are allowed to wait in a lobby or similar space until seats or space is available, such use of a lobby or similar space shall not encroach upon the required clear width of exits. Such waiting shall be restricted to areas other than the required means of egress. Exits shall be provided for such waiting spaces on the basis of one person for each 3 ft^2 (0.28 m^2) of waiting space area. Such exits shall be in addition to the exits specified for the main auditorium area and shall conform in construction and arrangement to the general rules for exits given in this chapter.

16.1.7.5 Large Occupant Loads. Where the occupant load of an assembly occupancy is greater than 6000, a life safety evaluation shall be performed in accordance with 16.4.2.

16.1.7.6 Outdoor Facilities. In outdoor facilities, where approved by the authority having jurisdiction, the number of occupants provided with a minimum of 15 ft^2 (1.4 m^2) of lawn surface shall be permitted to be excluded from the maximum occupant load of 6000 specified in 16.1.7.3 in determining the need for a life safety evaluation.

16.1.8 Accessibility. Accessibility shall be in accordance with Chapter 12.

16.2 Means of Egress Requirements.

16.2.1 General.

16.2.1.1 All means of egress shall be in accordance with Chapter 11 and this chapter.

16.2.1.2 Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 22.2.8.

16.2.2 Means of Egress Components.

16.2.2.1 General. Components of means of egress shall be limited to the types described in 16.2.2.2 through 16.2.2.10.

16.2.2.2 Doors.

16.2.2.2.1 Doors complying with 11.2.1 shall be permitted.

16.2.2.2.2 Assembly occupancies with occupant loads of 300 or less in malls *(see 27.4.4.6)* shall be permitted to have horizontal or vertical security grilles or doors complying with 11.2.1.4.1(3) on the main entrance/exits.

16.2.2.2.3 Any door in a required means of egress from an area having an occupant load of 100 or more persons shall be permitted to be provided with a latch or lock only if it is panic hardware or fire exit hardware complying with 11.2.1.7, unless otherwise provided by one of the following:

(1) The requirement of 16.2.2.2.3 shall not apply to delayed-egress locks as permitted in 16.2.2.2.5.
(2) The requirement of 16.2.2.2.3 shall not apply to sensor-release of electrical locking systems as permitted in 16.2.2.2.6.

16.2.2.2.4 Locking devices complying with 11.2.1.6.3 shall be permitted to be used on a single door or a single pair of doors, provided that both of the following conditions apply:

(1) The door or pair of doors serves as the main exit, and the assembly occupancy has an occupant load not greater than 500.
(2) Any latching devices on such a door(s) from assembly occupancies having an occupant load of 100 or more are released by panic hardware or fire exit hardware.

16.2.2.2.5 Delayed-egress locks complying with 11.2.1.6.1 shall be permitted on doors other than main entrance/exit doors.

16.2.2.2.6 Doors in the means of egress shall be permitted to be equipped with an approved access control system complying with 11.2.1.6.2. Doors shall not be locked from the egress side when the assembly occupancy is occupied.

16.2.2.2.7 Elevator lobby exit access door locking in accordance with 11.2.1.6.4 shall be permitted.

16.2.2.2.8 Revolving doors complying with the requirements of 11.2.1.10 shall be permitted.

16.2.2.2.9 The provisions of 11.2.1.11.1 and 11.2.1.11.1.2 that permit turnstiles where revolving doors are permitted shall not apply.

16.2.2.2.10 No turnstiles or other devices that restrict the movement of persons shall be installed in any assembly occupancy in such a manner as to interfere in any way with required means of egress facilities.

16.2.2.3 Stairs.

16.2.2.3.1 General. Stairs complying with 11.2.2 shall be permitted, unless one of the following criteria applies:

(1)* Stairs serving seating that is designed to be repositioned shall not be required to comply with 11.2.2.3.1.
(2) The requirement of 16.2.2.3.1 shall not apply to stages and platforms as permitted by 16.4.7.
(3) The stairs connecting only a stage or platform and the immediately adjacent assembly seating shall be permitted to have a handrail in the center only or on one side only.
(4) The stairs connecting only a stage or platform and the immediately adjacent assembly seating shall be permitted to omit the guards required by 11.1.8 where both of the following criteria are met:
    (a) The guard would restrict audience sight-lines to the stage or platform
    (b) The height between any part of the stair and the adjacent floor is not more than 42 in. (1065 mm)
(5) Stairs connecting aisle stairs with cross-aisles, concourses, or other aisle stairs and landings in compliance with 16.2.5.8.9 shall be permitted to comply with 16.2.5.8.7.

16.2.2.3.2 Catwalk, Gallery, and Gridiron Stairs.

16.2.2.3.2.1 Noncombustible grated stair treads and landing floors shall be permitted in means of egress from lighting and access catwalks, galleries, and gridirons.

16.2.2.3.2.2 Spiral stairs complying with 11.2.2.2.3 shall be permitted in means of egress from lighting and access catwalks, galleries, and gridirons.

16.2.2.4 Smokeproof Enclosures. Smokeproof enclosures complying with 11.2.3 shall be permitted.

16.2.2.5 Horizontal Exits. Horizontal exits complying with 11.2.4 shall be permitted.

16.2.2.6 Ramps. Ramps complying with 11.2.5 shall be permitted, and the following alternatives shall also apply:

(1) Ramps not part of an accessible means of egress and serving only stages or nonpublic areas shall be permitted to have a slope not steeper than 1 in 8.
(2) Ramped aisles not part of an accessible means of egress shall be permitted to have a slope not steeper than 1 in 8.

16.2.2.7 Exit Passageways. Exit passageways complying with 11.2.6 shall be permitted.

16.2.2.8 Fire Escape Ladders.

16.2.2.8.1 Fire escape ladders complying with 11.2.9 shall be permitted.

16.2.2.8.2 For ladders serving catwalks, the 3-person limitation specified in 11.2.9.1(3) shall be permitted to be increased to 10 persons.

16.2.2.9 Alternating Tread Devices. Alternating tread devices complying with 11.2.11 shall be permitted.

16.2.2.10 Areas of Refuge. Areas of refuge complying with 11.2.12 shall be permitted.

16.2.3 Capacity of Means of Egress.

16.2.3.1 General. The capacity of means of egress shall be in accordance with one of the following:

(1) Section 11.3 for other than theater-type seating or smoke-protected assembly seating
(2) Paragraph 16.2.3.2 for rooms with theater-type seating or similar seating arranged in rows
(3) Subsection 16.4.3 for smoke-protected assembly seating

16.2.3.2* Theater-Type Seating.

16.2.3.2.1 Minimum clear widths of aisles and other means of egress serving theater-type seating, or similar seating arranged in rows, shall be in accordance with Table 16.2.3.2.1.

16.2.3.2.2 The minimum clear widths shown in Table 16.2.3.2.1 shall be modified in accordance with all of the following:

(1) If risers exceed 7 in. in height, the stair width in the table shall be multiplied by factor *A*, where *A* equals the following:

[16.2.3.2.2a]

$$A = 1 + \frac{\text{riser height} - 7}{5}$$

Table 16.2.3.2.1 Capacity Factors

Number of Seats	Clear Width per Seat Served			
	Stairs		Passageways, Ramps, and Doorways	
	in.	mm	in.	mm
Unlimited	0.3 *AB*	7.6 *AB*	0.22 *C*	5.6 *C*

(2) If risers exceed 178 mm in height, the stair width in the table shall be multiplied by factor *A*, where *A* equals the following:

[16.2.3.2.2b]

$$A = 1 + \frac{\text{riser height} - 178}{125}$$

(3) Stairs not having a handrail within a 30 in. (760 mm) horizontal distance shall be 25 percent wider than otherwise calculated; that is, their width shall be multiplied by factor *B*, where *B* equals the following:

[16.2.3.2.2c]

$$B = 1.25$$

(4) Ramps steeper than 1 in 10 slope where used in ascent shall have their width increased by 10 percent; that is, their width shall be multiplied by factor *C*, where *C* equals the following:

[16.2.3.2.2d]

$$C = 1.10$$

16.2.3.2.3 The requirements of 16.2.3.2.1 and 16.2.3.2.2 shall not apply to lighting and access catwalks as permitted by 16.4.7.8.

16.2.3.3 Main Entrance/Exit.

16.2.3.3.1 Every assembly occupancy shall be provided with a main entrance/exit.

16.2.3.3.2 The main entrance/exit width shall be as follows:

(1) The main entrance/exit shall be of a width that accommodates two-thirds of the total occupant load in the following assembly occupancies:
   (a) Dance halls
   (b) Discotheques
   (c) Nightclubs
   (d) Assembly occupancies with festival seating
(2) In assembly occupancies, other than those listed in 16.2.3.3.2(1), the main entrance/exit shall be of a width that accommodates one-half of the total occupant load.

16.2.3.3.3 The main entrance/exit shall be at the level of exit discharge or shall connect to a stairway or ramp leading to a street.

16.2.3.3.4 Access to the main entrance/exit shall be as follows:

(1) Each level of the assembly occupancy shall have access to the main entrance/exit, and such access shall have the capacity to accommodate two-thirds of the occupant load of such levels in the following assembly occupancies:
   (a) Dance halls
   (b) Discotheques
   (c) Nightclubs
   (d) Assembly occupancies with festival seating
(2) In assembly occupancies, other than those listed in 16.2.3.3.4(1), each level of the assembly occupancy shall have access to the main entrance/exit, and such access shall have the capacity to accommodate one-half of the occupant load of such levels.

16.2.3.3.5 Where the main entrance/exit from an assembly occupancy is through a lobby or foyer, the aggregate capacity of all exits from the lobby or foyer shall be permitted to provide the required capacity of the main entrance/exit, regardless of whether all such exits serve as entrances to the building.

16.2.3.3.6 In assembly occupancies where there is no well-defined main entrance/exit, exits shall be permitted to be distributed around the perimeter of the building, provided that the total exit width furnishes not less than 100 percent of the width needed to accommodate the permitted occupant load.

16.2.3.4 Other Exits. Each level of an assembly occupancy shall have access to the main entrance/exit and shall be provided with additional exits of sufficient width to accommodate a minimum of one-half of the total occupant load served by that level.

16.2.3.4.1 Additional exits shall discharge in accordance with 16.2.7.

16.2.3.4.2 Additional exits shall be located as far apart as practicable and as far from the main entrance/exit as practicable.

16.2.3.4.3 Additional exits shall be accessible from a cross aisle or a side aisle.

16.2.3.4.4 In assembly occupancies where there is no well-defined main entrance/exit, exits shall be permitted to be distributed around the perimeter of the building, provided that the total exit width furnishes a minimum of 100 percent of the width needed to accommodate the permitted occupant load.

16.2.3.5 Corridor Minimum Width. The minimum width of any exit access corridor serving 50 or more persons shall be 44 in. (112 cm).

16.2.4* Number of Means of Egress.

16.2.4.1 The number of means of egress shall be in accordance with Section 11.4, other than exits for fenced outdoor assembly occupancies in accordance with 16.2.4.2.

16.2.4.2 A fenced outdoor assembly occupancy shall have at least two remote means of egress from the enclosure in accordance with 11.5.1.4 and 11.5.1.5, unless otherwise required by one of the following:

(1) If more than 6000 persons are to be served by such means of egress, there shall be at least three means of egress.
(2) If more than 9000 persons are to be served by such means of egress, there shall be at least four means of egress.

16.2.4.3 Balconies or mezzanines having an occupant load not greater than 50 shall be permitted to be served by a single means of egress, and such means of egress shall be permitted to lead to the floor below.

16.2.4.4 Balconies or mezzanines having an occupant load greater than 50, but not greater than 100, shall have at least two remote means of egress, but both such means of egress shall be permitted to lead to the floor below.

16.2.4.5 Balconies or mezzanines having an occupant load greater than 100 shall be provided with means of egress as for a floor.

16.2.4.6 A second means of egress shall not be required from lighting and access catwalks, galleries, and gridirons where a means of escape to a floor or a roof is provided. Ladders, alternating tread devices, or spiral stairs shall be permitted in such means of escape.

16.2.5 Arrangement of Means of Egress.

16.2.5.1 General. Means of egress shall be arranged in accordance with Section 11.5.

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16.2.5.2 Common Paths of Travel. Common paths of travel shall be permitted for the first 20 ft (6100 mm) from any point where serving any number of occupants and for the first 75 ft (23 m) from any point where serving not more than 50 occupants.

16.2.5.3 Dead-End Corridors. Dead-end corridors shall not exceed 20 ft (6100 mm).

16.2.5.4 Limitations. Means of egress shall not be permitted through kitchens, storerooms, restrooms, closets, or hazardous areas as described in 16.3.2.

16.2.5.5 Auditoriums and Arenas. Where the floor area of auditoriums and arenas is used for assembly activities/events, at least 50 percent of the occupant load shall have means of egress provided without passing through adjacent fixed seating areas.

16.2.5.6 General Requirements for Access and Egress Routes within Assembly Areas.

16.2.5.6.1 Festival seating, as defined in 3.3.565.1, shall be prohibited within a building unless otherwise permitted by one of the following:

(1) Festival seating shall be permitted in assembly occupancies where the festival seating occupant load is 250 or less.
(2) Festival seating shall be permitted in assembly occupancies where the festival seating occupant load exceeds 250, provided that an approved life safety evaluation has been performed. *(See 16.4.2.)*
(3) Festival seating shall be permitted in assembly occupancies without dance halls, discotheques, and nightclubs, where the festival seating occupant load is 1000 or less.

16.2.5.6.2* Access and egress routes shall be designed and constructed so that any individual is able to move without undue hindrance, on personal initiative and at any time, from an occupied position to exits.

16.2.5.6.3* Access and egress routes shall be designed and constructed so that crowd management, security, and emergency medical personnel are able to move without undue hindrance at any time to any individual.

16.2.5.6.4* The width of aisle accessways and aisles shall provide sufficient egress capacity for the number of persons accommodated by the catchment area served by the aisle accessway or aisle in accordance with 16.2.3.1 or, for smoke-protected assembly seating, in accordance with 16.4.3.

16.2.5.6.5 Where aisle accessways or aisles converge to form a single path of egress travel, the required egress capacity of that path shall be not less than the combined required capacity of the converging aisle accessways and aisles.

16.2.5.6.6 Those portions of aisle accessways and aisles where egress is possible in either of two directions shall be uniform in required width, unless otherwise permitted by 16.2.5.6.7.

16.2.5.6.7 The requirement of 16.2.5.6.6 shall not apply to those portions of aisle accessways where the required width, not including the seat space described by 16.2.5.9.3, does not exceed 12 in. (305 mm).

16.2.5.6.8 In the case of side boundaries, other than for nonfixed seating at tables, for aisle accessways or aisles, the clear width shall be measured to boundary elements such as walls, guardrails, handrails, edges of seating, tables, and side edges of treads, with the measurement made horizontally to the vertical projection of the elements resulting in the smallest width measured perpendicularly to the line of travel.

16.2.5.7* Aisle Accessways Serving Seating Not at Tables.

Δ **16.2.5.7.1*** The required clear width of aisle accessways between rows of seating shall be determined as follows:

(1) Horizontal measurements shall be made between vertical planes, from the back of one seat to the front of the most forward projection immediately behind it.
(2) Where the entire row consists of automatic-rising or self-rising seats that comply with ASTM F851, *Test Method for Self-Rising Seat Mechanisms*, the measurement shall be permitted to be made with the seats in the up position.

16.2.5.7.2 The aisle accessway between rows of seating shall have a clear width of not less than 12 in. (305 mm), and this minimum clear width shall be increased as a function of row length in accordance with 16.2.5.7.5 and 16.2.5.7.6, unless otherwise permitted in 16.2.5.7.3 and 16.2.5.7.4.

16.2.5.7.3 If used by not more than four persons, there shall be no minimum clear width requirement for the portion of the aisle accessway having a length not exceeding 6 ft (1830 mm), measured from the center of the seat farthest from the aisle.

16.2.5.7.4 The increase in aisle accessway width required by 16.2.5.7.2 shall not apply to grandstands, bleachers, and folding and telescopic seating, provided that the number of seats between the farthest seat and an aisle does not exceed that shown in Table 16.4.10.2.5.

16.2.5.7.5* Rows of seating served by aisles or doorways at both ends shall have not more than 100 seats per row.

16.2.5.7.5.1 The 12 in. (305 mm) minimum clear width of aisle accessway between rows of seating specified in 16.2.5.7.2 shall be increased by $\frac{3}{10}$ in. (7.6 mm) for every seat over a total of 14, but shall not be required to exceed 22 in. (560 mm).

16.2.5.7.5.2 The requirements of 16.2.5.7.5.1 shall not apply to smoke-protected assembly seating as permitted by 16.4.3.4.

16.2.5.7.6 Rows of seating served by an aisle or doorway at one end only shall have a path of travel not exceeding 30 ft (9.1 m) in length from any seat to an aisle.

16.2.5.7.6.1 The 12 in. (305 mm) minimum clear width of aisle accessway between rows of seating specified in 16.2.5.7.2, shall be increased by $\frac{3}{5}$ in. (15 mm) for every seat over a total of seven.

16.2.5.7.6.2 The requirements of 16.2.5.7.6 and 16.2.5.7.6.1 shall not apply to smoke-protected assembly seating as permitted by 16.4.3.4 and 16.4.3.5.

16.2.5.7.7 Rows of seating utilizing tablet-arm chairs shall be permitted only if the clear width of aisle accessways complies with the requirements of 16.2.5.7 when measured under one of the following conditions:

(1) The clear width is measured with the tablet in the usable position.
(2) The clear width is measured with the tablet arm in the stored position where the tablet arm automatically returns to the stored position when raised manually to a vertical position in one motion and falls to the stored position by force of gravity.

16.2.5.7.8 The depth of seat boards shall not be less than 9 in. (230 mm) where the same level is not used for both seat boards and footboards.

16.2.5.7.9 Footboards, independent of seats, shall be provided such that there is no horizontal opening that allows the passage of a ½ in. (13 mm) diameter sphere.

16.2.5.8 Aisles Serving Seating Not at Tables.

16.2.5.8.1 General. Aisles shall be provided so that the number of seats served by the nearest aisle is in accordance with 16.2.5.7.2 through 16.2.5.7.6, unless otherwise permitted for bleachers in 16.2.5.8.2.

16.2.5.8.2 Bleachers Aisle Exemption. Aisles shall not be required in bleachers, provided that all of the following conditions are met:

(1) Egress from the front row is not obstructed by a rail, guard, or other obstruction.
(2) Row spacing is 28 in. (710 mm) or less.
(3) Rise per row, including the first row, is 6 in. (150 mm) or less.
(4) The number of rows does not exceed 16.
(5) The seat spaces are not physically defined.
(6) Seat boards that are also used as stepping surfaces for descent provide a walking surface with a minimum width of 12 in. (305 mm), and, where there is a depressed footboard, the gap between seat boards of adjacent rows does not exceed 12 in. (305 mm), measured horizontally, and the following criteria also are met:
    (a) The leading edges of the walking surfaces are provided with a contrasting marking stripe so that the location of such leading edge is readily apparent, particularly where viewed in descent, but such marking stripe is not required where bleacher surfaces and environmental conditions, under all conditions of use, are such that the location of each leading edge is readily apparent, particularly when viewed in descent.
    (b) The contrasting marking stripe is at least 1 in. (25 mm) wide and does not exceed 2 in. (51 mm) in width.
    (c) The contrasting marking stripe shall not be required where bleacher surfaces and environmental conditions, under all conditions of use, are such that the location of each leading edge is readily apparent, particularly when viewed in descent.

16.2.5.8.3 Dead-End Aisles. Dead-end aisles shall not exceed 20 ft (6100 mm) in length, unless otherwise permitted by one of the following:

(1) A dead-end aisle shall be permitted to exceed 20 ft (6100 mm) in length where seats served by the dead-end aisle are not more than 24 seats from another aisle, meas-

ured along a row of seats having a minimum clear width of 12 in. (305 mm) plus 3/5 in. (15 mm) for each additional seat over a total of 7 in the row.

(2) A 16-row dead-end aisle shall be permitted in folding and telescopic seating and grandstands.

(3) The requirement of 16.2.5.8.3 shall not apply to aisle termination as permitted by 16.4.3.7 for smoke-protected assembly seating.

16.2.5.8.4* Minimum Clear Width of Aisles. The minimum clear width of aisles shall be sufficient to provide egress capacity in accordance with 16.2.3.1 but shall be not less than the following:

(1) 48 in. (1220 mm) for stairs having seating on each side or 36 in. (915 mm) where the aisle does not serve more than 50 seats

(2) 36 in. (915 mm) for stairs having seating on only one side

(3) 23 in. (585 mm) between a handrail and seating or a guardrail and seating where the aisle is subdivided by a handrail

(4) 42 in. (1065 mm) for level or ramped aisles having seating on both sides or 36 in. (915 mm) where the aisle does not serve more than 50 seats

(5) 36 in. (915 mm) for level or ramped aisles having seating on only one side

(6) 23 in. (585 mm) between a handrail or guardrail and seating where the aisle does not serve more than five rows on one side

16.2.5.8.5 Aisle Stairs and Aisle Ramps.

16.2.5.8.5.1* The following shall apply to aisle stairs and aisle ramps:

(1) Aisles having a gradient steeper than 1 in 20, but not steeper than 1 in 8, shall consist of an aisle ramp.

(2) Aisles having a gradient steeper than 1 in 8 shall consist of an aisle stair.

16.2.5.8.5.2 Aisle stairs shall comply with 11.2.2 except as otherwise addressed by this chapter.

16.2.5.8.5.3 Table 11.2.2.2.1 shall not apply to aisle stairs and landings.

16.2.5.8.5.4 The limitation on height between landings in Table 11.2.5.3 shall not apply to aisle ramps and landings.

16.2.5.8.6 Aisle Stair Treads. Aisle stair treads shall meet all of the following criteria:

(1) There shall be no variation in the depth of adjacent treads that exceeds 3/16 in. (4.8 mm), unless otherwise permitted by 16.2.5.8.6(2).

(2) Construction-caused nonuniformities in tread depth shall be permitted, provided that both of the following criteria are met:

  (a) Such nonuniformity does not exceed 3/8 in. (10 mm).

  (b) The aisle tread depth is 22 in. (560 mm) or greater.

(3)* Tread depth shall be not less than 11 in. (280 mm).

(4) All treads shall extend the full width of the aisle.

16.2.5.8.7 Aisle Stair Risers. Aisle stair risers shall meet the following criteria:

(1) Riser heights shall be not less than 4 in. (100 mm) in other than aisle stairs of folding and telescopic seating.

(2) The riser height of aisle stairs in folding and telescopic seating shall be permitted to be not less than 3½ in. (90 mm).

(3) Riser heights shall not exceed 8 in. (205 mm), unless otherwise permitted by 16.2.5.8.7(4) or 16.2.5.8.7(5).

(4) The riser height of aisle stairs in folding and telescopic seating shall be permitted to be not more than 11 in. (280 mm).

(5) Where the gradient of an aisle is steeper than 8 in. (205 mm) in rise in 11 in. (280 mm) of run for the purpose of maintaining necessary sight lines in the adjoining seating area, the riser height shall be permitted to exceed 8 in. (205 mm) but shall not exceed 9 in. (230 mm).

(6) Riser heights shall be designed to be uniform in each aisle, and the construction-caused nonuniformities shall not exceed 3/16 in. (4.8 mm) between adjacent risers, unless the conditions of 16.2.5.8.7(7) or 16.2.5.8.7(8) are met.

(7) Riser height shall be permitted to be nonuniform where both of the following criteria are met:

  (a) The nonuniformity shall be only for the purpose of accommodating changes in gradient necessary to maintain sight lines within a seating area, in which case the nonuniformity shall be permitted to exceed 3/16 in. (4.8 mm) but not greater than the ½ in. (13 mm) between adjacent risers.

  (b) Where nonuniformities exceed 3/16 in. (4.8 mm) between adjacent risers, the exact location of such nonuniformities shall be indicated by a distinctive marking stripe on each tread at the nosing or leading edge adjacent to the nonuniform risers.

(8) Construction-caused nonuniformities in riser height shall be permitted to exceed 3/16 in. (4.8 mm) where all of the following are met:

  (a) The riser height shall be designed to be nonuniform.

  (b) Such construction-caused nonuniformities shall not exceed 3/8 in. (10 mm) where the aisle tread depth is less than 22 in. (560 mm).

  (c) Such construction-caused nonuniformities shall not exceed 3/4 in. (19 mm) where the aisle tread depth is 22 in. (560 mm) or greater.

  (d) Where nonuniformities exceed 3/16 in. (4.8 mm) between adjacent risers, the exact location of such nonuniformities shall be indicated by a distinctive marking stripe on each tread at the nosing or leading edge adjacent to the nonuniform risers.

16.2.5.8.8 Aisle Stair Profile. Aisle stairs shall comply with all of the following:

(1) Aisle risers shall be vertical or sloped under the tread projection at an angle not to exceed 30 degrees from vertical.

(2) Tread projection not exceeding 1½ in. (38 mm) shall be permitted.

(3) Tread projection shall be uniform in each aisle, except as otherwise permitted by 16.2.5.8.8(4).

(4) Construction-caused projection nonuniformities not exceeding ¼ in. (6.3 mm) shall be permitted.

16.2.5.8.9 Aisle Transitions. Where the path of travel on a stair or an aisle stair continues to another stair or aisle stair of different rise or tread depth, or another ramp of different

slope, there shall be a tread at that transition whose depth is equal to or greater than the width of the stair, aisle stair, or ramp unless otherwise permitted by one of the following:

(1) Maximum height between landings in accordance with 11.2.2 is not required within aisles.
(2) No landing is required at the termination of an aisle stair.
(3) No landing is required within aisle stairs with nonuniform risers as permitted by 16.2.5.8.7(7).
(4) No landing is required between aisle ramps of different slopes.
(5) No landing is required between an aisle ramp and an aisle accessway or between an aisle stair and an aisle accessway.
(6) A minimum 30 in. (760 mm) deep tread at that transition is permitted between an aisle stair and a stair with the same tread depths or between an aisle stair and another aisle stair with the same tread depths.
(7) A minimum 22 in. (560 mm) deep tread at that transition is permitted between an aisle stair and a stair with greater tread depth in the descending direction and between an aisle stair and another aisle stair with greater tread depth in the descending direction.
(8) A minimum 30 in. (760 mm) deep tread at that transition is permitted between an aisle stair and a stair with less tread depth in the descending direction and between an aisle stair and another aisle stair with less tread depth in the descending direction.
(9) A minimum 22 in. (560 mm) deep tread at that transition is permitted between an aisle ramp and a stair and between an aisle ramp and an aisle stair.
(10) No landing depth need exceed 48 in. (1220 mm).

16.2.5.8.10* Aisle Handrails.

16.2.5.8.10.1 Ramped aisles having a gradient exceeding 1 in 12 and aisle stairs shall be provided with handrails at one side or along the centerline and in accordance with 11.2.2.4.4(A) through 11.2.2.4.4(C).

16.2.5.8.10.2 Where there is seating on both sides of the aisle, the handrails shall be discontinuous, with gaps or breaks at intervals not exceeding five rows to facilitate access to seating and to allow crossing from one side of the aisle to the other.

16.2.5.8.10.3 The gaps or breaks permitted by 16.2.5.8.10.1 shall have a clear width of not less than 22 in. (560 mm) and shall not exceed 36 in. (915 mm), measured horizontally, and the handrail shall have rounded terminations or bends.

16.2.5.8.10.4 Where handrails are provided in the middle of aisle stairs, there shall be an additional intermediate rail located approximately 12 in. (305 mm) below the main handrail.

16.2.5.8.10.5 Handrails shall not be required where otherwise permitted by one of the following:

(1) Handrails shall not be required for ramped aisles having a gradient not steeper than 1 in 8 and having seating on both sides where the aisle does not serve as an accessible route.
(2) The requirement for a handrail shall be satisfied by the use of a guard provided with a rail that complies with the graspability requirements for handrails and is located at a consistent height between 34 in. and 42 in. (865 mm and 1065 mm), measured as follows:
   (a) Vertically from the top of the rail to the leading edge (nosing) of stair treads
   (b) Vertically from the top of the rail to the adjacent walking surface in the case of a ramp

16.2.5.8.10.6 Where an aisle transition stair does not have seating at its sides, a handrail shall be provided on both sides of the aisle, and the provision of 16.2.5.8.10.7 shall also apply.

16.2.5.8.10.7 If an aisle stair leading to the aisle transition stair is provided with a center handrail and the aisle landing is less than 48 in (1220 mm) in the direction of travel, a center handrail shall also be provided on the aisle transition stair.

16.2.5.8.11* Aisle Marking.

16.2.5.8.11.1 A contrasting marking stripe shall be provided on each tread at the nosing or leading edge so that the location of such tread is readily apparent, particularly when viewed in descent.

16.2.5.8.11.2 The marking stripe shall be at least 1 in. (25 mm) wide and shall not exceed 2 in. (51 mm) in width.

16.2.5.8.11.3 The marking stripe shall not be required where tread surfaces and environmental conditions, under all conditions of use, are such that the location of each tread is readily apparent, particularly when viewed in descent.

16.2.5.9* Aisle Accessways Serving Seating at Tables.

16.2.5.9.1 The minimum required clear width of an aisle accessway shall be 12 in. (305 mm), where measured in accordance with 16.2.5.9.3, and increased as a function of length in accordance with 16.2.5.9.4, unless otherwise provided in 16.2.5.9.2.

16.2.5.9.2* If used by not more than four persons, there shall be no minimum clear width requirement for the portion of aisle accessway having a length not exceeding 6 ft (1830 mm) and located farthest from an aisle.

16.2.5.9.3* Where nonfixed seating is located between a table and an aisle accessway, the measurement of required clear width of the aisle accessway shall be made to a line 19 in. (485 mm), measured perpendicularly to the edge of the table, away from the edge of said table.

16.2.5.9.4* The minimum required clear width of an aisle accessway, measured in accordance with 16.2.5.6.7 and 16.2.5.9.3, shall be increased beyond the 12 in. (305 mm) requirement of 16.2.5.9.1 by ½ in. (13 mm) for each additional 12 in. (305 mm), or fraction thereof, beyond 12 ft (3660 mm) of aisle accessway length, where measured from the center of the seat farthest from an aisle.

16.2.5.9.5 The path of travel along the aisle accessway shall not exceed 36 ft (11 m) from any seat to the closest aisle or egress doorway.

16.2.5.10 Aisles Serving Seating at Tables.

16.2.5.10.1* Aisles that contain steps or that are ramped, such as the aisles serving dinner theater–style configurations, shall comply with the requirements of 16.2.5.8.

16.2.5.10.2* The minimum width of aisles serving seating at tables shall be 44 in. (1120 mm), where serving an occupant load greater than 50, and 36 in. (915 mm) where serving an occupant load of 50 or fewer.

16.2.5.10.3* Where nonfixed seating is located between a table and an aisle, the measurement of required clear width of the aisle shall be made to a line 19 in. (485 mm), measured perpendicularly to the edge of the table, away from the edge of said table.

16.2.5.11 Approval of Layouts.

16.2.5.11.1 Where required by the authority having jurisdiction, plans drawn to scale showing the arrangement of furnishings or equipment shall be submitted to the authority by the building owner, manager, or authorized agent to substantiate conformance with the provisions of 16.2.5.

16.2.5.11.2 The layout plans shall constitute the only acceptable arrangement, unless one of the following criteria is met:

(1) The plans are revised.
(2) Additional plans are submitted and approved.
(3) Temporary deviations from the specifications of the approved plans are used, provided that the occupant load is not increased and the intent of 16.2.5.11 is maintained.

16.2.6 Travel Distance to Exits.

16.2.6.1 Travel distance shall be measured in accordance with Section 11.6.

16.2.6.2 Exits shall be arranged so that the total length of travel from any point to reach an exit does not exceed 200 ft (61 m) in any assembly occupancy, unless otherwise permitted by one of the following:

(1) The travel distance shall not exceed 250 ft (76 m) in assembly occupancies protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.
(2) The travel distance requirement of 16.2.6 shall not apply to smoke-protected assembly seating as permitted by 16.4.3.8 through 16.4.3.10.

16.2.7 Discharge from Exits.

16.2.7.1 Exit discharge shall comply with Section 11.7.

16.2.7.2 The level of exit discharge shall be measured at the point of principal entrance to the building.

16.2.7.3 Where the principal entrance to an assembly occupancy is via a terrace, either raised or depressed, such terrace shall be permitted to be considered to be the level of exit discharge for the purposes of the construction requirements of Chapter 7, provided that all of the following criteria are met:

(1) The terrace is at least as long (measured parallel to the building) as the total width of the exit(s) it serves, but not less than 60 in. (1525 mm) long.
(2) The terrace is at least as wide (measured perpendicularly to the building) as the exit(s) it serves, but not less than 10 ft (3050 mm) wide.
(3) Required stairs leading from the terrace to the finished ground level are protected in accordance with 11.2.2.7.3 or are a minimum of 10 ft (3050 mm) from the building.

16.2.8 Illumination of Means of Egress. Means of egress, other than for private party tents not exceeding 1200 ft^2 (112 m^2), shall be illuminated in accordance with Section 11.8.

16.2.9 Emergency Lighting. Emergency lighting, other than for private party tents not exceeding 1200 ft^2 (112 m^2), shall be provided in accordance with Section 11.9.

16.2.10 Marking of Means of Egress.

16.2.10.1 Means of egress shall be provided with signs in accordance with Section 11.10.

16.2.10.2 Exit markings shall not be required on the seating side of vomitories from seating areas where exit marking is provided in the concourse and such marking is readily apparent from the vomitories.

16.2.11 Special Means of Egress Features.

16.2.11.1 Guards and Railings.

16.2.11.1.1* Sight Line-Constrained Rail Heights. Unless subject to the requirements of 16.2.11.1.2, a fasciae or railing system complying with the guard requirements of 11.2.2.4, and having a minimum height of 26 in. (660 mm), shall be provided where the floor or footboard elevation is more than 30 in. (760 mm) above the floor or the finished ground level below and the fasciae or railing system would otherwise interfere with sight lines of immediately adjacent seating.

16.2.11.1.2 Fasciae or Railing System at Foot of Aisles.

16.2.11.1.2.1 A fasciae or railing system complying with the guard requirements of 11.2.2.4 shall be provided for the full width of the aisle where the foot of the aisle is more than 30 in. (760 mm) above the floor or the finished ground level below.

16.2.11.1.2.2 The fasciae or railing shall be a minimum of 36 in. (915 mm) high and shall provide not less than 42 in. (1065 mm), measured diagonally, between the top of the rail and the nosing of the nearest tread.

16.2.11.1.3 Railing Systems at Cross Aisles. Guards and railings at cross aisles shall meet the following criteria:

(1) Cross aisles located behind seating rows shall be provided with railings not less than 26 in. (660 mm) above the adjacent floor of the aisle.
(2) The requirement of 16.2.11.1.3(1) shall not apply where the backs of seats located at the front of the aisle project 24 in. (610 mm) or more above the adjacent floor of the aisle.
(3) Where cross aisles exceed 30 in. (760 mm) above the floor or the finished ground level below, guards shall be provided in accordance with 11.2.2.4.

16.2.11.1.4 Guards at Side and Back of Seating Areas. Guards complying with the guard requirements of 11.2.2.4 shall be provided and shall be of a height not less than 42 in. (1065 mm) above the aisle, aisle accessway, or footboard where the floor elevation is more than 30 in. (760 mm) above the floor or the finished ground level to the side or back of seating.

16.2.11.1.5 Openings Below Seating. Openings between footboards and seat boards shall be provided with intermediate construction so that a 4 in. (100 mm) diameter sphere cannot pass through the opening.

16.2.11.1.6 Locations Not Requiring Guards.

16.2.11.1.6.1 Guards shall not be required in the following locations:

(1) On the audience side of stages, raised platforms, and other raised floor areas such as runways, ramps, and side stages used for entertainment or presentations
(2) At vertical openings in the performance area of stages

(3) Where the side of an elevated walking surface is required to be open for the normal functioning of special lighting or for access and use of other special equipment

16.2.11.1.6.2* Where a guard is ordinarily required but not provided in accordance with 16.2.11.1.6.1(1) or (2), a written plan shall be developed and maintained to mitigate the fall hazards of unguarded raised floor areas and vertical openings on stages.

16.2.11.2 Lockups. Lockups in assembly occupancies shall comply with the requirements of 21.4.6.

16.3 Protection.

Δ **16.3.1* Protection of Vertical Openings.** Any vertical opening shall be enclosed or protected in accordance with Section 8.12, unless otherwise permitted by one of the following:

(1) Stairs or ramps shall be permitted to be unenclosed between balconies or mezzanines and main assembly areas located below, provided that the balcony or mezzanine is open to the main assembly area.
(2) Exit access stairs from lighting and access catwalks, galleries, and gridirons shall not be required to be enclosed.
(3) Assembly occupancies protected by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3 shall be permitted to have unprotected vertical openings between any two adjacent floors, provided that such openings are separated from unprotected vertical openings serving other floors by a barrier complying with 8.12.1.5.
(4) Assembly occupancies protected by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3 shall be permitted to have convenience stair openings in accordance with 8.12.5.2.

16.3.2 Hazardous Area Protection.

16.3.2.1 Service Equipment, Hazardous Operations or Processes, and Storage Facilities.

16.3.2.1.1 Rooms containing high-pressure boilers, refrigerating machinery of other than domestic refrigerator type, large transformers, or other service equipment subject to possible explosion shall meet both of the following requirements:

(1) All such rooms shall not be located directly under or abutting required exits.
(2) All such rooms shall be separated from other parts of the building by fire barriers having a fire resistance rating of not less than 1 hour in accordance with Section 8.4 or shall be protected by automatic extinguishing systems in accordance with Section 55.3.

16.3.2.1.2 Rooms or spaces shall be protected in accordance with the following:

(1) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour or protection of such rooms by automatic extinguishing systems as specified in Section 8.15 in the following areas:
    (a) Boiler and furnace rooms, unless otherwise permitted by one of the following:
        i. The requirement of 16.3.2.1.2(1)(a) shall not apply to rooms enclosing furnaces, heating and air-handling equipment, or compressor equipment with a total aggregate input rating less than 200,000 Btu (211 MJ).
        ii. The rooms specified in 16.3.2.1.2(1)(a)(i) shall not be used for storage, unless otherwise protected as required.
        iii. For installations in attics, the draftstopping requirements of Section 8.14 shall apply.
    (b) Rooms or spaces used for the storage of combustible supplies in quantities deemed hazardous by the authority having jurisdiction
    (c) Rooms or spaces used for the storage of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards
(2) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour and protection of such rooms by automatic extinguishing systems as specified in Section 8.15 in the following areas:
    (a) Laundries
    (b) Maintenance shops, including woodworking and painting areas
    (c) Rooms or spaces used for processing or use of combustible supplies deemed hazardous by the authority having jurisdiction
    (d) Rooms or spaces used for processing or use of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards
(3) Where automatic extinguishing is used to meet the requirements of 16.3.2.1.2(1) or (2), protection permitted in accordance with 55.3.1.2

16.3.2.2 Cooking Equipment.

16.3.2.2.1 Cooking equipment shall be protected in accordance with Section 55.10, unless otherwise permitted by one of the following:

(1) The requirement of 16.3.2.2.1 shall not apply to outdoor equipment.
(2) The requirement of 16.3.2.2.1 shall not apply to portable cooking equipment that is not flue connected.
(3) The requirement of 16.3.2.2.1 shall not apply to equipment used only for food warming.

16.3.2.2.2 Openings shall not be required to be protected between food preparation areas and dining areas.

16.3.3 Interior Finish.

16.3.3.1 General. Interior finish shall be in accordance with Chapter 10.

16.3.3.2 Corridors, Lobbies, and Enclosed Stairways. Interior wall and ceiling finish materials complying with Chapter 10 shall be Class A or Class B in all corridors and lobbies and shall be Class A in enclosed stairways.

16.3.3.3 Assembly Areas. Interior wall and ceiling finish materials complying with Chapter 10 shall be Class A or Class B in general assembly areas having occupant loads of more than 300 and shall be Class A, Class B, or Class C in assembly areas having occupant loads of 300 or fewer.

Δ **16.3.3.4 Screens.** Screens on which pictures are projected shall comply with the requirements of Class A or Class B interior finish in accordance with Chapter 10.

16.3.3.5 Interior Floor Finish.

Δ **16.3.3.5.1** Interior floor finish shall comply with 10.2.6.

Δ **16.3.3.5.2** Interior floor finish in exit enclosures, exit access corridors, and spaces not separated from such enclosures and corridors by walls complying with 16.3.6 shall be not less than Class II in accordance with 10.2.6.4.

Δ **16.3.3.5.3** Interior floor finish shall comply with 10.2.6.1 and 10.2.6.2, as applicable.

16.3.4 Detection, Alarm, and Communications Systems.

16.3.4.1 General.

16.3.4.1.1 Assembly occupancies with occupant loads greater than 300 and all theaters with more than one audience-viewing room shall be provided with an approved fire alarm system in accordance with Section 55.2 and 16.3.4.2 through 16.3.4.3.8, unless otherwise permitted by 16.3.4.1.2.

16.3.4.1.2 Assembly occupancies that are a part of a mixed occupancy shall be permitted to be served by a common fire alarm system, provided that the individual requirements of each occupancy are met.

16.3.4.2 Initiation.

16.3.4.2.1 Initiation of the required fire alarm system shall be by both of the following:

(1) Manual means in accordance with 55.2.2(1), unless otherwise permitted by one of the means that follow:
   (a) The requirement of 16.3.4.2.1(1) shall not apply where initiation is by means of an approved automatic fire detection system in accordance with Section 55.2 that provides fire detection throughout the building.
   (b) The requirement of 16.3.4.2.1(1) shall not apply where initiation is by means of an approved automatic sprinkler system in accordance with Section 55.3 that provides fire detection and protection throughout the building.
(2) Where automatic sprinklers are provided, initiation of the fire alarm system by means of sprinkler system waterflow, even where manual fire alarm boxes are provided in accordance with 16.3.4.2.1(1).

16.3.4.2.2 The initiating device shall be capable of transmitting an alarm to a receiving station, located within the building, that is constantly attended when the assembly occupancy is occupied.

16.3.4.2.3* In assembly occupancies with occupant loads greater than 300, automatic detection shall be provided in all hazardous areas that are not normally occupied, unless such areas are protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with Section 55.3.

16.3.4.3 Notification.

16.3.4.3.1 The required fire alarm system shall activate an audible and visible alarm in a constantly attended receiving station within the building when occupied for purposes of initiating emergency action.

16.3.4.3.2 Positive alarm sequence in accordance with 55.2.3.4 shall be permitted.

16.3.4.3.3 Occupant notification shall be by means of voice announcements in accordance with 55.2.3.9, initiated by the person in the constantly attended receiving station.

16.3.4.3.4 Occupant notification shall be by means of visible signals in accordance with 55.2.3.5, initiated by the person in the constantly attended receiving station, unless otherwise permitted by 16.3.4.3.5.

16.3.4.3.5* Where the occupant load of a single room or space exceeds 1000, visible signals shall not be required in the assembly seating area, or the floor area used for the contest, performance, or entertainment where the occupancy load exceeds 1000 and an approved alternative visible means of occupant notification is provided. *(See 55.2.3.5.5.)*

16.3.4.3.6 The announcement shall be permitted to be made via voice communication or public address system in accordance with 55.2.3.9.2.

16.3.4.3.7 Where the authority having jurisdiction determines that it is impractical to have a constantly attended receiving station, both of the following shall be provided:

(1) Automatically transmitted evacuation or relocation instructions shall be provided in accordance with *NFPA 72*.
(2) The system shall be monitored by a supervising station in accordance with *NFPA 72*.

N **16.3.4.3.8** Emergency forces notification shall be provided in accordance with 55.2.4.

16.3.4.4 Carbon Monoxide Detection.

16.3.4.4.1 New assembly occupancies shall be provided with carbon monoxide detection and warning equipment in accordance with Section 55.11 in the locations specified as follows:

(1) On the ceilings of rooms containing permanently installed fuel-burning appliances or fuel-burning fireplaces
(2) Centrally located within occupiable spaces served by the first supply air register from a permanently installed, fuel-burning HVAC system
(3)* Centrally located within occupiable spaces adjacent to an attached garage

16.3.4.4.2 Carbon monoxide detectors as specified in 16.3.4.4.1 shall not be required in the following locations:

(1) Garages
(2) Occupiable spaces with attached garages that are open parking structures as defined in 3.3.633.11.4
(3) Occupiable spaces with attached garages that are mechanically ventilated in accordance with the mechanical code

16.3.4.5 Risk Analysis for Mass Notification Systems. A risk analysis in accordance with Section 55.13 shall be performed for new assembly occupancies with an occupant load of 500 or more to determine whether a mass notification system is required.

16.3.5 Extinguishment Requirements.

16.3.5.1 Sprinkler Systems.

16.3.5.1.1 The following assembly occupancies shall be protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with 55.3.1.1(1):

(1) Dance halls

(2) Discotheques
(3) Nightclubs
(4) Bars
(5) Restaurants
(6) Assembly occupancies with festival seating

16.3.5.1.2 Any building containing one or more assembly occupancies where the aggregate occupant load of the assembly occupancies exceeds 300 shall be protected by an approved, electrically supervised automatic sprinkler system installed in accordance with Section 55.3 as follows:

(1) Throughout the story containing the assembly occupancy
(2) Throughout all stories below the story containing the assembly occupancy
(3) In the case of an assembly occupancy located below the level of exit discharge, throughout all stories intervening between that story and the level of exit discharge, including the level of exit discharge

16.3.5.1.3 The requirements of 16.3.5.1.2 shall not apply to the following:

(1)* Assembly occupancies consisting of a single multipurpose room of less than 12,000 ft^2 (1100 m^2) that are not used for exhibition or display and are not part of a multiple occupancy protected as a mixed occupancy
(2) Gymnasiums, skating rinks, and swimming pools used exclusively for participant sports with no audience facilities for more than 300 persons
(3)* Locations in stadia and arenas as follows:
  (a) Over the floor area used for contests, performances, or entertainment, provided that the roof construction is more than 50 ft (15 m) above the floor level and use is restricted to low fire hazard uses
  (b) Over the seating areas, provided that use is restricted to low fire hazard uses
  (c) Over open-air concourses where an approved engineering analysis substantiates the ineffectiveness of sprinkler protection due to building height and combustible loading
(4) Areas in unenclosed stadia and arenas as follows:
  (a) Press boxes of less than 1000 ft^2 (93 m^2)
  (b) Storage facilities of less than 1000 ft^2 (93 m^2) where enclosed with not less than 1-hour fire-resistance-rated construction
  (c) Enclosed areas underneath grandstands that comply with 16.4.10.5

16.3.5.1.4 Where another provision of this chapter requires an automatic sprinkler system to be electrically supervised, the sprinkler system shall be electrically supervised in accordance with 55.3.2.

N **16.3.5.1.5** High-rise buildings shall comply with 16.4.5.

N **16.3.5.1.6** Where required by Section 7.4, buildings containing assembly occupancies shall be protected by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.

16.3.5.2 Standpipes.

16.3.5.2.1 Class I standpipe systems shall be provided in buildings four or more stories in height, or having four or more basement levels, as specified in 55.4.1.

16.3.5.2.2 Class I standpipe systems shall be provided in buildings where at least one occupiable level is more than 30 ft (9.1 m) above or below the level of fire department access.

16.3.5.2.3 Class I standpipe systems shall be provided in buildings not protected throughout by an approved, electrically supervised sprinkler system in accordance with Section 55.3 where an occupiable area is more than 150 ft (45 m) from the closest point of fire department entry into the building.

• **16.3.5.3 Portable Fire Extinguishers.** Portable fire extinguishers shall be installed in assembly occupancies in accordance with Section 55.6, unless otherwise permitted by one of the following:

(1) The requirement of 16.3.5.3 shall not apply to seating areas.
(2) The requirement of 16.3.5.3 shall not apply to floor areas used for contests, performances, or entertainment.
(3) The requirement of 16.3.5.3 shall not apply to outside assembly occupancy areas.
(4) Portable extinguishers shall be permitted to be located in secure locations accessible to staff.

16.3.6 Corridors. Interior corridors and lobbies shall be constructed in accordance with Section 8.4 and 11.1.3.1, unless otherwise permitted by one of the following:

(1) Corridor and lobby protection shall not be required where assembly rooms served by the corridor or lobby have at least 50 percent of their exit capacity discharging directly to the outside, independent of corridors and lobbies.
(2) Corridor and lobby protection shall not be required in buildings protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with Section 55.3.
(3) Lobbies serving only one assembly area that meet the requirements for intervening rooms *(see 11.5.1.7)* shall not be required to have a fire resistance rating.
(4) Where the corridor ceiling is an assembly having a 1-hour fire resistance rating where tested as a wall, the corridor walls shall be permitted to terminate at the corridor ceiling.
(5) Corridor and lobby protection shall not be required in buildings protected throughout by an approved, total (complete) coverage smoke detection system *(see 55.2.2.3)* that provides occupant notification and is installed in accordance with Section 55.2.

16.3.7 Integrated Fire Protection and Life Safety Systems. Integrated fire protection and life safety systems shall be tested in accordance with 55.1.4.2.1.

16.4 Special Provisions.

N **16.4.1 Special Structures.** Assembly occupancies shall comply with Chapter 31 where located in special structures.

16.4.2 Life Safety Evaluation.

16.4.2.1* General. Where a life safety evaluation is required by other provisions of this *Code*, it shall comply with all of the following:

(1) The life safety evaluation shall be performed by persons acceptable to the authority having jurisdiction.
(2) The life safety evaluation shall include a written assessment of safety measures for conditions listed in 16.4.2.2