

REVISION RECORD FOR THE STATE OF CALIFORNIA

ERRATA

October 1, 2020

2019 Title 24, Part 9, California Fire Code

General Information:

1. The date of this erratum is for identification purposes only. See the History Note Appendix on the back side or accompanying page.
2. This erratum is issued by the California Building Standards Commission in order to correct nonsubstantive printing errors or omissions in California Code of Regulations, Title 24, Part 9, of the 2019 *California Fire Code*. Instructions are provided below.
3. Health and Safety Code Section 18938.5 establishes that only building standards in effect at the time of the application for a building permit may be applied to the project plans and construction. This rule applies to both adoptions of building standards for Title 24 by the California Building Standards Commission, and local adoptions and ordinances imposing building standards. An erratum to Title 24 is a nonregulatory correction because of a printing error or omission that does not differ substantively from the official adoption by the California Building Standards Commission. Accordingly, the corrected code text provided by this erratum may be applied on and after the stated effective date.
4. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

Title 24, Part 9

Remove Existing Pages

25 and 26
229 and 230
251 and 252
457 and 458
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Insert Buff-Colored Pages

25 and 26
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ness, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

[A] 109.2 Limitations on authority. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall not have authority to waive requirements of this code.

[A] 109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems, and are not employees of the jurisdiction.

SECTION 110 VIOLATIONS

[A] 110.1 Unlawful acts. It shall be unlawful for a person, firm or corporation to erect, construct, alter, repair, remove, demolish or utilize a building, occupancy, premises or system regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

[A] 110.2 Owner/occupant responsibility. Correction and abatement of violations of this code shall be the responsibility of the owner or the owner's authorized agent. Where an occupant creates, or allows to be created, hazardous conditions in violation of this code, the occupant shall be held responsible for the abatement of such hazardous conditions.

[A] 110.3 Notice of violation. Where the fire code official finds a building, premises, vehicle, storage facility or outdoor area that is in violation of this code, the fire code official is authorized to prepare a written notice of violation describing the conditions deemed unsafe and, where compliance is not immediate, specifying a time for reinspection.

[A] 110.3.1 Service. A notice of violation issued pursuant to this code shall be served on the owner, the owner's authorized agent, operator, occupant or other person responsible for the condition or violation, either by personal service, mail or by delivering the same to, and leaving it with, some person of responsibility on the premises. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation shall be mailed by certified mail with return receipt requested or a certificate of mailing, to the last known address of the owner, the owner's authorized agent, or occupant.

[A] 110.3.2 Compliance with orders and notices. A notice of violation issued or served as provided by this code shall be complied with by the owner, the owner's authorized agent, operator, occupant or other person responsible for the condition or violation to which the notice of violation pertains.

[A] 110.3.3 Prosecution of violations. If the notice of violation is not complied with promptly, the fire code official is authorized to request the legal counsel of the jurisdiction to institute the appropriate legal proceedings at law or in equity to restrain, correct or abate such violation or to

require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant hereto.

[A] 110.3.4 Unauthorized tampering. Signs, tags or seals posted or affixed by the fire code official shall not be mutilated, destroyed or tampered with, or removed, without authorization from the fire code official.

[A] 110.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a **[SPECIFY OFFENSE]**, punishable by a fine of not more than **[AMOUNT]** dollars or by imprisonment not exceeding **[NUMBER OF DAYS]**, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] 110.4.1 Abatement of violation. In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

SECTION 111 UNSAFE BUILDINGS

[A] 111.1 General. If during the inspection of a premises, a building or structure, or any building system, in whole or in part, constitutes a clear and inimical threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section, and shall refer the building to the building department for any repairs, alterations, remodeling, removing or demolition required.

[A] 111.1.1 Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe or deficient because of inadequate means of egress, that constitute a fire hazard, are otherwise dangerous to human life or the public welfare, or involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. A vacant structure that is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe.

[A] 111.1.2 Structural hazards. Where an apparent structural hazard is caused by the faulty installation, operation or malfunction of any of the items or devices governed by this code, the fire code official shall immediately notify the building code official in accordance with Section 111.1.

[A] 111.2 Evacuation. The fire code official or the fire department official in charge of an incident shall be authorized to order the immediate evacuation of any occupied building deemed unsafe where such building has hazardous conditions that present imminent danger to building occupants. Persons so notified shall immediately leave the struc-

ture or premises and shall not enter or re-enter until authorized to do so by the fire code official or the fire department official in charge of the incident.

[A] 111.3 Summary abatement. Where conditions exist that are deemed hazardous to life and property, the fire code official or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code.

[A] 111.4 Abatement. The owner, the owner's authorized agent, operator or occupant of a building or premises deemed unsafe by the fire code official shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other approved corrective action.

an immediate hazard. The fire code official shall notify the serving utility and, where possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, then the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

SECTION 112 STOP WORK ORDER

[A] 112.1 Order. Where the fire code official finds any work regulated by this code being performed in a manner contrary to the provisions of this code, or in a dangerous or unsafe manner, the fire code official is authorized to issue a stop work order.

[A] 112.2 Issuance. A stop work order shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work is authorized to resume.

[A] 112.3 Emergencies. Where an emergency exists, the fire code official shall not be required to give a written notice prior to stopping the work.

[A] 112.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.

SECTION 113 SERVICE UTILITIES

[A] 113.1 Authority to disconnect service utilities. The fire code official shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate

3. Manual fire alarm boxes with a protective cover installed are permitted to protrude 4 inches.

[BE] 1003.3.4 Clear width. Protruding objects shall not reduce the minimum clear width of accessible routes as required by Chapter 11A or 11B of the California Building Code.

[BE] 1003.4 Slip-resistant surface. Circulation paths of the means of egress shall have a slip-resistant surface and be securely attached.

[BE] 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 1012 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, R-3, S and U at exterior doors not required to be accessible by Chapter 11A or 11B of the California Building Code.
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 11A or 11B of the California Building Code, where the risers and treads comply with Section 1011.5, the minimum depth of the tread is 13 inches (330 mm) and not less than one handrail complying with Section 1014 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 11A or 11B of the California Building Code, provided that the risers and treads comply with Section 1029.14 and the aisle is provided with a handrail complying with Section 1029.16.

Throughout a story in a Group I-2 and I-2.1 occupancy, any change in elevation in portions of the means of egress that serve nonambulatory persons shall be by means of a ramp or sloped walkway.

[BE] 1003.6 Means of egress continuity. The path of egress travel along a means of egress shall not be interrupted by a building element other than a means of egress component as specified in this chapter. Obstructions shall not be placed in the minimum width or required capacity of a means of egress component except projections permitted by this chapter. The minimum width or required capacity of a means of egress system shall not be diminished along the path of egress travel.

[BE] 1003.7 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress from any other part of the building.

Exception: Elevators used as an accessible means of egress in accordance with Section 1009.4.

**[BE] TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT**

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR ^a
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	See Section 1004.4
Assembly without fixed seats	
Concentrated (chairs only – not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	150 gross
Concentrated business use areas	See Section 1004.8
Courtrooms – other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
Group H-5 fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross
Sleeping areas	120 gross
Kitchens, commercial	200 gross
Laboratory	
Educational (K–12)	50 net
Laboratories, noneducational	100 net
Laboratory suite ^b	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mall buildings – covered and open	See Section 402.8.2 of the California Building Code
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

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

a. Floor area in square feet per occupant.

b. See Section 453.2 of the California Building Code.

SECTION 1004 OCCUPANT LOAD

[BE] 1004.1 Design occupant load. In determining means of egress requirements, the number of occupants for whom means of egress facilities are provided shall be determined in accordance with this section.

[California Code of Regulations, Title 19, Division 1, §3.27] Overcrowding.

The number of occupants of any building, structure, or portion thereof, shall not exceed the permitted or posted capacity.

[BE] 1004.2 Cumulative occupant loads. Where the path of egress travel includes intervening rooms, areas or spaces, cumulative occupant loads shall be determined in accordance with this section.

[BE] 1004.2.1 Intervening spaces or accessory areas.

Where occupants egress from one or more rooms, areas or spaces through others, the design occupant load shall be the combined occupant load of interconnected accessory or intervening spaces. Design of egress path capacity shall be based on the cumulative portion of occupant loads of all rooms, areas or spaces to that point along the path of egress travel.

[BE] 1004.2.2 Adjacent levels for mezzanines. That portion of the occupant load of a mezzanine with required egress through a room, area or space on an adjacent level shall be added to the occupant load of that room, area or space.

[BE] 1004.2.3 Adjacent stories. Other than for the egress components designed for convergence in accordance with Section 1005.6, the occupant load from separate stories shall not be added.

[BE] 1004.3 Multiple-function occupant load. Where an area under consideration contains multiple functions having different occupant load factors, the design occupant load for such area shall be based on the floor area of each function calculated independently.

[BE] 1004.4 Multiple occupancies. Where a building contains two or more occupancies, the means of egress requirements shall apply to each portion of the building based on the occupancy of that space. Where two or more occupancies utilize portions of the same means of egress system, those egress components shall meet the more stringent requirements of all occupancies that are served.

[BE] 1004.5 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.5. For areas without fixed seating, the occupant load shall be not less than that number determined by dividing the floor area under consideration by the occupant load factor assigned to the function of the space as set forth in Table 1004.5. Where an intended function is not listed in Table 1004.5, the fire code official shall establish a function based on a listed function that most nearly resembles the intended function.

Exception: Where approved by the fire code official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load.

[BE] 1004.5.1 Increased occupant load. The occupant load permitted in any building, or portion thereof, is permitted to be increased from that number established for the occupancies in Table 1004.5, provided that all other requirements of the code are met based on such modified number and the occupant load does not exceed one occupant per 7 square feet (0.65 m²) of occupiable floor space. Where required by the fire code official, an approved aisle, seating or fixed equipment diagram substantiating any increase in occupant load shall be submitted. Where required by the fire code official, such diagram shall be posted.

[California Code of Regulations, Title 19, Division 1, §3.30] Posting of Room Capacity.

Any room having an occupant load of 50 or more persons where fixed seats are not installed, and which is used for assembly, classroom, dining, drinking, or similar purposes, shall have the capacity of the room posted in a conspicuous place near the main exit from the room. Posting shall be by means of a durable sign having a contrasting color from the background to which it is attached. Signs shall be of an approved type and shall be maintained in a legible manner by the owner or his authorized agent and shall indicate the number of occupants permitted for each room use. No person shall deface or remove such signs except as authorized by the enforcing agency.

[BE] 1004.6 Fixed seating. For areas having fixed seats and aisles, the occupant load shall be determined by the number of fixed seats installed therein. The occupant load for areas in which fixed seating is not installed, such as waiting spaces, shall be determined in accordance with Section 1004.5 and added to the number of fixed seats.

The occupant load of wheelchair spaces and the associated companion seat shall be based on one occupant for each wheelchair space and one occupant for the associated companion seat provided in accordance with *Chapter 11B* of the *California Building Code*.

For areas having fixed seating without dividing arms, the occupant load shall be not less than the number of seats based on one person for each 18 inches (457 mm) of seating length.

The occupant load of seating booths shall be based on one person for each 24 inches (610 mm) of booth seat length measured at the backrest of the seating booth.

[BE] 1004.7 Outdoor areas. Yards, patios, occupied roofs courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the fire code official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

Exceptions:

1. Outdoor areas used exclusively for service of the building need only have one means of egress.
2. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

[BE] 1011.5.5.2 Nosing projection uniformity. Nosing projections of the leading edges shall be of uniform size, including the projections of the nosing's leading edge of the floor at the top of a flight.

[BE] 1011.5.5.3 Solid risers. Risers shall be solid.

Exceptions:

1. Solid risers are not required for stairways that are not required to comply with Section 1009.3, provided that the opening between treads does not permit the passage of a sphere with a diameter of 4 inches (102 mm).
2. Solid risers are not required for occupancies in Group I-3 or in Group F, H and S occupancies other than areas accessible to the public. The size of the opening in the riser is not restricted.
3. Solid risers are not required for spiral stairways constructed in accordance with Section 1011.10.

[BE] 1011.6 Stairway landings. There shall be a floor or landing at the top and bottom of each stairway. The width of landings, measured perpendicularly to the direction of travel, shall be not less than the width of stairways served. Every landing shall have a minimum depth, measured parallel to the direction of travel, equal to the width of the stairway or 48 inches (1219 mm), whichever is less. 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. Where wheelchair spaces are required on the stairway landing in accordance with Section 1009.6.3, the wheelchair space shall not be located in the required width of the landing and doors shall not swing over the wheelchair spaces.

Exceptions:

1. Where stairways connect stepped aisles to cross aisles or concourses, stairway landings are not required at the transition between stairways and stepped aisles constructed in accordance with Section 1029.
2. *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.*

[BE] 1011.7 Stairway construction. Stairways shall be built of materials consistent with the types permitted for the type of construction of the building, except that wood handrails shall be permitted for all types of construction.

[BE] 1011.7.1 Stairway walking surface. The walking surface of treads and landings of a stairway shall not be sloped steeper than one unit vertical in 48 units horizontal (2-percent slope) in any direction. Stairway treads and landings shall have a solid surface. Finish floor surfaces shall be securely attached.

Exceptions:

1. Openings in stair walking surfaces shall be a size that does not permit the passage of 1/2-inch-diam-

eter (12.7 mm) sphere. Elongated openings shall be placed so that the long dimension is perpendicular to the direction of travel.

2. In Group F, H and S occupancies, other than areas of parking structures accessible to the public, openings in treads and landings shall not be prohibited provided that a sphere with a diameter of 1 1/8 inches (29 mm) cannot pass through the opening.

[BE] 1011.7.2 Outdoor conditions. Outdoor stairways and outdoor approaches to stairways shall be designed so that water will not accumulate on walking surfaces.

[BE] 1011.7.3 Enclosures under interior stairways. The walls and soffits within enclosed usable spaces under enclosed and unenclosed stairways shall be protected by 1-hour fire-resistance-rated construction or the fire-resistance rating of the stairway enclosure, whichever is greater. Access to the enclosed space shall not be directly from within the stairway enclosure.

Exception: Spaces under stairways serving and contained within a single residential dwelling unit in Group R-2 or R-3 shall be permitted to be protected on the enclosed side with 1/2-inch (12.7 mm) gypsum board.

[BE] 1011.7.4 Enclosures under exterior stairways. There shall not be enclosed usable space under exterior exit stairways unless the space is completely enclosed in 1-hour fire-resistance-rated construction. The open space under exterior stairways shall not be used for any purpose.

[BE] 1011.8 Vertical rise. A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings.

Exception: Spiral stairways used as a means of egress from technical production areas.

[BE] 1011.9 Curved stairways. Curved stairways with winder treads shall have treads and risers in accordance with Section 1011.5 and the smallest radius shall be not less than twice the minimum width or required capacity of the stairway.

Exception: The radius restriction shall not apply to curved stairways in Group R-3 and within individual dwelling units in Group R-2.

[BE] 1011.10 Spiral stairways. Spiral stairways are permitted to be used as a component in the means of egress only within dwelling units or from a space not more than 250 square feet (23 m²) in area and serving not more than five occupants, or from technical production areas in accordance with Section 410.5 of the *California Building Code*.

A spiral stairway shall have a 6 3/4-inch (171 mm) minimum clear tread depth at a point 12 inches (305 mm) from the narrow edge. The risers shall be sufficient to provide a headroom of 78 inches (1981 mm) minimum, but riser height shall not be more than 9 1/2 inches (241 mm). The minimum stairway clear width at and below the handrail shall be 26 inches (660 mm).

[BE] 1011.11 Handrails. Flights of stairways shall have handrails on each side and shall comply with Section 1014.

Where glass is used to provide the handrail, the handrail shall comply with Section 2407 of the *California Building Code*.

[DSA-AC] For applications listed in Section 1.9.1 regulated by the Division of the State Architect-Access Compliance, see Chapter 11B, of the *California Building Code*.

Exceptions:

1. Flights of stairways within dwelling units, and flights of spiral stairways are permitted to have a handrail on one side only.
2. 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.
3. **[SFM]** In Group R-3 occupancies, a continuous run of treads or flight of stairs with less than four risers does not require handrails.
4. Changes in room elevations of three or fewer risers within dwelling units and sleeping units in Group R-2 and R-3 do not require handrails.

[BE] 1011.12 Stairway to roof. In buildings four or more stories above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper than four units vertical in 12 units horizontal (33-percent slope).

Exception: Other than where required by Section 1011.12.1, in buildings without an occupied roof, access to the roof from the top story shall be permitted to be by an alternating tread device, a ships ladder or a permanent ladder.

[BE] 1011.12.1 Stairway to elevator equipment. Roofs and penthouses containing elevator equipment that must be accessed for maintenance are required to be accessed by a stairway.

[BE] 1011.12.2 Roof access. Where a stairway is provided to a roof, access to the roof shall be provided through a penthouse complying with Section 1510.2 of the *California Building Code*.

Exception: In buildings without an occupied roof, access to the roof shall be permitted to be a roof hatch or trap door not less than 16 square feet (1.5 m²) in area and having a minimum dimension of 2 feet (610 mm).

[BE] 1011.13 Guards. Guards shall be provided along stairways and landings where required by Section 1015 and shall be constructed in accordance with Section 1015. Where the roof hatch opening providing the required access is located within 10 feet (3049 mm) of the roof edge, such roof access or roof edge shall be protected by guards installed in accordance with Section 1015.

[BE] 1011.14 Alternating tread devices. Alternating tread devices are limited to an element of a means of egress in buildings of Groups F, H and S from a mezzanine not more than 250 square feet (23 m²) in area and that serves not more than five occupants; in buildings of Group I-3 from a guard tower, observation station or control room not more than 250 square feet (23 m²) in area and for access to unoccupied roofs. Alternating tread devices used as a means of egress shall not have a rise greater than 20 feet (6096 mm) between floor levels or landings.

[BE] 1011.14.1 Handrails of alternating tread devices. Handrails shall be provided on both sides of alternating tread devices and shall comply with Section 1014.

[BE] 1011.14.2 Treads of alternating tread devices. Alternating tread devices shall have a minimum tread depth of 5 inches (127 mm), a minimum projected tread depth of 8½ inches (216 mm), a minimum tread width of 7 inches (178 mm) and a maximum riser height of 9½ inches (241 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projections of adjacent treads. The riser height shall be measured vertically between the leading edges of adjacent treads. The riser height and tread depth provided shall result in an angle of ascent from the horizontal of between 50 and 70 degrees (0.87 and 1.22 rad). The initial tread of the device shall begin at the same elevation as the platform, landing or floor surface.

Exception: Alternating tread devices used as an element of a means of egress in buildings from a mezzanine area not more than 250 square feet (23 m²) in area that serves not more than five occupants shall have a minimum tread depth of 3 inches (76 mm) with a minimum projected tread depth of 10½ inches (267 mm). The rise to the next alternating tread surface shall not exceed 8 inches (203 mm).

[BE] 1011.15 Ships ladders. Ships ladders are permitted to be used in lifeguard towers not open to the public and Group I-3 as a component of a means of egress to and from control rooms or elevated facility observation stations not more than 250 square feet (23 m²) with not more than three occupants and for access to unoccupied roofs. The minimum clear width at and below the handrails shall be 20 inches (508 mm).

[BE] 1011.15.1 Handrails of ships ladders. Handrails shall be provided on both sides of ships ladders.

[BE] 1011.15.2 Treads of ships ladders. Ships ladders shall have a minimum tread depth of 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is not less than 8½ inches (216 mm). The maximum riser height shall be 9½ inches (241 mm).

[BE] 1011.16 Ladders. Permanent ladders shall not serve as a part of the means of egress from occupied spaces within a building. Permanent ladders shall be constructed in accordance with Section 304.3 of the *California Mechanical Code*. Permanent ladders shall be permitted to provide access to the following areas: ||

1. Spaces frequented only by personnel for maintenance, repair or monitoring of equipment.
2. Nonoccupiable spaces accessed only by catwalks, crawl spaces, freight elevators or very narrow passageways.
3. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands.
4. Elevated levels in Group U not open to the general public.

CHAPTER 33

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

User note:

About this chapter: Chapter 33 outlines general fire safety precautions for all structures and all occupancies during construction and demolition operations. In general, these requirements seek to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment and promote prompt response to fire emergencies. Features regulated include fire protection systems, fire fighter access to the site and building, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources. Fire watches are an important component of this chapter. This chapter correlates with Chapter 33 of the International Building Code®.

SECTION 3301 GENERAL

3301.1 Scope. This chapter shall apply to structures in the course of construction, alteration or demolition, including those in underground locations. Compliance with NFPA 241 is required for items not specifically addressed herein.

3301.2 Purpose. This chapter prescribes minimum safeguards for construction, alteration and demolition operations to provide reasonable safety to life and property from fire during such operations.

SECTION 3302 DEFINITIONS

3302.1 Terms defined in Chapter 2. Words and terms used in this chapter and defined in Chapter 2 shall have the meanings ascribed to them as defined therein.

SECTION 3303 TEMPORARY HEATING EQUIPMENT

3303.1 Listed. Temporary heating devices shall be listed and labeled. The installation, maintenance and use of temporary heating devices shall be in accordance with the listing and the manufacturer's instructions.

3303.2 Oil-fired heaters. Oil-fired heaters shall comply with Section 603.

3303.3 LP-gas heaters. Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 and the *California Mechanical Code*.

3303.4 Refueling. Refueling operations for liquid-fueled equipment or appliances shall be conducted in accordance with Section 5705. The equipment or appliance shall be allowed to cool prior to refueling.

3303.5 Installation. Clearance to combustibles from temporary heating devices shall be maintained in accordance with the labeled equipment. When in operation, temporary heating devices shall be fixed in place and protected from damage, dislodgement or overturning in accordance with the manufacturer's instructions.

3303.6 Supervision. The use of temporary heating devices shall be supervised and maintained only by competent personnel.

SECTION 3304 PRECAUTIONS AGAINST FIRE

3304.1 Smoking. Smoking shall be prohibited except in approved areas. Signs shall be posted in accordance with Section 310. In approved areas where smoking is permitted, approved ashtrays shall be provided in accordance with Section 310.

3304.2 Combustible debris, rubbish and waste. Combustible debris, rubbish and waste material shall comply with the requirements of Sections 3304.2.1 through 3304.2.4.

3304.2.1 Combustible waste material accumulation. Combustible debris, rubbish and waste material shall not be accumulated within buildings.

3304.2.2 Combustible waste material removal. Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work.

3304.2.3 Rubbish containers. Where rubbish containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15 m³) are used for temporary storage of combustible debris, rubbish and waste material, they shall have tight-fitting or self-closing lids. Such rubbish containers shall be constructed entirely of materials that comply with either of the following:

1. Noncombustible materials.
2. Materials that meet a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m² in the horizontal orientation.

3304.2.4 Spontaneous ignition. Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container.

3304.3 Burning of combustible debris, rubbish and waste. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved.

3304.4 Open burning. Open burning shall comply with Section 307.

3304.5 Fire watch. Where required by the fire code official or the prefire plan established in accordance with Section 3308.3, a fire watch shall be provided for building demolition and for building construction that is hazardous in nature, such as temporary heating or hot work.

3304.5.1 Fire watch during construction. Where required by the fire code official, a fire watch shall be provided during nonworking hours for new construction that exceeds 40 feet (12 192 mm) in height above the lowest adjacent grade.

3304.5.2 Fire watch personnel. Trained personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with not fewer than one approved means for notification of the fire department, and the sole duty of such personnel shall be to perform constant patrols and watch for the occurrence of fire. The combination of fire watch duties and site security duties is acceptable. Fire watch personnel shall be trained in the use of portable fire extinguishers.

3304.5.3 Fire watch location and records. The fire watch shall include areas specified by the prefire plan established in accordance with Section 3308.3. The fire watch personnel shall keep a record of all time periods of duty, including a log entry each time the site was patrolled and each time a structure under construction was entered and inspected. The records and log entries shall be made available for review by the fire code official upon request.

3304.6 Cutting and welding. Welding, cutting, open torches and other hot work operations and equipment shall comply with Chapter 35.

3304.7 Electrical. Temporary wiring for electrical power and lighting installations used in connection with the construction, alteration or demolition of buildings, structures, equipment or similar activities shall comply with the *California Electrical Code*.

3304.8 Cooking. Cooking shall be prohibited except in approved designated cooking areas. Signs with a minimum letter height of 3 inches (76 mm) and a minimum brush stroke of $\frac{1}{2}$ inch (13 mm) shall be posted in conspicuous locations in designated cooking areas and state:

DESIGNATED COOKING AREA
COOKING OUTSIDE OF A DESIGNATED COOKING
AREA IS PROHIBITED

SECTION 3305 FLAMMABLE AND COMBUSTIBLE LIQUIDS

3305.1 Storage of flammable and combustible liquids. Storage of flammable and combustible liquids shall be in accordance with Section 5704.

3305.2 Class I and Class II liquids. The storage, use and handling of flammable and combustible liquids at construction sites shall be in accordance with Section 5706.2. Ventilation shall be provided for operations involving the application of materials containing flammable solvents.

3305.3 Housekeeping. Flammable and combustible liquid storage areas shall be maintained clear of combustible vege-

tation and waste materials. Such storage areas shall not be used for the storage of combustible materials.

3305.4 Precautions against fire. Sources of ignition and smoking shall be prohibited in flammable and combustible liquid storage areas. Signs shall be posted in accordance with Section 310.

3305.5 Handling at point of final use. Class I and II liquids shall be kept in approved safety containers.

3305.6 Leakage and spills. Leaking vessels shall be immediately repaired or taken out of service and spills shall be cleaned up and disposed of properly.

SECTION 3306 FLAMMABLE GASES

3306.1 Storage and handling. The storage, use and handling of flammable gases shall comply with Chapter 58.

3306.2 Cleaning with flammable gas. Flammable gases shall not be used to clean or remove debris from piping open to the atmosphere.

3306.2.1 Pipe cleaning and purging. The cleaning and purging of flammable gas piping systems, including cleaning new or existing piping systems, purging piping systems into service and purging piping systems out of service, shall comply with NFPA 56.

Exceptions:

1. Compressed gas piping systems other than fuel gas piping systems where in accordance with Chapter 53.
2. Piping systems regulated by the *International Fuel Gas Code*.
3. Liquefied petroleum gas systems in accordance with Chapter 61.

SECTION 3307 EXPLOSIVE MATERIALS

3307.1 Storage and handling. Explosive materials shall be stored, used and handled in accordance with Chapter 56.

3307.2 Supervision. Blasting operations shall be conducted in accordance with Chapter 56.

3307.3 Demolition using explosives. Approved fire hoses for use by demolition personnel shall be maintained at the demolition site wherever explosives are used for demolition. Such fire hoses shall be connected to an approved water supply and shall be capable of being brought to bear on post-detonation fires anywhere on the site of the demolition operation.

SECTION 3308 OWNER'S RESPONSIBILITY FOR FIRE PROTECTION

3308.1 Program development and maintenance. The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program at the project site applicable throughout all phases of the construction,

CHAPTER 49

REQUIREMENTS FOR WILDLAND-URBAN INTERFACE FIRE AREAS

SECTION 4901 GENERAL

4901.1 Scope. The mitigation of conditions where a wildfire burning in vegetative fuels may readily transmit fire to buildings and threaten to destroy life, overwhelm fire suppression capabilities, or result in large property losses shall comply with this chapter.

4901.2 Purpose. The purpose of this code is to provide minimum standards to increase the ability of a building to resist the intrusion of flame or burning embers being projected by a vegetation fire and contributes to a systematic reduction in conflagration losses through the use of performance and prescriptive requirements.

SECTION 4902 DEFINITIONS

4902.1 General. For the purpose of this chapter, certain terms are defined as follows:

CDF DIRECTOR. Director of the California Department of Forestry and Fire Protection.

FIRE PROTECTION PLAN. 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 Article. 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 101.15 shall apply.

FIRE HAZARD SEVERITY ZONES. 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.

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."

LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONE. 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. 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. 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. 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. 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.

SECTION 4903 PLANS [RESERVED]

SECTION 4904 FIRE HAZARD SEVERITY ZONES

4904.1 General. Lands in the state are classified by the CDF Director in accordance with the severity of wildfire hazard expected to prevail in those areas and the responsibility for fire protection, so that measures may be identified which will reduce the potential for losses to life, property, and resources from wildfire.

4904.2 Classifications. The CDF Director classifies lands into fire hazard severity zones in accordance with California Public Resources Code, Sections 4201 through 4204 for State Responsibility Areas and accordance with Government Code, Sections 51175 through 51189 for areas where a local agency is responsible for fire protection.

SECTION 4905 WILDFIRE PROTECTION BUILDING CONSTRUCTION

4905.1 General. Materials and construction methods for exterior wildfire exposure protection shall be applied within geographical areas where a wildfire burning in vegetative fuels may readily transmit fire to buildings and threaten to destroy life, overwhelm fire suppression capabilities, or result in large property losses.

4905.2 Construction methods and requirements within established limits. Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in the California Building Standards Code, including the following:

1. California Building Code, Chapter 7A,
2. California Residential Code, Section R337,
3. California Referenced Standards Code, Chapter 12-7A.

4905.3 Establishment of limits. The establishment of limits for the Wildland-Urban Interface Fire Area's required construction methods shall be designated pursuant to the California Public Resources Code for State Responsibility areas or by a local agency following a finding supported by substantial evidence in the record that the requirements of this section are necessary for effective fire protection within the area.

SECTION 4906 HAZARDOUS VEGETATION AND FUEL MANAGEMENT

4906.1 General. Hazardous vegetation and fuels shall be managed to reduce the severity of potential exterior wildfire exposure to buildings and to reduce the risk of fire spreading to buildings as required by applicable laws and regulations.

4906.2 Application. Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:
 - 1.1. Moderate Fire Hazard Severity Zones.
 - 1.2. High Fire Hazard Severity Zones.
 - 1.3. Very-high Fire Hazard Severity Zones.
2. Land designated as Very-high Fire Hazard Severity Zone by cities and other local agencies.

4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings and structures shall be maintained in accordance with the following laws and regulations:

1. Public Resources Code, Section 4291.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance

for implementation "General Guideline to Create Defensible Space").

3. California Government Code, Section 51182.
4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.

SECTION 4907 DEFENSIBLE SPACE

4907.1 General. Defensible space will be maintained around all buildings and structures in State Responsibility Area (SRA) as required in Public Resources Code 4290 and "SRA Fire Safe Regulations" California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

Buildings and structures within the Very-high Fire Hazard Severity Zones of a Local Responsibility Areas (LRA) shall maintain defensible space as outlined in Government Code 51175 – 51189 and any local ordinance of the authority having jurisdiction.

APPENDIX CHAPTER 4

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 435 SPECIAL PROVISIONS FOR LICENSED 24-HOUR CARE FACILITIES IN A GROUP R-2.1, R-3.1, R-4 [SFM]

435.1 Scope. The provisions of this section shall apply to 24-hour care facilities in a Group R-2.1, R-3.1 or R-4 occupancy licensed by a governmental agency.

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

435.2.1 Restraint shall not be practiced in a Group R-2.1, R-3.1 or R-4 occupancies.

Exception: Occupancies which meet all the requirements for a Group I-3 occupancy.

435.2.2 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) in accordance with Health and Safety Code Section 13133.

435.3 Building height and area provisions.

435.3.1 Group R-2.1, R-3.1 and R-4 shall be constructed in accordance with Table 504.3 of the California Building Code.

[California Code of Regulations, Title 19, Division 1, §3.26] Operators Statement – Group I, R-2.1, R-3.1 and R-4 Occupancies. Every person, firm or corporation maintaining or operating any Group I or R-2.1, R-3.1 or R-4 occupancy shall provide an operators statement in accordance with Section 13132 of the Health and Safety Code which reads as follows:

“13132. Every person, firm or corporation maintaining or operating any facility for the care of the mentally handicapped shall file a statement with the fire authority having jurisdiction within five days of the admission or readmission of a patient stating that such patient is an ambulatory or a nonambulatory person and enumerating the reasons for such classification. Such a

statement shall also be filed for each existing patient within 30 days of the effective date of this section.

Any statement required to be filed pursuant to this section shall be certified as to its correctness by the person attending such patient.

It shall be unlawful for any person, firm, or corporation required to file a statement pursuant to this section to include false statements therein. Any such act shall be in violation of this section and subject to the provisions of Section 13112.”

435.3.2 Limitations six or less clients. Group R-3.1 occupancies where nonambulatory clients are housed above the first story, having more than two stories in height or having more than 3,000 square feet (279 m²) of floor area above the first story shall not be of less than 1-hour fire-resistance-rated construction throughout.

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

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

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

435.3.3 Limitations seven or more clients. Group R-4 occupancies, where nonambulatory clients are housed above the first story and there is more than 3,000 square feet (279 m²) of floor area above the first story or housing not more than 16 clients above the first story, shall be constructed of not less than 1-hour fire-resistance-rated construction throughout.

435.3.4 Ambulatory and nonambulatory elderly clients. Group R-4 occupancies housing nonambulatory elderly clients shall be of not less than 1-hour fire-resistance-rated construction throughout.

435.4 Type of construction provisions.

435.4.1 Group R-2.1, occupancies are not permitted in non-fire-resistance-rated construction, see Health and Safety Code, Section 13131.5.

435.5 Fire-resistance-rated construction provisions.

435.5.1 Smoke barriers required. Group R-2.1 and R-4 occupancies licensed as a Residential Care Facility (RCF)

with individual floor areas over 6000 square feet (557 m²) per floor, shall be provided with smoke barriers, constructed in accordance with Section 710 of the California Building Code.

Group R-2.1 occupancies housing bedridden clients shall be provided with smoke barriers constructed in accordance with Section 710 of the California Building Code regardless of the number of clients.

When smoke barriers are required, the area within a smoke compartment shall not exceed 22,500 square feet (2090 m²) nor shall its travel distance exceed 200 feet (60 960 mm). Such smoke barriers shall divide the floor as equally as possible.

435.5.2 Smoke partitions. Group R-2.1 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.

435.5.3 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.

435.6 Interior finish provisions.

435.6.1 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 903.3 of the California Building Code.

435.6.2 Safety padding. Padding material used on walls, floors and ceilings in Group I and R-2.1 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, California Code of Regulations, Title 24, Part 12.

435.7 Fire Protection system provisions.

435.7.1 Automatic sprinkler systems in Group R-2.1, R-3.1 and R-4 occupancies. An automatic sprinkler system shall be installed where required in Section 903.

435.7.2 Fire alarm systems in Group R-2.1 and R-4 occupancies. An approved fire alarm system shall be installed where required in Section 907.

435.7.3 Smoke alarms in Groups R-2.1, R-3.1, and R-4 occupancies. Smoke alarms shall be installed where required in Section 907.2.11.2.

435.7.4 Hearing impaired. See Section 907.5.2.3.5.

435.8 Means of egress provisions.

435.8.1 General. In addition to the general means of egress requirements of Chapter 10, this section shall apply to Group R-2.1, R-3.1, and R-4 occupancies.

435.8.2 Number of exits.

435.8.2.1 Group R-2.1, 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 1021.

435.8.3 Egress arrangements.

435.8.3.1 Egress through adjoining dwelling units shall not be permitted.

435.8.3.2 Group R-3.1 occupancies housing nonambulatory clients. 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 1³/₈ inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector installed in accordance with Section 716.5.9 of the California Building Code.
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 1³/₈ inch (35 mm) in thickness, maintained self-closing or shall be automatic closing by actuation of a smoke detector installed in accordance with Section 716.5.9 of the California Building Code.
3. Direct exit from the bedroom to the exterior, such doors 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, 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).
4. Egress through an adjoining bedroom which exits to the exterior.

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

1. In Group R-3.1 occupancies housing a bedridden client, a direct exit to the exterior of the residence shall be provided from the client sleeping room.
2. Doors to a bedridden client's sleeping room shall be of a self-closing, positive latching 1³/₈ 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 detector in accordance with California Building Code, Section 716.5.9.

3. Group R-3.1 occupancies housing a bedridden client shall not have a night latch, dead bolt, security chain or any similar locking device installed on any interior door leading from a bedridden client's sleeping room to any interior area such as a corridor, hallway and or general use areas of the residence in accordance with Chapter 10.
4. The exterior exit door to a bedridden client's sleeping room shall be operable from both the interior and exterior of the residence.
5. Every required exit doorway from a bedridden client sleeping room shall be of a size as to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height. When installed in exit doorways, exit doors shall be capable of opening at least 90 degrees and shall be so mounted that the clear width of the exit way is not less than 32 inches (813 mm).

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

435.8.3.4 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.

435.8.4 Corridors.

435.8.4.1 Unless specified by Section 435.8.4, corridors serving Group R-2.1 and Group R-4 occupancies shall comply with Section 1018.1.

435.8.4.2 The minimum clear width of a corridor shall be as follows:

1. Group R-2.1 occupancies shall have 60 inches (1524 mm) on floors housing nonambulatory clients and 44 inches (1118 mm) on floors housing only ambulatory clients.
2. Group R-4 occupancies shall have 44 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.

In Group R-2.1 occupancies provided with fire sprinklers throughout and which are required to have

rated corridors, door closers need not be installed on doors to client sleeping rooms.

435.8.4.3 In a Group R-2.1 and Group R-4 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.

435.8.5 Changes in level. In Group R-3.1 occupancies housing nonambulatory clients, interior changes in level up to 0.25 inch (6 mm) may be vertical and without edge treatment. Changes in level between 0.25 inch (6 mm) and 0.5 inch (12.7 mm) shall be beveled with a slope no greater than 1 unit vertical in 2 units horizontal (50-percent slope). Changes in level greater than 0.5 inch (12.7 mm) shall be accomplished by means of a ramp.

435.8.6 Stairways.

435.8.6.1 Group R-2.1 and Group R-4 occupancies housing more than six nonambulatory clients above the first floor shall be provided with two vertical exit enclosures. Stairway enclosures shall be in compliance with Section 1022.

435.8.6.2 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).

435.8.7 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.

435.8.7.1 Doors within floor separations. Doors within such floor separations shall be tight fitting solid wood at least 1³/₈ inches (35 mm) in thickness. Door glazing shall not exceed 1296 square inches (32 918 mm²) 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.

435.8.8 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 m²) per occupant. Gates shall not be installed across corridors or passageways leading to such dispersal areas unless they comply with egress requirements.

435.8.9 Basement exits. One exit is required to grade level when the basement is accessible to clients.

435.8.10 Delayed egress locks. See Section 1010.1.9.8.

435.9 Request for alternate means of protection for facilities housing bedridden clients. Request for alternate means of protection shall apply to Sections 435 through 435.9. 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 enforcing agency 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 enforcing agency 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-3.1 occupancies housing a bedridden client.

Approvals made by the local fire enforcing agency 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.

435.10 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-2.1, R-3.1, or R-4 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.

SECTION 436 GROUP I-4 [SFM]

436.1 Group I-4 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 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, or other egress systems complying with Section 1017

with two exits, for the exclusive use of such occupants. Egress systems for the exclusive use of such occupants shall be maintained until exit discharge at grade is attained.

3. Group I-4 child-care 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 child-care 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 child-care facility to indicate a fire alarm or sprinkler flow condition in other portions of the building; and

- 3.3. Group I-4 child-care facilities, if more than 1,000 square feet (92.9 m²) 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 of the California Building Code, occupancy separations between Group I-4 child-care 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 710 of the California Building Code, 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 exits or exit access are required at least one shall not share a common path of travel.

- 3.6. The building is equipped with an automatic sprinkler system throughout.

Part VII—Appendices

APPENDIX A BOARD OF APPEALS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance or legislation of the jurisdiction.

User note:

About this appendix: Appendix A contains optional criteria that, when adopted, provide jurisdictions with detailed appeals, board member qualifications and administrative procedures to supplement the basic requirements found in Section 109 of this code.

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of the *California Fire Code* pursuant to the provisions of Section 109 of the *California Fire Code*. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the fire code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Membership. The membership of the board shall consist of five voting members having the qualifications established by this section. Members shall be nominated by the fire code official or the chief administrative officer of the jurisdiction, subject to confirmation by a majority vote of the governing body. Members shall serve without remuneration or compensation, and shall be removed from office prior to the end of their appointed terms only for cause.

A101.2.1 Design professional. One member shall be a practicing design professional registered in the practice of engineering or architecture in the state in which the board is established.

A101.2.2 Fire protection engineering professional. One member shall be a qualified engineer, technologist, technician or safety professional trained in fire protection engineering, fire science or fire technology. Qualified representatives in this category shall include fire protection contractors and certified technicians engaged in fire protection system design.

A101.2.3 Industrial safety professional. One member shall be a registered industrial or chemical engineer, certified hygienist, certified safety professional, certified hazardous materials manager or comparably qualified specialist experienced in chemical process safety or industrial safety.

A101.2.4 General contractor. One member shall be a contractor regularly engaged in the construction, alter-

ation, maintenance, repair or remodeling of buildings or building services and systems regulated by the code.

A101.2.5 General industry or business representative. One member shall be a representative of business or industry not represented by a member from one of the other categories of board members described in Sections A101.2.1 through A101.2.4.

A101.3 Terms of office. Members shall be appointed for terms of 4 years. Members shall not be reappointed to serve more than two consecutive full terms.

A101.3.1 Initial appointments. Of the members first appointed, two shall be appointed for a term of 1 year, two for a term of 2 years, one for a term of 3 years.

A101.3.2 Vacancies. Vacancies shall be filled for an unexpired term in the manner in which original appointments are required to be made. Members appointed to fill a vacancy in an unexpired term shall be eligible for reappointment to two full terms.

A101.3.3 Removal from office. Members shall be removed from office prior to the end of their terms only for cause. Continued absence of any member from regular meetings of the board shall, at the discretion of the applicable governing body, render any such member liable to immediate removal from office.

A101.4 Quorum. Three members of the board shall constitute a quorum. In varying the application of any provisions of this code or in modifying an order of the fire code official, affirmative votes of the majority present, but not less than three, shall be required.

A101.5 Secretary of board. The fire code official shall act as secretary of the board and shall keep a detailed record of all its proceedings, which shall set forth the reasons for its decisions, the vote of each member, the absence of a member and any failure of a member to vote.

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction.

tion's expense in all matters arising from service within the scope of their duties.

A101.7 Meetings. The board shall meet at regular intervals, to be determined by the chairman. In any event, the board shall meet within 10 days after notice of appeal has been received.

A101.8 Conflict of interest. Members with a material or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

A101.9 Decisions. Every decision shall be promptly filed in writing in the office of the fire code official and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant, and a copy shall be kept publicly posted in the office of the fire code official for 2 weeks after filing.

A101.10 Procedures. The board shall be operated in accordance with the Administrative Procedures Act of the state in which it is established or shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code and applicable state law.

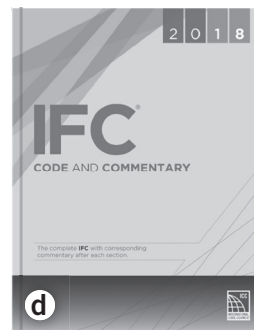
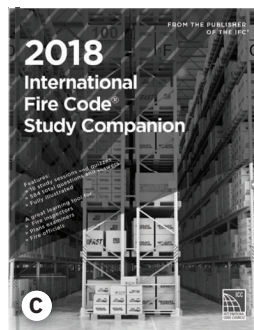
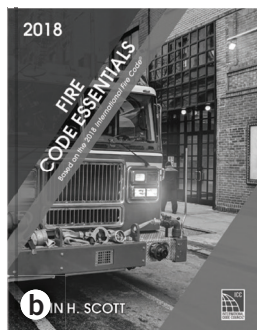
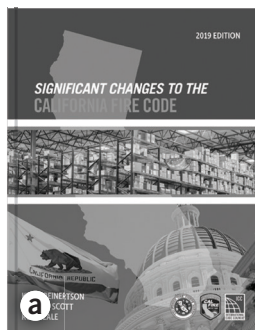
HISTORY NOTE APPENDIX

2019 California Fire Code California Code of Regulations, Title 24, Part 9

HISTORY:

For prior code history, see the History Note Appendix to the *California Fire Code*, 2016 Triennial Edition, effective January 1, 2017.

1. SFM 06-18—Adoption of the 2018 edition of the *International Fire Code*, published by the International Code Council, for incorporation into the 2019 *California Fire Code*, CCR Title 24, Part 9 with amendments for state-regulated occupancies effective on January 1, 2020.
2. Erratum to correct editorial errors in Chapters 1–6, 8–12, 23, 30, 31, 33, 50, 51, 53, 56–58, 61, 80, and Appendices H and N, effective January 1, 2020.
3. Erratum to correct editorial errors in Chapters 1, 10, 33, 49, and Appendix Chapter 4, and Appendix Chapter A, effective October 1, 2020.



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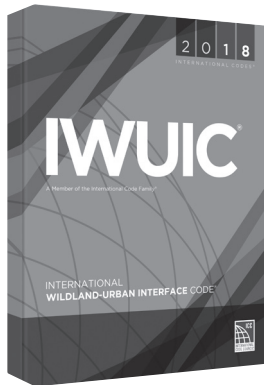
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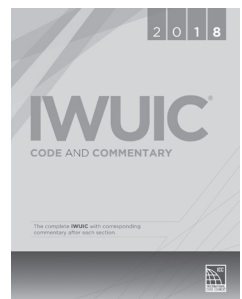
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