sections ~~340.14.2, 3411.3 through 340.14.40 3411.11~~ above shall apply only to multiple-story structures existing on January 1, 1975, let for human habitation including, and limited to, apartments, houses, hotels and motels wherein rooms used for sleeping are let above the ground floor.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211  
References: Health and Safety Code Sections 13143

Relocated from 2001 CBC Section 310.14.12  
**[For SFM] 310.14.12 3411.12 Fire Alarms.**

Relocated from 2001 CBC Section 310.14.12.1

**[For SFM] 310.14.12.1 3411.12.1 General.** Every apartment house three or more stories in height or containing more than 15 apartments, every hotel three or more stories in height or containing 20 or more guest rooms, shall have installed therein an automatic or manually operated fire alarm system. Such fire alarm systems shall be so designed that all occupants of the building may be warned simultaneously and shall be in accordance with the California Fire Code. See Section ~~403.5~~ 3412.14 for special requirements in buildings over 75 feet (22 860 mm) in height.

**Exception:** A fire alarm system need not be installed provided such apartment house or hotel is separated by an unpierced wall of not less than four-hour fire resistance in buildings of Type IA, Type II~~FRB~~, Type III or Type IV ~~H-T~~ construction and two-hour fire resistance in buildings of all other types of construction provided:

1. Areas do not exceed the number of apartments or guest rooms stipulated.
2. The fire-resistive wall conforms to the requirements of Section ~~504.5-705.6~~.
3. The wall complies with all other applicable provisions of the CBC.
4. The wall extends to all outer edges of horizontal projecting elements, such as balconies, roof overhangs, canopies, marquees or architectural projections.
5. No openings are permitted for air ducts or similar penetrations, except that openings for pipes, conduits and electrical outlets of copper, sheet steel or ferrous material shall be permitted through such wall and need not be protected, provided they do not unduly impair the required fire resistance of the assembly.
6. Tolerances around such penetrations shall be filled with approved noncombustible materials.

**3411.12.2 Installation.** The installation of all fire alarm equipment shall be in accordance with the California Fire Code.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211  
References: Health and Safety Code Sections 13143

(Relocated from 2001 CBC 403.25)

**[For SFM 403.25] 3411.13 Existing Group R Occupancy High-rise Buildings.**

(Relocated from 2001 CBC 403.25.1)

**[For SFM 403.25.1] 3411.13.1 General.** Regardless of other provisions of these regulations relating to existing high-rise buildings, requirements relative to existing Group R, ~~Division I Occupancies~~ shall not be less restrictive than those established pursuant to ~~Section 17920.7, Health and Safety Code~~ Health and Safety Code Section 13143.2.

(Relocated from 2001 CBC 403.25.2)

**[For SFM 403.25.2] 3411.13.2 Exit corridor openings.** Openings in corridor walls and ceilings shall be protected by not less than 13/4-inch (44.5 mm) solid-bonded wood-core doors, 1/4-inch-thick (6 mm) wired glass conforming to Section ~~713.3~~ 715.1, by approved fire dampers or by equivalent protection in lieu of any of these items. Transoms shall be fixed closed with material having a fire-resistive rating equal to 1/2-inch (12.7 mm) Type X gypsum wallboard or equivalent material installed on both sides of the opening.

(Relocated from 2001 CBC 403.25.3)

~~[For SFM 403.25.3]~~ **3411.13.3 Fire alarm systems.** Notwithstanding the provisions of Section ~~403.16~~ ~~403.20~~, every existing high-rise building used for the housing of a Group ~~R~~ ~~Division I~~ and Group R 2 Occupancy shall have installed therein a fire alarm system conforming to this subsection.

(Relocated from 2001 CBC 403.25.3.1)

~~[For SFM 403.25.3.1]~~ **3411.13.3.1 General.** Every apartment house and every hotel shall have installed therein an automatic or manually operated fire alarm system. Such fire alarm systems shall be so designed that all occupants of the building may be warned simultaneously.

(Relocated from 2001 CBC 403.25.3.2)

~~[For SFM 403.25.3.2]~~ **3411.13.3.2 Installation.** The installation of all fire alarm equipment shall be in accordance with the California Fire Code.

(Relocated from 2001 CBC 403.25.3.3)

~~[For SFM 403.25.3.3]~~ **3411.13.3.3 Fire-extinguishing systems.** Automatic fire-extinguishing systems installed in any structure subject to these regulations shall have an approved flow indicator ~~electronically~~ electrically interconnected to the required fire alarm system.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

## **SECTION 3412**

### **403.11**~~[For SFM]~~ **EXISTING HIGH-RISE BUILDINGS.**

Relocated from 2001 CBC 403.11.1

**3412.1 Scope and definition.** The provisions of Sections ~~403.11.1~~ 3412.1 through ~~403.25~~ 3412.27 shall apply to every existing high-rise building of any type of construction or occupancy having floors (as measured from the top of the floor surface) used for human occupancy located more than 75 feet (22 860 mm) above the lowest floor level having building access.

#### **Exceptions:**

1. Hospitals, as defined in Section 1250 of the Health and Safety Code.
2. The following structures, while classified as high-rise buildings, shall not be subject to the provisions of Sections ~~403.11.1~~ 3412.1 through ~~403.25~~ 3412.27, but shall conform to all applicable provisions of these regulations.
  - 2.1 Building used exclusively as open parking garages.
  - 2.2 Buildings where all floors above the 75 foot (22 860 mm) level are used exclusively as open parking garages.
  - 2.3 Floors of buildings used exclusively as open parking garages and located above all other floors used for human occupancy.
  - 2.4 Buildings such as power plants, look-out towers, steeples, grain houses, and similar structures, when so determined by the enforcing agency.
  - 2.5 Buildings used exclusively for jails and prisons.

For the purposes of this section, "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 (610 mm) 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.

*“Existing high-rise structure” means a high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.*

*For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Actual construction of such buildings shall commence on or before January 1, 1976, unless all provisions for new buildings have been met.*

**Note:** *it is the intent of this section that, in determining the level from which the highest occupied floor is to be measured, the enforcing agency should exercise reasonable judgment, including consideration of overall accessibility to the building by fire department personnel and vehicular equipment. When a building is situated on sloping terrain and there is building access on more than one level, the enforcing agency may select the level which provides the most logical and adequate fire department access.*

*Relocated from 2001 CBC 403.11.2*

**3412.2 Compliance data.** *Except as may be otherwise specified, existing high-rise building shall conform to the applicable requirements of these regulations by April 26, 1979.*

**Exception:** *The period of compliance may be extended upon showing of good cause for such extension if a systematic and progressive plan of correction is submitted to, and approved by, the enforcing agency. Such extension shall not exceed two years from the date of approval of such plan. Any plan of correction submitted pursuant to this exception shall be submitted and approved on or before April 26, 1979.*

*Relocated from 2001 CBC 403.11.3*

**3412.3 Continued use.** *Existing high-rise building may have their use continued if they conform, or are made to conform, to the intent of the provisions of Sections ~~403.12~~ 4312.5 through ~~403.25~~ 3412.27 to provide for the safety of the occupants of the high-rise buildings and person involved in fire-suppression activities.*

*Relocated from 2001 CBC 403.11.4*

**3412.4 Alternate protection.** *Alternate means of egress, fire-resistive area separations, smoke barriers, automatic fire detection or fire-extinguishing systems, or other fire-protection devices, equipment or installations may be approved by the enforcing agency to provide reasonable and adequate life safety as intended by Sections ~~403.12~~ 403.2.5 through ~~403.25~~ 403.2.26 for existing high-rise buildings.*

*Relocated from 2001 CBC 403.12*

**403.12 [For SFM] General**

*Relocated from 2001 CBC 403.12.1*

**3412.5 Basic provisions.** *The provisions outlined in Sections ~~403.12~~ 3412.1 through ~~403.25~~ 3412.27 are applicable to every existing high-rise building.*

*Relocated from 2001 CBC 403.13*

**403.13 [For SFM] Construction.**

*Relocated from 2001 CBC 403.13.1*

**3412.6 Minimum construction.** *Existing wood lath and plaster, existing ½-inch (12.7 mm) gypsum wallboard, existing installations of ½-inch thick (12.7 mm) wired glass which are or are rendered inoperative and fixed in a closed position, or other existing materials having similar fire-resistive capabilities shall be acceptable. All such assemblies shall be in good repair, free of any condition which would diminish their original fire-resistive characteristics.*

Where 1 ¾ -inch (44.5 mm) solid-bonded wood-core doors are specified in these regulations for existing high-rise buildings, new or existing 1 3/8-inch (34.9 mm) doors shall be acceptable where existing framing will not accommodate a 1 ¾-inch (44.5 mm) door.

**Note:** It is the intent of this provisions that existing wood frames may have their use continued.

Relocated from 2001 CBC 403.13.2

**3412.7 New construction.** All new construction shall be composed of materials and assemblies of materials conforming to the fire-resistive provisions of these regulations. In no case shall enclosure walls be required to be of more than one-hour fire-resistive construction.

**Exception:** When approved by the enforcing agency, materials specified in Section ~~403-13-1~~ 3412.6 may be used for new construction when necessary to maintain continuity of design and measurement of existing construction.

Relocated from 2001 CBC 403.14

**403.14 [For SFM] Exits.**

Relocated from 2001 CBC 403.14.1

**3412.8 General Exits.** Every floor from an existing high-rise building shall have access to two separate means of egress, one of which, when approved by the enforcing agency, may be an existing exterior fire escape.

New installations of smoke-proof enclosures shall not be required.

**Note:** In determining the adequacy of exits and their design, Chapter 10 may be used as a guide. It is the intent of this section that every existing high-rise building need not mandatorily conform or be made to conform with the requirements for new high-rise buildings. Reasonable judgment in the application of requirements must be exercised by the enforcing agency.

Relocated from 2001 CBC 403.14.2

**3412.9 Fire escapes.** An existing fire escape in good structural condition may be acceptable as one of the required means of egress from each floor. Access to such fire escapes may be by any one of the following:

Through a room between the corridor and the fire escape if the door to the room is operable from the corridor side without the use of any key, special knowledge or effort.

By a door operable to a fire escape from the interior without the use of any key, special knowledge or effort.

By a window operable from the interior. Such window shall have a minimum dimension of 29 inches (737 mm) when open. The sill shall not be more than 30 inches (762 mm) above the floor and landing.

Relocated from 2001 CBC 403.14.3

**3412.10 Protection of exterior openings.** When an existing fire escape is accepted as one of the require means of egress, openings onto the fire escape landing and openings within 5 feet (1524 mm) horizontally of the landings shall be protected in a manner acceptable to the enforcing agency.

Relocated from 2001 CBC 403.14.4

**3412.11 Locking of stairway doors.** When exit doors from corridors to exit stairways are locked to prohibit access from the stairway side, ~~conformance with Section 403.9 shall be provided or, the locking mechanisms shall be retracted to the unlocked position upon failure of electrical power and a telephone or other two-way communication system connected to an approved emergency service that operates continuously shall be provided at not less than every fifth floor in each required stairway.~~ In lieu thereof, master keys which will unlock all such doors from the stairway side shall be provided in such numbers and locations as approved by the enforcing agency.

Relocated from 2001 CBC 403.15

**403.15 [For SFM] Vertical Shafts.**

Relocated from 2001 CBC 403.15.1

**3412.12 Enclosures.** Interior vertical shafts, including but not limited to, elevators, stairway and utility, shall be enclosed with construction as set forth in Section ~~403-13~~ 3412.6.

Relocated from 2001 CBC 403.15.2

**3412.13 Opening protection.** Doors in other than elevators, which shall be of a type acceptable to the enforcing agency, shall be approved one-hour, fire-rated, tight-fitting or gasketed doors or equivalent protection, and shall be of the normally closed type, self-closing or a type which will close automatically in accordance with Section ~~713-1~~ 715.

**Exception:** In lieu of stairway enclosures, smoke barriers may be provided in such a manner that fire and smoke will not spread to other floors or otherwise impair exit facilities.

In these instances, smoke barriers shall not be less than one-hour fire resistive with openings protected by not less than approved one-third-hour, fire-rated, tight-fitting or gasketed doors. Such doors shall be of the self-closing type or of a type which will close automatically in the manner specified in Section ~~713-1~~ 715.

Doors crossing corridors shall be provided with wired-glass vision panels set in approved steel frames.

Doors for elevators shall not be of the open-grille type.

Relocated from 2001 CBC 403.16

**403.16 [For SFM] Fire-warning System.**

Relocated from 2001 CBC 403.16.1

**3412.14 General-Fire alarm system.** Every existing high-rise building shall be provided with an approved fire ~~warning~~ alarm system. In department stores, retail sales stores and similar occupancies where the general public is admitted, such systems shall be of a type capable of alerting staff and employees. In office buildings and all other high-rise buildings, such systems shall be of a type capable of alerting all occupants simultaneously.

**Exceptions:**

1. In areas of public assemblage, the type and location of audible ~~devices~~ appliances shall be as determined by the enforcing agency.
2. When acceptable to the enforcing agency, the occupant voice notification system required by Section ~~403-17~~ 3412.17 may be used in lieu of the fire-warning system required by Section ~~403-16~~ 3412.14.

Relocated from 2001 CBC 403.16.2

**3412.15 Existing systems.** Existing fire ~~warning~~ systems, when acceptable to the enforcing agency, shall be deemed as conforming to the provisions of these regulations. For requirements for existing Group R, ~~Division 1~~ Occupancies, see Section ~~403-25~~ 3411.13.

Relocated from 2001 CBC 403.16.3

**3412.16 Annunciation.** When a new fire alarm system is installed, it shall be connected to an annunciator panel installed in a location approved by the enforcing agency.

For purposes of annunciation, zoning shall be in accordance with the following:

1. When the system serves more than one building, each building shall be considered as a separate zone.
2. Each floor shall be considered as a separate zone.

**Exception:** Selective coded systems need not conform to Items 1 and 2.

Relocated from 2001 CBC 403.16.4

**3412.17 Fire department notification Monitoring.** ~~There shall be provided a dependable method of notifying the fire department. Shall be in accordance with Section 907.14.~~

Relocated from 2001 CBC 403.16.5

**3412.18 Systems Interconnection.** When an automatic fire detection system or automatic extinguishing system is installed, activation of such system shall cause the sounding of the fire-warning alarm system signaling devices notification appliances at locations designated by the enforcing agency.

Relocated from 2001 CBC 403.16.6

**3412.19 Manual sending stations fire alarm boxes.** A manual fire alarm stations box shall be provided in the locations designated by the enforcing agency. Such locations shall be where stations boxes are readily accessible and visible and in normal paths of daily travel by occupants of the building, ~~but need not exceed that specified in the California Electrical Code for the distribution of manual sending stations.~~

Relocated from 2001 CBC 403.16.7

~~**Wiring.** Approved and listed TFE and FEP cables may be installed exposed or concealed without the use of raceways. Such exposed cables shall not be installed less than 7 feet (2134 mm) from the floor, and when passing through fire resistive construction, shall have their penetrations protected in such a manner as to retain the integrity of the fire resistive construction.~~

~~**Exception:** Previously installed fire alarm wiring in good condition and adequate for the system's electrical requirements may be accepted.~~

Relocated from 2001 CBC 403.17

~~[For SFM 403.17]~~ **3412.20 Occupant voice notification system Emergency voice/alarm communication system.** An approved ~~occupant voice notification emergency voice/alarm~~ system shall be provided in every existing high-rise building which exceeds 150 feet (45720 mm) in height measured in the manner set forth in Section ~~403.14~~ 3412.1. Such system shall provide communication from a location available to and designated by the enforcing agency to not less than all public areas.

The ~~occupant voice notification emergency voice/alarm~~ system may be combined with a fire alarm system provide the combined system has been approved and listed by the State Fire Marshal. The sounding of a fire alarm signal in any given area or floor shall not prohibit voice communication to other areas of floors. Combination systems shall be designed to permit voice transmission to override the fire alarm signal, but the fire alarm signal shall not terminate in less than three minutes.

Relocated from 2001 CBC 403.18

~~[For SFM] 403.18~~ **3412.21 Fire department system.** When it is determined by test that portable fire department communication equipment is ineffective, a communication system acceptable to the enforcing agency shall be installed within the building to permit emergency communication between fire-suppression personnel.

Relocated from 2001 CBC 403.19

~~403.19 [For SFM]~~ **3412.22 Interior Wall and Ceiling Finish.** Interior wall and ceiling finish of exitways shall conform to the provisions of Chapter 8. Where the materials used in such finishes do not conform to the provisions of Chapter 8, such finishes may be surfaced with an approved fire-retardant coating.

Relocated from 2001 CBC 403.20

~~403.20 [For SFM]~~ **3412.23 Ventilation.** Natural or mechanical ventilation for the removal of products of combustion shall be provided in every story of an existing high-rise building. Such ventilation shall be any one or combination of the following:

Panels or windows in the exterior wall which can be opened. Such venting facilities shall be provided at the rate of at least 20 square feet (1.86 m<sup>2</sup>) of opening per 50 lineal feet (15 240 lineal mm) of exterior wall in each story, distributed around the perimeter at not more than 50-foot (15 240 mm) intervals on at least two sides of the building.

Approved fixed tempered glass may be used in lieu of openable panels or windows. When only selected panels or windows are of tempered glass, they shall be clearly identified as required by the enforcing agency. Any other design which will produce equivalent results.

Relocated from 2001 CBC 403.21

~~[For SFM] 403.21~~ **3412.24 Smoke control systems.** Existing air-circulation systems shall be provided with an override switch in a location approved by the enforcing agency which will allow for the manual control of shutdown of the systems.

**Exception:** Systems which serve only a single floor, or portion thereof, without any penetration by ducts or other means into adjacent floors.

Relocated from 2001 CBC 403.22

~~[For SFM] 403.22~~ **3412.25 Sensing devices-Elevator recall smoke detection.** Sensing devices Smoke detectors for emergency operation of elevators shall be provided as required by Section 3003.

~~**Exception:** Sensing devices required by Section 403.22 shall be State Fire Marshal approve and listed detectors of the type which respond to visible or invisible products of combustion based on a smoke obscuration of not more than 0.03 optical density per foot or more at ceiling height or at an elevation of 12 feet (3658 mm), whichever is lower, at the elevator entrance.~~

Relocated from 2001 CBC 403.23

~~[For SFM] 403.23~~ **3412.26 Exit signs and illumination.** Exits and stairways shall be provided with exit signs and illumination as required by Sections ~~1003.2.8.4~~ 1011.1 and ~~1003.2.9.2~~ 1011.2.

Relocated from 2001 CBC 403.24

~~[For SFM] 403.24~~ **3412.27 Automatic sprinkler system – Existing high-rise buildings.** Regardless of any other provisions of these regulations, every existing high-rise building of Type II-~~NB~~, Type III-~~NB~~ or Type V-~~NB~~ construction shall be provided with an approved automatic sprinkler system conforming to NFPA 13.

Authority: Health and Safety Code Sections 13108, 13143, 13210, 13211

References: Health and Safety Code Sections 13143

### **3413 EXISTING GROUP I OCCUPANCIES**

~~308.12 [For SFM] 3413.1 Existing Group I Occupancies-General.~~ Existing buildings housing existing protective social-care homes or facilities established prior to the effective date of these regulations March 4, 1972 may have their use continued if they conform, or are made to conform, to the following provisions:

~~308.12.1~~ **3413.2 Use of floors.** The use of floor levels in buildings of Type III, IV or V nonfire-rated construction may be as follows:

Nonambulatory - first floor only;

Ambulatory - not higher than the third-floor level, provided walls and partitions are constructed of materials equal in fire-resistive quality to that of wood lath and plaster in good repair and all walls are firestopped at each floor level.

~~308.12.2~~ **3413.3 Enclosure of exits and vertical openings.** Except for two-story structures housing ambulatory guests, all interior stairs shall be enclosed in accordance with Chapter 10. In lieu of stairway enclosures, floor separations or smoke barriers may be provided in such a manner that fire and smoke will not spread rapidly to floors above or otherwise impair exit facilities. In these instances, floor separations or smoke barriers shall have a fire resistance equal to not less than 1/2-inch (13 mm) gypsum wall board on each side of wood studs with openings protected by not less than a 1 3/4-inch (44.5 mm) solid bonded wood-core door of the self-closing type. All other vertical openings shall be enclosed in accordance with the provisions of Section ~~403.15~~ 3412.6.

~~308.12.3~~ **3413.4 Exit access.** Each floor or portion thereof of buildings used for the housing of existing protective social-care homes or facilities shall have access to not less than two exits in such a manner as to furnish egress from the building or structure in the event of an emergency substantially equivalent to the provisions of Chapter 10.

~~308.12.4~~ **3413.5 Corridor openings.** Openings from rooms to interior corridors shall be protected by not less than 13/4-inch (44.5 mm) solid-bonded wood-core doors. Transoms and other similar openings shall be sealed with materials equivalent to existing corridor wall construction.

~~308.12.5~~ **3413.6 Interior finishes** Interior wall and ceiling finishes shall conform to the requirements for a Group R, Division 1 Occupancy as specified in Chapter 8.

~~308.12.6~~ **3413.7 Automatic fire sprinklers** Automatic sprinkler systems shall be installed in existing protective social-care occupancies in accordance with the provisions of Section ~~308.7~~ 903.2.5.

~~308.12.7~~ **3413.8 Fire alarm systems.** Automatic fire alarm systems shall be installed in existing protective social-care homes or facilities in accordance with the provisions of Section ~~308.9~~ 907.2.6.

**EXCEPTION:** When an approved automatic sprinkler system conforming to Section ~~308.7~~ 903.2.5 is installed, a separate fire alarm system as specified in this section need not be provided.

**3413.9 Group I-2.** In existing Group I-2 Occupancies, the corridor fire-resistance rating shall be 1-hour when smoke compartment are not equipped with an automatic sprinkler system in accordance with Section 903.1.1

Authority: Health and Safety Code Sections 13143.6

References: Health and Safety Code Sections 13143.6

### ~~307.13 [For SFM]~~ **3414 Existing Group H, ~~Division 8~~ L Occupancies**

Authority: Health and Safety Code Sections 13143, 13210

References: Health and Safety Code Sections 13143, 13210

~~307.13.1 [For SFM] Additions, Alterations or Repairs~~ **3414.1 General.** Additions, alterations or repairs, or may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this Code Section, provided the addition, alteration, or repair conforms to ~~that required for a new building or structure~~ the requirements of this Section.

**3414.2 Unsafe Condition.** Additions, repairs, or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code, nor shall such additions or alterations cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

**3414.3 Changes in Use or Occupancy.** ~~Any buildings that have alterations or additions so altered, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings. Any building plus new additions shall not exceed the height, number of stories and area permitted for new buildings.~~

**3414.4 Buildings Not in Compliance with Code.** Additions or alterations shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such addition or alteration will result in the existing building or structure being no more hazardous, based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken.

(Relocated from 307.13.2, 2001 CBC)

~~307.13.2 [For SFM]~~ **3414.5 Maintenance of Structural and Fire Resistive Integrity** Alterations or repairs to an existing building or structure that are nonstructural and do not adversely affect any structural member of any part of the building or structure having required fire resistance may be made with the same materials of which the building or structure is constructed. The installation or replacement of glass shall be as required for new installations.

~~(Relocated from 307.13.3 2001 CBC)~~

~~307.13.3 [For SFM] Existing Installations~~ **3414.6 Continuation of Existing Use.** Buildings in existence at the time of the adoption of this code may have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this code, provided such continued use is not dangerous to life.

~~(Relocated from 307.13.4, 2001 CBC)~~

~~307.13.4 [For SFM] 3414.7~~ Laboratories which are located above the 10th story prior to 1992 ~~the effective date of these regulations~~ may have their use continued and may have additions, alterations and repairs when all the following are provided:

~~Additions, alterations and repairs would otherwise be classified as a Group H, Division 8 Occupancy;~~

~~Additions, alterations and repairs do not extend beyond the existing story; where the Group L is located and~~

~~Additions, alterations and repairs comply with all other provisions for a new Group L H, Division 8 Occupancy; and~~

~~Additions, alterations and repairs shall also include an automatic fire alarm system which responds to the products of combustion other than heat is installed in accordance with 907 the California Fire Code.~~

## CHAPTER 35 REFERENCED STANDARDS

(Note: Adopt entire Chapter with amendments.)

### ASTM Standards

ASTM E648-04 Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source

804.4.2

### FM Standards

3260, (2000) Radiant Energy-Sensing Fire Detectors for Automatic Fire Alarm Signaling.

Authority: Health and Safety Code Sections 13108, 13143, 13210

References: Health and Safety Code Sections 13143

### NFPA Standards

**National Standards. Chapter 35**

#### NFPA

NFPA 11A, 1999 Edition, Medium- and High-Expansion Foam Systems

NFPA 13, 2002 Edition, Installation of Sprinkler Systems, as amended

**Add a sentence to the beginning of Section 9.3.5.8.9 as follows:**

Where pipe is used for sway bracing, it shall have a wall thickness of not less than Schedule 40.

**Replace Section 9.3.5.9.4 as follows:**

Lag screws or powder-driven fasteners shall not be used to attach braces to the building structure.

NFPA 15, 2001 Edition, Water Spray Fixed Systems for Fire Protection

NFPA 20, 1999-2003 Edition, Installation of Stationary Pumps for Fire Protection

NFPA 22, 2003 Edition, Water Tanks for Private Fire Protection

NFPA 24, 2002 Edition, Installation of Private Fire Service Mains and Their Appurtenances

NFPA 37, 2002 Edition, Installation and Use of Stationary Combustion Engines and Gas Turbines

NFPA 50, 2001 Edition, Bulk Oxygen Systems at Consumer Sites

NFPA 52, 2002 Edition, Compressed Natural Gas (CNG) Vehicular Fuel Systems Code

NFPA 57, 2002 Edition, Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code

NFPA 54, 2002 Edition, National Fuel Gas Code

NFPA 58, 2004 Edition, Standard for the Storage and Handling of Liquefied Petroleum Gases

NFPA 72, 2002 Edition, National Fire Alarm Code, as amended.

**4.4.4.4. Wiring.** The installation of all wiring, cable and equipment shall be in accordance with ~~NFPA 70 California~~ National Electrical Code, and specifically with Article 760, 770 and 800, where applicable. Optical fiber cables shall be protected against mechanical injury in accordance with Article 760.

**5.12.4** The operable part of each manual fire alarm box shall be not less than 1.1 m (3 1/2 ft) and not more than ~~1.37m (4 1/2 ft)~~ **1.22 m (4 ft)** above floor level.

**5.12.8** Additional fire alarm boxes shall be provided so that the travel distance to the nearest fire alarm box shall not be in excess of 61m (200 ft) measured horizontally on the same floor.

**Exception:** *When individual dwelling units are served by a single exit stairway, additional boxes at other than the ground floor may be omitted.*

**6.4.2.2.2**

**Exception:** *(4) Where the vertically run conductors are contained in a 2-hour rated cable assembly, or enclosed (installed) in a 2-hour rated enclosure or a listed circuit integrity (C.I.) cable, which meets or exceeds a 2-hour fire resistive rating.*

**6.8.5.4.1 (2)** A smoke detector that is continuously subjected to a smoke concentration above alarm threshold does not delay the system within functions of 4.4.3, 6.8.1.1, or 6.15.2.1 by more than ~~4-minute~~ **30 seconds**.

**6.8.5.4.1 (5)** *Operation of a patient room smoke detector in Group I-1 and I-2 Occupancies shall not include an alarm verification feature.*

**7.4.1.2.** *The total sound pressure level produced by combining the ambient sound pressure level with all audible notification appliances operation shall not exceed ~~120~~ **110** dBA anywhere in the occupied area.*

**7.4.3.1.** *Audible notification appliances intended for operation in the private mode shall have a sound level of not less than 45dBA at 10 feet (3m) or more than ~~120~~ **110** dBA at the minimum hearing distance from the audible appliance.*

**11.7.2.1** *The alarm verification feature shall not be used for household fire warning equipment.*

**11.7.5.7.1** *The alarm verification feature shall not be used for household fire warning equipment.*

NFPA 92 A, 2000 Edition, Recommended Practice for Smoke-Control Systems

NFPA 99, 2002 Edition, Health Care Facilities

Authority: Health and Safety Code Sections 13108, 13143, 13143.6, 13210, Public Education Code 17074.50  
References: Health and Safety Code Sections 13143

(SFM STANDARDS from 2001 CBC, 3504.1.2)

~~3504.1.2 [For SFM]~~ California State Fire Marshal Standards are found in the California Code of Regulations, Title 24, Part 12.

~~SFM 12-3, Releasing Systems for Security Bars in Dwellings~~

~~SFM 12-4-1, Smoke or Heat Ventilators.~~

~~SFM 12-7-1, Fire Tests of Building Construction and Materials~~

~~SFM 12-7-2, Fire Dampers~~

~~SFM 12-7-3, Fire-testing Furnaces~~

~~SFM 12-7A-1, Exterior Wall Siding and Sheathing~~

~~SFM 12-7A-2, Exterior Window~~

~~SFM 12-7A-3, Under Eave~~

~~SFM 12-7A-4, Decking~~

~~SFM 12-8-100, Room Fire Tests for Wall and Ceiling Materials.~~

~~SFM 12-8-1A, Calculation of the Total Rate of Heat and Carbon Monoxide or Carbon Dioxide Production~~

~~SFM 12-8-1B, Mounting Techniques for Wall and Ceiling Interior Finish Material~~

~~SFM 12-10-1, Power Operated Exit Doors~~

~~SFM 12-10-2, Single Point Latching or Locking Devices~~

~~SFM 12-10-3, Emergency Exit and Panic Hardware~~

~~SFM 12-72-1, Protective Signaling Systems~~

~~SFM 12-72-2, Single and Multiple Station Fire Alarm Devices~~

~~SFM 12-73-3, Smoke Detectors, Combustion Products Type~~

(The Office of the State Fire Marshal standards referred to above are found in the California Code of Regulations, Title 24, Part 12.)

## UL Standards

~~27- UL 13, Power-limited Circuit Cables, Second Edition February 29, 1996~~

~~28- UL 38, Manually Actuated Signaling Boxes, Seventh Edition, March 26, 1999, with revisions through June 12, 2001 and including February 2, 2005~~

### **Amend Section 14.1.5 as follows:**

14.1.5 A signaling box having a glass panel, disc, rod, or similar part that must be broken to operate it for a signal or for access to its actuating means shall satisfactorily complete five part-breaking operations using the means provided with the box, without jamming of the mechanism or other interference by broken particles. It shall be practicable to remove and replace the broken parts. A signaling box shall not have a glass panel, disc, rod, or similar part requiring a striking action by grasping a tool to operate it for a signal. The force required to activate controls shall be no greater than 5 pounds (22.N) of force.

### **Add Appendix B Chapter to UL 38 (1999) as follows:**

#### **Appendix B, Section 4.1.5**

**4.1.5 Operation.** Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

~~29-UL 193, Alarm Valves for Fire-Protection Service, Tenth Edition, January 12, 2004~~

~~30-UL 199, Automatic Sprinklers for Fire Protection Service, Edition with revisions through August 19, 2005~~

~~31- UL 199-E Fire Test of sprinklers and Water Spray Nozzles for the Protection of Deep Fat Fryers, May 2004~~

~~32-UL 217, Single- and Multiple-Station Smoke Alarm, Fifth Edition, February 21, 1997 with revisions through June 15, 2004 August 15, 2005~~

### **Amend Section 34.2.1 as follows:**

Each single and multiple station smoke alarm may be provided with an automatically resettable alarm silencing means that has a fixed or variable time setting which silences the smoke alarm for a maximum of 15 minutes. Alarm silencing shall not disable the smoke alarm. It may reduce the sensitivity to no more than 4 percent obscuration (0.0177 O.D. per foot). Each device shall operate a distinctive audible trouble signal while in the

silence mode. This may be done with a short beep similar to the low-battery signal or by visible indication. Following the silenced period, the alarm shall restore automatically to its intended operation. Silencing of one alarm of a multiple station system shall not prevent an alarm operation from the other alarms in the system. See 34.2.1 and 34.2.2.

- ~~33~~–UL 228, Door Closers/ Holders, with or without Integral Smoke Detectors, Fourth Edition, April 29, 1997, with revisions through ~~January 24, 1999~~ January 26, 2006
- ~~34~~–UL 260, Dry Pipe and Deluge Valves for Fire Protection Service, Seventh Edition, March 17, 2004
- ~~35~~–UL 262, Gate Valves for Fire Protection Service, Eighth Edition, February 26, 2004
- ~~36~~–UL 268, Smoke Detectors for Fire Protective Signaling Systems, Fourth Edition, December 30, 1996, with revisions through October 22, 2003
- ~~37~~–UL 268A, Smoke Detectors for Duct Application, Third Edition, May 15, 1998 with revisions through ~~April 10, 2003~~ October 22, 2003
- ~~38~~–UL 312, Check Valves for Fire-Protection Service, Ninth Edition, January 8, 2004
- ~~39~~–UL 346, Waterflow Indicators for Fire Protective Signaling Systems Fourth Edition, May 27, 1994
- ~~40~~–UL 464, Audible Signal Appliances, Eighth Edition, April 28, 2003, with revisions through October 10, 2003
- ~~41~~–UL 497B, Protectors for Data Communication and Fire Alarm Circuits, Fourth Edition, June 14, 2004
- ~~42~~–UL 521, Heat Detectors for Fire Protective Signaling Systems, Seventh Edition, February 19, 1999 with revisions through ~~October 3, 2002~~ July 20, 2005
- ~~43~~–UL 539, Single- and Multiple-Station Heat Detectors, ~~Fifth~~ January 21, 2000 August 15, 2005
- ~~44~~–UL 632, Electrically Actuated Transmitters Seventh Edition, March 29, 2000
- ~~45~~–UL 753, Alarm Accessories for Automatic Water Supply Valves for Fire Protection Service, Ninth Edition, May 7, 2004
- ~~46~~–UL 813, Commercial Audio Equipment, Seventh Edition, December 13, 1996, with revisions through December 7, 1999
- ~~47~~–UL 864, Control Units for Fire Protective Signaling Systems, as amended, Ninth Edition, September 30, 2003 with revisions through ~~October 29, 2003~~ July 14, 2005

**Amend No. 55.1 as follows:**

**RETARD-RESET-RESTART PERIOD – MAXIMUM 30 SECONDS** - No alarm obtained from control unit. Maximum permissible time is ~~60~~ 30 seconds.

**Amend Section 55.2.2 as follows:**

Where an alarm verification feature is provided, the maximum retard-reset-restart period before an alarm signal can be confirmed and indicated at the control unit, including any control unit reset time and the power-up time for the detector to become operational for alarm, shall not exceed 30 seconds. (The balance of the section text is to remain unchanged).

**Add a Section 55.2.9 as follows:**

Smoke detectors connected to an alarm verification feature shall not be used as releasing devices.

**Exception:** Smoke detectors which operate their releasing function immediately upon alarm actuation independent of alarm verification feature.

**Amend Section 89.1.10 as follows:**

The existing text of this section is to remain as printed with one editorial amendment as follows:

**THE TOTAL DELAY (CONTROL UNIT PLUS SMOKE DETECTORS) SHALL NOT EXCEED 30 SECONDS.**

(The balance ~~to~~ of the section text is to remain unchanged).

- ~~48~~–UL 884, Underfloor ~~Electric~~ Raceways and Fittings, Tenth Edition, 1987 November 30, 1998
- ~~49~~–UL 913, Intrinsically Safe Apparatus for Use in Class I, II, and III, Division 1, Hazardous Locations, Sixth Edition, ~~August 8, 2002~~ August 9, 2004
- ~~50~~–UL 916, Energy Management Equipment, Third Edition, December 23, 1998 with revisions through February 10, 2004
- ~~51~~–UL 924, Emergency Lighting and Power Equipment, Eighth Edition, March 29, 1995 with revisions through and including July 11, 2001
- ~~52~~–UL 985, Household Fire Warning System Units, Fifth Edition, May 26, 2000 with revisions through April 29, 2004

- 53.—**UL 1091**, *Butterfly Valves for Fire Protection Service Sixth Edition*, ~~June 3, 2004~~ August 5, 2005  
54.—**UL 1424**, *Cables for Power-limited Fire Protective Signaling Circuits, Second Edition*, April 29, 1996  
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Authority: Health and Safety Code Sections 13108.5(a), 13143, 18949.2(b) 18949.2(c) and Government Code Section 51189.

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

#### **APPENDIX CHAPTER 1 ADMINISTRATION**

**IBC Chapter 1 Administration relocated here as an Appendix**

**(Note: Adopt only those Sections listed the matrix adoption table.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

#### **APPENDIX A EMPLOYEE QUALIFICATIONS**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

#### **APPENDIX B BOARD OF APPEALS**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

#### **APPENDIX C GROUP U – AGRICULTURAL BUILDINGS**

**(Note: Adopt the entire Appendix without amendments.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX D  
FIRE DISTRICTS**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX E  
SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX F  
RODENT PROOFING**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX G  
FLOOD RESISTANT CONSTRUCTION**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX H  
SIGNS**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949

References: Health and Safety Code Sections 13143

**APPENDIX I  
PATIO COVERS**

**(Note: Adopt entire IBC Appendix without amendments.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143

**APPENDIX J**  
**EXCAVATION AND GRADING**

**(Note: This Appendix is not adopted.)**

Authority: Health and Safety Code Sections 13143, 18949  
References: Health and Safety Code Sections 13143