# 1301:7-7-11 Construction requirements for existing buildings.

#### (A) Section 1101 General

(1) **1101.1 Scope.** The provisions of this *rule* shall apply to existing buildings constructed prior to the adoption of this code *in accordance with paragraph* (B)(1)(c)(102.1) of rule 1301:7-7-01 of the Administrative Code. The provisions of this rule shall not apply to existing buildings unless the conditions at the building constitute a distinct hazard to life or property in the opinion of the fire code official in accordance with paragraph (B)(1)(c)(102.1) of rule 1301:7-7-01 of the Administrative Code.

#### Exceptions:

- 1. The provisions of paragraph (D)(1104) of this rule shall apply to all existing buildings.
- 2. The provisions of paragraph (C)(9)(1103.9) of this rule shall apply to all existing occupancies identified in paragraph (C)(9)(1103.9) of this rule.
- (2) **1101.2 Intent.** The intent of this *rule* is to provide a minimum degree of fire and life safety to persons occupying existing buildings by providing minimum construction requirements where such existing buildings do not comply with the minimum requirements of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.
- (3) **1101.3 Permits.** Permits shall be required as set forth in *rule 1301:7-7-01 of the Administrative Code* and the building code as listed in rule 1301:7-7-80 of the Administrative Code.
- (4) **1101.4 Owner notification.** When a building is found to be in noncompliance with this *rule*, the fire code official shall duly notify the owner of the building. Upon receipt of such notice, the owner shall, subject to the following time limits, take necessary actions to comply with the provisions of this *rule*.
  - (a) **1101.4.1 Construction documents.** Construction documents necessary to comply with this *rule* shall be completed and submitted within a time schedule approved by the fire code official.
  - (b) **1101.4.2 Completion of work.** Work necessary to comply with this *rule* shall be completed within a time schedule approved by the fire code official.
  - (c) **1101.4.3 Extension of time.** The fire code official is authorized to grant necessary extensions of time when it can be shown that the specified time periods are not physically practical or pose an undue hardship. The granting of an extension of time for compliance shall be based on the showing of good cause and subject to the filing of an acceptable systematic plan of correction with the fire code official.

#### (B) Section 1102 Definitions

(1) **1102.1 Definitions.** The following terms are defined in *rule 1301:7-7-02 of the Administrative Code*.

"Dutch door."

"Existing."

# (C) Section 1103 Fire safety requirements for existing buildings

(1) **1103.1 Required construction.** Existing buildings shall comply with not less than the minimum provisions specified in Table 1103.1 of this rule and as further enumerated in paragraphs (C)(2)(1103.2) to (C)(10)(1103.10) of this rule.

The provisions of this *rule* shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

**Exception:** Group U occupancies.

Table 1103.1
Occupancy and use requirements<sup>a</sup>

Section		<u>Us</u>	<u>e</u>									Occupa	ancy cl	assifica	tion_							
	<u>High</u>	<u>Atrium</u>	Underground	Α	<u>B</u>	<u>E</u>	<u>F</u>	H-1	H-2	H-3	H-4	H-5	<u>l-1</u>	<u>l-2</u>	<u>I-3</u>	<u>I-4</u>	M	R-1	R-2	R-3	R-4	<u>s</u>
	<u>rise</u>	<u>or</u>	building																			1
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	<u>R</u>	=	<u>R</u>	-	-	-	-	<u>-</u>	=	=	-	-	=	<u>R</u>	<u>R</u>	=	<u>-</u>	<u>-</u>	-	=	-	-
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a. Existing buildings shall comply with the *paragraphs* identified as "Required" (R) based on occupancy classification or use, or both, whichever is applicable.

R=The building is required to comply.

(a) **1103.1.1 Historic buildings.** Facilities designated as historic buildings shall develop a fire protection plan in accordance with NFPA 914 *as listed in rule 1301:7-7-80 of the Administrative Code*. The fire protection plans shall comply with the maintenance and availability provisions in *paragraphs* (D)(3)(404.3) and (D)(4)(404.4) *of rule 1301:7-7-04 of the Administrative Code*.

(2) 1103.2 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

b. Only applies to Group I-2 Condition 2 as established by the adopting ordinance.

(a) Where an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with paragraph (J)(1)(510.1), exception 1 of rule 1301:7-7-05 of the Administrative Code.

(b) Within a time-frame established by the adopting authority.

**Exception:** Where it is determined by the fire code official that the radio coverage system is not needed.

- (3) **1103.3 Existing elevators.** Existing elevators, escalators and moving walks shall comply with the requirements of paragraphs (C)(3)(a)(1103.3.1) and (C)(3)(ii)(1103.3.2) of this rule.
  - (a) **1103.3.1 Elevators, escalators and moving walks.** Existing elevators, escalators and moving walks in Group I-2 Condition 2 occupancies shall comply with ASME A17.3 *as listed in rule 1301:7-7-80 of the Administrative Code*.
  - (b) **1103.3.2 Elevator emergency operation.** Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3 as listed in rule 1301:7-7-80 of the Administrative Code.

# **Exceptions:**

- 1. Buildings without occupied floors located more than 55 feet (16 764 mm) above or 25 feet (7620 mm) below the lowest level of fire department vehicle access where protected at the elevator shaft openings with additional fire doors in accordance with section 716.5 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and where all of the following conditions are met:
  - 1.1. The doors shall be provided with vision panels of approved fire protection-rated glazing so located as to furnish clear vision of the approach to the elevator. Such glazing shall not exceed 100 square inches (0.065 m²) in area.
  - 1.2. The doors shall be held open but be automatic-closing by activation of a fire alarm initiating device installed in accordance with the requirements of NFPA 72 as listed in rule 1301:7-7-80 of the Administrative Code as for Phase I Emergency Recall Operation, and shall be located at each floor served by the elevator; in the associated elevator machine room, control space, or control room; and in the elevator hoistway, where sprinklers are located in those hoistways.
  - 1.3. The doors, when closed, shall have signs visible from the approach area stating: "WHEN THESE DOORS ARE CLOSED OR IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRWAYS."
- 2. Buildings without occupied floors located more than 55 feet (16 764 mm) above or 25 feet (7620 mm) below the lowest level of fire department vehicle access where provided with automatic sprinkler systems installed in accordance with paragraphs (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code.
- 3. Freight elevators in buildings provided with both automatic sprinkler systems installed in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code and not less than one ASME 17.3-compliant elevator serving the same floors.

Elimination of previously installed Phase I emergency recall or Phase II emergency in-car systems shall not be permitted.

(4) **1103.4 Vertical openings.** Interior vertical openings, including but not limited to stairways, elevator hoistways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected as specified in *paragraphs* (C)(4)(a)(1103.4.1) to (C)(4)(j)(1103.4.10) of this rule.

(a) 1103.4.1 Group I-2 and I-3 occupancies. In Group I-2 and I-3 occupancies, interior vertical openings connecting two or more stories shall be protected with 1 hour fire-resistance rated construction.

- 1. In Group I-2, unenclosed vertical openings not exceeding two connected stories and not concealed within the building construction shall be permitted as follows:
  - 1.1. The unenclosed vertical openings shall be separated from other unenclosed vertical openings serving other floors by a smoke barrier.
  - 1.2. The unenclosed vertical openings shall be separated from corridors by smoke partitions.
  - 1.3. The unenclosed vertical openings shall be separated from other fire or smoke compartments on the same floors by a smoke barrier.
  - 1.4. On other than the lowest level, the unenclosed vertical openings shall not serve as a required means of egress.
- 2. In Group I-2, atriums connecting three or more stories shall not require 1-hour fire-resistance-rated construction where the building is equipped throughout with an automatic sprinkler system installed in accordance with paragraph (C)(3)(903.3) of rule 1301:7-7-09 of the Administrative Code, and all of the following conditions are met:
  - 2.1. For other than existing approved atriums with a smoke control system, where the atrium was constructed and is maintained in accordance with the code in effect at the time the atrium was created, the atrium shall have a smoke control system that is in compliance with paragraph (I)(909) of rule 1301:7-7-09 of the Administrative Code.
  - 2.2. Glass walls forming a smoke partition or a glass-block wall assembly shall be permitted when in compliance with Condition 2.2.1 or 2.2.2.
    - 2.2.1. Glass walls forming a smoke partition shall be permitted where all of the following conditions are met:
      - 2.2.1.1. Automatic sprinklers are provided along both sides of the separation wall and doors, or on the room side only if there is not a walkway or occupied space on the atrium side.
      - 2.2.1.2. The sprinklers shall be not more than 12 inches (305 mm) away from the face of the glass and at intervals along the glass of not greater than 72 inches (1829 mm).
      - 2.2.1.3. Windows in the glass wall shall be non-operating type.
      - 2.2.1.4. The glass wall and windows shall be installed in a gasketed frame in a manner that the framing system deflects without breaking (loading) the glass before the sprinkler system operates.

<u>2.2.1.5.</u> The sprinkler system shall be designed so that the entire surface of the glass is wet upon activation of the sprinkler system without obstruction.

- 2.2.2. A fire barrier is not required where a glass-block wall assembly complying with section 2110 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and having a ¾-hour fire protection rating is provided.
- 2.3. Where doors are provided in the glass wall, they shall be either self-closing or automatic-closing and shall be constructed to resist the passage of smoke.
- 3. In Group I-3 occupancies, exit stairways or ramps and exit access stairways or ramps constructed in accordance with section 408 in the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.
- (b) **1103.4.2** Three to five stories. In other than Group I-2 and I-3 occupancies, interior vertical openings connecting three to five stories shall be protected by either 1-hour fire-resistance-rated construction or an automatic sprinkler system shall be installed throughout the building in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii) (903.3.1.2) of rule 1301:7-7-09 of the Administrative Code.

#### **Exceptions:**

- 1. Vertical opening protection is not required for Group R-3 occupancies.
- 2. Vertical opening protection is not required for open parking garages.
- 3. Vertical opening protection for escalators shall be in accordance with paragraphs (C)(4)(e)(1103.4.5), (C)(4)(f)(1103.4.6) or (C)(4)(g)(1103.4.7) of this rule.
- 4. Exit access stairways and ramps shall be in accordance with paragraph (C)(4)(h)(1103.4.8) of this rule.
- (c) 1103.4.3 More than five stories. In other than Group I-2 and I-3 occupancies, interior vertical openings connecting more than five stories shall be protected by 1-hour fire-resistance-rated construction.

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# **Exceptions:**

- 1. Vertical opening protection is not required for Group R-3 occupancies.
- 2. Vertical opening protection is not required for open parking garages.
- 3. Vertical opening protection for escalators shall be in accordance with *paragraph* (C)(4)(e)(1103.4.5), (C)(4)(f)(1103.4.6) or (C)(4)(g)(1103.4.7) of this rule.
- 4. Exit access stairways and ramps shall be in accordance with paragraph (C)(4)(h)(1103.4.8) of this rule.
- (d) **1103.4.4 Atriums and covered malls.** In other than Group I-2 and I-3 occupancies, interior vertical openings in a covered mall building or a building with an atrium shall be protected by either 1-hour fire-resistance-rated construction or an automatic sprinkler system shall be installed throughout the building in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code.

# **Exceptions:**

1. Vertical opening protection is not required for Group R-3 occupancies.

- 2. Vertical opening protection is not required for open parking garages.
- 3. Exit access stairways and ramps shall be in accordance with paragraph (C)(4)(h)(1103.4.8) of this rule.
- (e) 1103.4.5 Escalators in Group B and M occupancies. In Group B and M occupancies, escalators creating vertical openings connecting any number of stories shall be protected by either 1-hour fire-resistance-rated construction or an automatic fire sprinkler system in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) of rule 1301:7-7-09 of the Administrative Code installed throughout the building, with a draft curtain and closely spaced sprinklers around the escalator opening.
- (f) 1103.4.6 Escalators connecting four or fewer stories. In other than Group B and M occupancies, escalators creating vertical openings connecting four or fewer stories shall be protected by either 1-hour fire-resistance-rated construction or an automatic sprinkler system in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code shall be installed throughout the building, and a draft curtain with closely spaced sprinklers shall be installed around the escalator opening.
- (g) 1103.4.7 Escalators connecting more than four stories. In other than Group B and M occupancies, escalators creating vertical openings connecting five or more stories shall be protected by 1 hour fire-resistance rated construction.
- (h) 1103.4.8 Occupancies other than Group I-2 and I-3. In other than Group I-2 and I-3 occupancies, floor openings containing exit access stairways or ramps that do not comply with one of the conditions listed in this paragraph shall be protected by 1-hour fire-resistance-rated construction.
  - 1. Exit access stairways and ramps that serve, or atmospherically communicate between, only two stories.

    Such interconnected stories shall not be open to other stories.
  - 2. In Group R-1, R-2 or R-3 occupancies, exit access stairways and ramps connecting four stories or less serving and contained within an individual dwelling unit or sleeping unit or live/work unit.
  - 3. Exit access stairways and ramps in buildings equipped throughout with an automatic sprinkler system in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) of rule 1301:7-7-09 of the Administrative Code, where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the stairway or ramp, and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13 as listed in rule 1301:7-7-80 of the Administrative Code. In other than Group B and M occupancies, this provision is limited to openings that do not connect more than four stories.
  - 4. Exit access stairways and ramps within an atrium complying with the provisions of section 404 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.
  - 5. Exit access stairways and ramps in open parking garages that serve only the parking garage.
  - 6. Exit access stairways and ramps serving open-air seating complying with the exit access travel distance requirements of section 1029.7 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.
  - 7. Exit access stairways and ramps serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.
- (i) **1103.4.9 Waste and linen chutes.** In Group I-2 occupancies, existing waste and linen chutes shall comply with paragraphs (C)(4)(i)(a)(1103.4.9.1) to (C)(4)(i)(e)(1103.4.9.5) of this rule.

(i) **1103.4.9.1 Enclosure.** Chutes shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with section 716 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code* and have a fire protection rating of not less than 1 hour.

- (ii) **1103.4.9.2 Chute intakes.** Chute intakes shall comply with paragraph (C)(4)(i)(ii)(a)(1103.4.9.2.1) or (C)(4)(i)(ii)(b)(1103.4.9.2.2) of this rule.
  - (a) 1103.4.9.2.1 Chute intake direct from corridor. Where intake to chutes is direct from a corridor, the intake opening shall be equipped with a chute-intake door in accordance with section 716 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and having a fire protection rating of not less than 1 hour.
  - (b) 1103.4.9.2.2 Chute intake via a chute-intake room. Where the intake to chutes is accessed through a chute-intake room, the room shall be enclosed with 1-hour fire-resistance-rated construction. Opening protectives for the intake room shall be in accordance with section 716 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and have a fire protection rating of not less than ¾ hour. Opening protective for the chute enclosure shall be in accordance with paragraph (C)(4)(i)(i)(1103.4.9.1) of this rule.
- (iii) **1103.4.9.3** Automatic sprinkler system. Chutes shall be equipped with an approved automatic sprinkler system in accordance with *paragraph* (C)(2)(k)(ii)(903.2.11.2) *of rule 1301:7-7-09 of the Administrative Code*.
- (iv) **1103.4.9.4 Chute discharge rooms.** Chutes shall terminate in a dedicated chute discharge room. Such rooms shall be separated from the remainder of the building by not less than 1-hour fire-resistance-rated construction. Opening protectives shall be in accordance with section 716 of the *building code as listed in rule* 1301:7-7-80 of the Administrative Code and have a fire protection rating of not less than 1 hour.
- (v) 1103.4.9.5 Chute discharge protection. Chute discharges shall be equipped with a self-closing or automatic-closing opening protective in accordance with section 716 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and having a fire protection rating of not less than 1 hour.
- (j) 1103.4.10 Flue-fed incinerators. Existing flue-fed incinerator rooms and associated flue shafts shall be protected with 1-hour fire-resistance-rated construction and shall not have other vertical openings connected with the space other than the associated flue. Opening protectives shall be in accordance with section 716 of the building code as listed in rule 1301:7-7-80 of the Administrative Code and have a fire protection rating of not less than 1 hour.
- (5) **1103.5 Sprinkler systems.** An automatic sprinkler system shall be provided in existing buildings in accordance with paragraphs (C)(5)(a)(1103.5.1) and (C)(5)(c)(1103.5.3) of this rule.
  - (a) **1103.5.1 Group I-2.** In Group I-2, an automatic sprinkler system shall be provided in accordance with paragraph (E)(8)(1105.8) of this rule.
  - (b) **1103.5.2 Group I-2 Condition 2.** In addition to the requirements of *paragraph* (C)(5)(a)(1103.5.1) of this rule, existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with *paragraph* (C)(3)(a)(i)(903.3.1.1) of rule 1301:7-7-09 of the Administrative Code. The automatic sprinkler system shall be installed as established by the adopting ordinance.
  - (c) 1103.5.3 Pyroxylin plastics. An automatic sprinkler system shall be provided throughout existing buildings where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg). Vaults located within buildings for the storage of raw pyroxylin shall be protected with an approved automatic sprinkler system capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

(6) **1103.6 Standpipes.** Existing structures shall be equipped with standpipes installed in accordance with paragraph (E)(905) of rule 1301:7-7-09 of the Administrative Code where required in paragraphs (C)(6)(a)(1103.6.1) and (C)(6)(b)(1103.6.2) of this rule. The fire code official is authorized to approve the installation of manual standpipe systems to achieve compliance with this paragraph where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.

- (a) **1103.6.1 Existing multiple-story buildings.** Existing buildings with occupied floors located more than 50 feet (15 240 mm) above the lowest level of fire department access or more than 50 feet (15 240 mm) below the highest level of fire department access shall be equipped with standpipes.
- (b) **1103.6.2 Existing helistops and heliports.** Existing buildings with a rooftop helistop or heliport located more than 30 feet (9144 mm) above the lowest level of fire department access to the roof level on which the helistop or heliport is located shall be equipped with standpipes in accordance with *paragraph* (G)(5)(2007.5) *of rule* 1301:7-7-20 of the Administrative Code.
- (7) **1103.7** Fire alarm systems. An approved fire alarm system shall be installed in existing buildings and structures in accordance with *paragraphs* (C)(7)(a)(1103.7.1) to (C)(7)(g)(1103.7.7) of this rule and provide occupant notification in accordance with *paragraph* (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code unless other requirements are provided by other *paragraphs* of this code.

**Exception:** Occupancies with an existing, previously approved fire alarm system.

(a) **1103.7.1 Group E.** A fire alarm system shall be installed in existing Group E occupancies in accordance with paragraph (G)(2)(c)(907.2.3) of rule 1301:7-7-09 of the Administrative Code.

## **Exceptions:**

- A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located not closer than 50 feet (15 240 mm) from another building.
- 2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50.
- (b) **1103.7.2 Group I-1.** An automatic fire alarm system shall be installed in existing Group I-1 facilities in accordance with paragraph (G)(2)(f)(i)(907.2.6.1) of rule 1301:7-7-09 of the Administrative Code.

Exception: Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with paragraph (U)(1021) of rule 1301:7-7-10 of the Administrative Code, and the building is not more than three stories in height.

- (c) 1103.7.3 Group I-2. In Group I-2, an automatic fire alarm system shall be installed in accordance with paragraph (E)(9)(1105.9) of this rule.
- (d) **1103.7.4 Group I-3.** An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with *paragraph* (G)(2)(f)(iii)(907.2.6.3) *of rule 1301:7-7-09 of the Administrative Code*.
- (e) 1103.7.5 Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with paragraphs (C)(7)(e)(i)(1103.7.5.1) to (C)(7)(e)(ii)(a)(1103.7.5.2.1) of this rule.
  - (i) 1103.7.5.1 Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the

Administrative Code shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

#### **Exceptions:**

- 1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
- 2. Manual fire alarm boxes are not required throughout the building where the following conditions are met:
  - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code.
  - 2.2. The notification appliances will activate upon sprinkler water flow.
  - 2.3. Not less than one manual fire alarm box is installed at an approved location.

(a)1103.7.5.1.1 Group R-1 hotel and motel automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised sprinkler system installed in accordance with paragraph (C)(903) of rule 1301:7-7-09 of the Administrative Code.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

(ii) 1103.7.5.2 Group R-1 boarding and rooming houses manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code shall be installed in existing Group R-1 boarding and rooming houses.

**Exception:** Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

(a) 1103.7.5.2.1 Group R-1 boarding and rooming houses automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with paragraph (C)(903) of rule 1301:7-7-09 of the Administrative Code.

**Exception:** Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of paragraph (G)(2)(k)(i)(907.2.11.1) of rule 1301:7-7-09 of the Administrative Code and where the fire alarm system includes not less than one manual fire alarm box per floor arranged to initiate the alarm.

(f) 1103.7.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code shall be installed in

existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

#### **Exceptions:**

- 1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than ¾ hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
- 2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii) (903.3.1.2) of rule 1301:7-7-09 of the Administrative Code and having a local alarm to notify all occupants.
- 3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) or (C)(3)(a)(ii)(903.3.1.2) of rule 1301:7-7-09 of the Administrative Code, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with paragraph (AA)(6)(1027.6), exception 3 of rule 1301:7-7-10 of the Administrative Code.
- 4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both of the following:
  - 4.1. Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fireresistance rating of not less than ¾ hour.
  - 4.2. Each dwelling unit is provided with hardwired, interconnected smoke alarms as required for new construction in paragraph (G)(2)(k)(907.2.11) of rule 1301:7-7-09 of the Administrative Code.
- (g) 1103.7.7 Group R-4. A manual fire alarm system that activates the occupant notification system in accordance with paragraph (G)(5)(907.5) of rule 1301:7-7-09 of the Administrative Code shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with paragraph (G)(2)(j)(j)(907.2.10.1) of rule 1301:7-7-09 of the Administrative Code.

# **Exceptions:**

- 1. Where there are interconnected smoke alarms meeting the requirements of paragraph (G)(2)(k)(907.2.11) of rule 1301:7-7-09 of the Administrative Code and there is not less than one manual fire alarm box per floor arranged to continuously sound the smoke alarms.
- 2. Other manually activated, continuously sounding alarms approved by the fire code official.
- (8) **1103.8** Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with *paragraphs* (C)(8)(a)(1103.8.1) to (C)(8)(c)(1103.8.3) of this rule.
  - (a) **1103.8.1 Where required.** Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with *paragraph* (G)(2)(k)(907.2.11) of rule 1301:7-7-09 of the Administrative Code. Interconnection and power sources shall be in accordance with *paragraphs* (C)(8)(b)(1103.8.2) and (C)(8)(c)(1103.8.3) of this rule, respectively.

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.

- 2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
- 3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

(b) **1103.8.2** Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

## **Exceptions:**

- 1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
- 2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.
- (c) 1103.8.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

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- 1. Smoke alarms are permitted to be solely battery operated in existing buildings where construction is not taking place.
- 2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
- 3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for building wiring without the removal of interior finishes.
- (9) **1103.9 Carbon monoxide alarms.** On or before January 1, 2019, existing Group I-1, I-2, I-4, R and E occupancies shall be equipped with carbon monoxide alarms in accordance with paragraph (O)(915) of rule 1301:7-7-09 of the Administrative Code, except that the carbon monoxide alarms shall be allowed to be solely battery operated.
- (10) **1103.10 Medical gases.** Medical gases stored and transferred in health-care-related facilities shall be in accordance with *rule 1301:7-7-53 of the Administrative Code*.

### (D) Section 1104 Means of egress for existing buildings

(1) **1104.1 General.** Means of egress in existing buildings shall comply with the minimum egress requirements where specified in Table 1103.1 of this rule as further enumerated in paragraphs (D)(2)(1104.2) to (D)(25)(1104.25) of this rule, and the building code that applied at the time of construction. Where the provisions of this rule conflict with the building code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements where specified in Table 1103.1 of this rule as further enumerated in paragraphs (D)(2)(1104.2) to (D)(25)(1104.25) of this rule.

(2) **1104.2 Elevators, escalators and moving walks.** Elevators, escalators and moving walks shall not be used as a component of a required means of egress.

## **Exceptions:**

- 1. Elevators used as an accessible means of egress where allowed by paragraph (I)(4)(1009.4) of rule 1301:7-7-10 of the Administrative Code.
- 2. Previously approved elevators, escalators and moving walks in existing buildings.
- (3) **1104.3** Exit sign illumination. Exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source, shall have an intensity of not less than 5 foot-candles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose.

Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

(4) **1104.4 Power source.** Where emergency illumination is required in *paragraph* (D)(5)(1104.5) *of this rule*, exit signs shall be visible under emergency illumination conditions.

<u>Exception:</u> Approved signs that provide <u>continuous illumination independent</u> of external power sources are not required to be connected to an emergency <u>electrical system.</u>

- (5) **1104.5 Illumination emergency power.** Where means of egress illumination is provided, the power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress:
  - 1. Group A having 50 or more occupants.

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

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

**Exception:** Buildings used only during daylight hours and that are provided with windows for natural light in accordance with the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

#### 5. Group I.

# 6. Group M.

**Exception:** Buildings less than 3,000 square feet (279 m<sup>2</sup>) in gross sales area on one story only, excluding mezzanines.

## 7. Group R-1.

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

#### 8. Group R-2.

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

# 9. Group R-4.

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

(a) 1104.5.1 Emergency power duration and installation. Emergency power for means of egress illumination shall be provided in accordance with paragraph (D)(604) of rule 1301:7-7-06 of the Administrative Code. In other than Group I-2, emergency power shall be provided for not less than 60 minutes for systems requiring emergency power. In Group I-2, essential electrical systems shall comply with paragraphs (E)(5)(a)(1105.5.1) and (E)(5)(b)(1105.5.2) of this rule.

(6) **1104.6 Guards.** Guards complying with this *paragraph* shall be provided at the open sides of means of egress that are more than 30 inches (762 mm) above the floor or grade below.

(a) 1104.6.1 Height of guards. Guards shall form a protective barrier not less than 42 inches (1067 mm) high.

# **Exceptions:**

- 1. Existing guards on the open side of exit access and exit stairways and ramps shall be not less than 30 inches (760 mm) high.
- 2. Existing guards within dwelling units shall be not less than 36 inches (910 mm) high.
- 3. Existing guards in assembly seating areas.

(b) **1104.6.2 Opening limitations.** Open guards shall have balusters or ornamental patterns such that a 6-inch diameter (152 mm) sphere cannot pass through any opening up to a height of 34 inches (864 mm).

- 1. At elevated walking surfaces for access to, and use of electrical, mechanical or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass through any opening.
- 2. In occupancies in Group I-3, F, H or S, the clear distance between intermediate rails measured at right angles to the rails shall not exceed 21 inches (533 mm).

3. Approved existing open guards.

(7) 1104.7 Size of doors. The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this paragraph requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). In ambulatory care facilities, doors serving as means of egress from patient treatment rooms or patient sleeping rooms shall provide a clear width of not less than 32 inches (813 mm). In Group I-2, means of egress doors where used for the movement of beds shall provide a clear width not less than 41 ½ inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. The height of door openings shall be not less than 80 inches (2032 mm).

# **Exceptions:**

- 1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in occupancies in Groups R-2 and R-3.
- 2. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.
- 3. Width of door leafs in revolving doors that comply with paragraph (J)(10)(a)(i)(1010.1.1) of rule 1301:7-7-10 of the Administrative Code shall not be limited.
- 4. Door openings within a dwelling unit shall not be less than 78 inches (1981 mm) in height.
- 5. Exterior door openings in dwelling units, other than the required exit door, shall be not less than 76 inches (1930 mm) in height.
- 6. Exit access doors serving a room not larger than 70 square feet (6.5 m²) shall be not less than 24 inches (610 mm) in door width.
- 7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.
- (8) **1104.8 Opening force for doors.** The opening force for interior side-swinging doors without closers shall not exceed a 5-pound (22 N) force. The opening forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other side-swinging, sliding and folding doors, the door latch shall release when subjected to a force of not more than 15 pounds (66 N). The door shall be set in motion when subjected to a force not exceeding 30 pounds (133 N). The door shall swing to a full-open position when subjected to a force of not more than 50 pounds (222 N). Forces shall be applied to the latch side.

## (9) **1104.9 Revolving doors.** Revolving doors shall comply with the following:

- 1. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of stairways or escalators.

  A dispersal area shall be provided between the stairways or escalators and the revolving doors.
- 2. The revolutions per minute for a revolving door shall not exceed those shown in Table 1104.9 of this rule.
- 3. Each revolving door shall have a conforming side-hinged swinging door in the same wall as the revolving door and within 10 feet (3048 mm).

# **Exceptions:**

1. A revolving door is permitted to be used without an adjacent swinging door for street floor elevator lobbies provided a stairway, escalator or door from other parts of the building does not discharge

- through the lobby and the lobby does not have any occupancy or use other than as a means of travel between elevators and a street.
- 2. Existing revolving doors where the number of revolving doors does not exceed the number of swinging doors within 20 feet (6096 mm).

Table 1104.9
Revolving door speeds

Inside diameter	Power-driven-type speed control	Manual-type speed control (RPM)
(feet-inches)	<u>(RPM)</u>	
<u>6′6″</u>	<u>11</u>	<u>12</u>
<u>7′0″</u>	<u>10</u>	<u>11</u>
<u>7′6″</u>	<u>9</u>	<u>11</u>
<u>8′0″</u>	<u>9</u>	<u>10</u>
<u>8′6″</u>	<u>8</u>	<u>9</u>
<u>9′0″</u>	<u>8</u>	<u>9</u>
<u>9'6"</u>	<u>7</u>	<u>8</u>
<u>10'0"</u>	<u>7</u>	<u>8</u>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- (a) **1104.9.1 Egress component.** A revolving door used as a component of a means of egress shall comply with paragraph (D)(9)(1104.9) of this rule and all of the following conditions:
  - (i) Revolving doors shall not be given credit for more than 50 per cent of the required egress capacity.
  - (ii) Each revolving door shall be credited with not more than a 50-person capacity.
  - (iii) Revolving doors shall be capable of being collapsed when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.
- (10) **1104.10 Stair dimensions for existing stairways.** Existing stairways in buildings shall be permitted to remain if the rise does not exceed 8½ inches (210 mm) and the run is not less than 9 inches (229 mm). Existing stairways can be rebuilt.

**Exception:** Other stairways approved by the fire code official.

- (a) **1104.10.1 Dimensions for replacement stairs.** The replacement of an existing stairway in a structure shall not be required to comply with the new stairway requirements of *paragraph* (I)(1009) of rule 1301:7-7-10 of the Administrative Code where the existing space and construction will not allow a reduction in pitch or slope.
- (11) **1104.11 Winders.** Existing winders shall be allowed to remain in use if they have a minimum tread depth of 6 inches (152 mm) and a minimum tread depth of 9 inches (229 mm) at a point 12 inches (305 mm) from the narrowest edge.
- (12) **1104.12 Curved stairways.** Existing curved stairways shall be allowed to continue in use, provided the minimum depth of tread is 10 inches (254 mm) and the smallest radius shall be not less than twice the width of the stairway.
- (13) **1104.13 Stairway handrails.** Stairways shall have handrails on at least one side. Handrails shall be located so that all portions of the stairway width required for egress capacity are within 44 inches (1118 mm) of a handrail.

Exception: Aisle stairs provided with a center handrail are not required to have additional handrails.

- (a) **1104.13.1 Height.** Handrail height, measured above stair tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 42 inches (1067 mm).
- (14) **1104.14 Slope of ramps.** Ramp runs utilized as part of a means of egress shall have a running slope not steeper than one unit vertical in 10 units horizontal (10-per cent slope). The slope of other ramps shall not be steeper than one unit vertical in eight units horizontal (12.5-per cent slope).
- (15) **1104.15 Width of ramps.** Existing ramps are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by *paragraph* (E)(1)(1005.1) of rule 1301:7-7-10 of the Administrative Code. In Group I-2, ramps serving as a means of egress and used for the movement of patients in beds shall comply with *paragraph* (E)(5)(d)(1105.5.4) of this rule.
- (16) **1104.16 Fire escape stairways.** Fire escape stairways shall comply with *paragraphs* (D)(16)(a)(1104.16.1) *to* (D)(16)(g)(1104.16.7) *of this rule.* 
  - (a) **1104.16.1 Existing means of egress.** Fire escape stairways shall be permitted in existing buildings but shall not constitute more than 50 *per cent* of the required exit capacity.
  - (b) 1104.16.2 Protection of openings. Openings within 10 feet (3048 mm) of fire escape stairways shall be protected by opening protectives having a minimum ¾-hour fire protection rating.
    - **Exception:** In buildings equipped throughout with an approved automatic sprinkler system, opening protection is not required.
  - (c) 1104.16.3 Dimensions. Fire escape stairways shall meet the minimum width, capacity, riser height and tread depth as specified in paragraph (D)(10)(1104.10) of this rule.
  - (d) 1104.16.4 Access. Access to a fire escape stairway from a corridor shall not be through an intervening room. Access to a fire escape stairway shall be from a door or window meeting the criteria of paragraph (E)(1)(1005.1) of rule 1301:7-7-10 of the Administrative Code. Access to a fire escape stairway shall be directly to a balcony, landing or platform. These shall not be higher than the floor or window sill level and no lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the window sill.
  - (e) 1104.16.5 Materials and strength. Components of fire escape stairways shall be constructed of noncombustible materials. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m²). Fire escape stairways and balconies shall be provided with a top and intermediate handrail on each side.
    - (i) **1104.16.5.1 Examination.** Fire escape stairways and balconies shall be examined for structural adequacy and safety in accordance with *paragraph* (D)(16)(e)(1104.16.5) of this rule by a registered design professional or others acceptable to the fire code official every 5 years, or as required by the fire code official. An inspection report shall be submitted to the fire code official after such examination.
  - (f) **1104.16.6 Termination.** The lowest balcony shall not be more than 18 feet (5486 mm) from the ground. Fire escape stairways shall extend to the ground or be provided with counterbalanced stairs reaching the ground.
    - **Exception:** For fire escape stairways serving 10 or fewer occupants, an approved fire escape ladder is allowed to serve as the termination.
  - (g) **1104.16.7 Maintenance.** Fire escape stairways shall be kept clear and unobstructed at all times and shall be maintained in good working order.

(17) **1104.17 Corridor construction.** Corridors serving an occupant load greater than 30 and the openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept closed or be self-closing. In Group I-2, corridors in areas housing patient sleeping or care rooms shall comply with paragraph (E)(4)(1105.4) of this rule.

## **Exceptions:**

- 1. Corridors in occupancies other than in Group H, that are equipped throughout with an approved automatic sprinkler system.
- 2. Corridors in occupancies in Group E where each room utilized for instruction or assembly has not less than one-half of the required means of egress doors opening directly to the exterior of the building at ground level.
- 3. Corridors that are in accordance with the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

(a) **1104.17.1 Corridor openings.** Openings in corridor walls shall comply with the requirements of the *building* code as listed in rule 1301:7-7-80 of the Administrative Code.

### **Exceptions:**

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

(18) **1104.18 Dead end corridors.** Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18 of this rule. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be in accordance with paragraph (E)(5)(f)(1105.5.6) of this rule.

Exception: A dead-end passageway or corridor shall not be limited in length where the length of the dead-end passageway or corridor is less than 2.5 times the least width of the dead-end passageway or corridor.

<u>Table 1104.18</u> <u>Common path, dead-end and travel distance limits (by occupancy)</u>

Occupancy	Common p	ath limit	<u>Dead-en</u>	d limit	Travel distance limit		
	Unsprinklered	Sprinklered	Unsprinklered	Sprinklered	Unsprinklered	<b>Sprinklered</b>	
	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	
Group A	20/75°	20/75 <sup>a</sup>	<u>20<sup>b</sup></u>	<u>20<sup>b</sup></u>	<u>200</u>	<u>250</u>	
Group Bh	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>300</u>	
Group E	<u>75</u>	<u>75</u>	<u>20</u>	<u>50</u>	<u>200</u>	<u>250</u>	

Group F-1, S- 1 <sup>d,h</sup>	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
Group F-2, S- 2 <sup>d,h</sup>	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>300</u>	<u>400</u>
Group H-1	<u>25</u>	<u>25</u>	<u>0</u>	<u>0</u>	<u>75</u>	<u>75</u>
Group H-2	<u>50</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>75</u>	<u>100</u>
Group H-3	<u>50</u>	<u>100</u>	<u>20</u>	<u>20</u>	<u>100</u>	<u>150</u>
Group H-4	<u>75</u>	<u>75</u>	<u>20</u>	<u>20</u>	<u>150</u>	<u>175</u>
Group H-5	<u>75</u>	<u>75</u>	<u>20</u>	<u>20</u>	<u>150</u>	<u>200</u>
Group I-1	<u>75</u>	<u>75</u>	<u>20</u>	<u>50</u>	<u>200</u>	<u>250</u>
Group I-2	Notes e,g	Notes e,g	<u>Note f</u>	<u>Note f</u>	<u>150</u>	<u>200°</u>
Group I-3	<u>100</u>	<u>100</u>	<u>NR</u>	<u>NR</u>	<u>150°</u>	<u>200°</u>
Group I-4 (Day care centers)	<u>NR</u>	<u>NR</u>	<u>20</u>	<u>20</u>	<u>200</u>	<u>250</u>
Group M (Covered or open mall)	<u>75</u>	100	<u>50</u>	<u>50</u>	<u>200</u>	<u>400</u>
Group M (Mercantile)	<u>75</u>	100	<u>50</u>	<u>50</u>	<u>200</u>	<u>400</u>
Group R-1 (Hotels)	<u>75</u>	<u>75</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
Group R-2 (Apartments)	<u>75</u>	<u>125</u>	<u>50</u>	<u>50</u>	200	<u>250</u>
Group R-3 (One- and two-family)	<u>NR</u>	<u>NR</u>	<u>NR</u>	<u>NR</u>	NR	<u>NR</u>
Group R-4 (Residential care/assisted living)	<u>NR</u>	NR NR	NR NR	NR THE SHAPE	<u>NR</u>	<u>NR</u>
Group Uf	<u>75</u>	<u>100</u>	<u>20</u>	<u>50</u>	<u>300</u>	<u>400</u>

NR=No requirements.

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929m<sup>2</sup>.

- a. 20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.
- b. See paragraph (CC)(9)(e)(1029.9.5) of rule 1301:7-7-10 of the Administrative Code for dead-end aisles in Group A occupancies.
- c. This dimension is for the total travel distance, assuming incremental portions have fully utilized their allowable maximums. For travel distance within the room, and from the room exit access door to the exit, see the appropriate occupancy rule.
- d. See the building code as listed in rule 1301:7-7-80 of the Administrative Code for special requirements on spacing of doors in aircraft hangars.
- e. In Group I-2, separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with paragraph (E)(5)(g)(1105.5.7) of this rule.
- f. In Group I-2, in smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with paragraph (E)(5)(f)(1105.5.6) of this rule.
- g. In Group I-2 Condition 2, care recipient sleeping rooms, or any suite that includes care recipient sleeping rooms, shall comply with paragraph (E)(6)(1105.6) of this rule.
- h. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet.

(19) **1104.19** Exit access travel distance. Exits shall be located so that the maximum length of exit access travel, measured from the most remote point to an approved exit along the natural and unobstructed path of egress travel, does not exceed the distances given in Table 1104.18 of this rule.

(20) **1104.20 Common path of egress travel.** The common path of egress travel shall not exceed the distances given in Table 1104.18 *of this rule*.

(21) **1104.21 Stairway discharge identification.** An interior exit stairway or ramp that continues below its level of exit discharge shall be arranged and marked to make the direction of egress to a public way readily identifiable.

**Exception:** Stairways that continue one-half story beyond their levels of exit discharge need not be provided with barriers where the exit discharge is obvious.

(22) **1104.22 Exterior stairway protection.** Exterior exit stairways shall be separated from the interior of the building as required in *paragraph* (AA)(6)(1027.6) of rule 1301:7-7-10 of the Administrative Code. Openings shall be limited to those necessary for egress from normally occupied spaces.

### **Exceptions:**

- 1. Separation from the interior of the building is not required for buildings that are two stories or less above grade where the level of exit discharge serving such occupancies is the first story above grade.
- 2. Separation from the interior of the building is not required where the exterior stairway is served by an exterior balcony that connects two remote exterior stairways or other approved exits, with a perimeter that is not less than 50 per cent open. To be considered open, the opening shall be not less than 50 per cent of the height of the enclosing wall, with the top of the opening not less than 7 feet (2134 mm) above the top of the balcony.
- 3. Separation from the interior of the building is not required for an exterior stairway located in a building or structure that is permitted to have unenclosed interior stairways in accordance with paragraph (W)(1023) of rule 1301:7-7-10 of the Administrative Code.
- 4. Separation from open-ended corridors of the building is not required for exterior stairways provided that:
  - 4.1. The open-ended corridors comply with paragraph (T)(1020) of rule 1301:7-7-10 of the Administrative Code.
  - 4.2. The open-ended corridors are connected on each end to an exterior exit stairway complying with paragraph (AA)(1027) of rule 1301:7-7-10 of the Administrative Code.
  - 4.3. At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3 m²) or an exterior stairway shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.
- (23) 1104.23 Minimum aisle width. The minimum clear width of aisles shall be:
  - (a) Forty-two inches (1067 mm) for aisle stairs having seating on each side.

**Exception:** Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

(b) Thirty-six inches (914 mm) for stepped aisles having seating on only one side.

- 1. Thirty inches (760 mm) for catchment areas serving not more than 60 seats.
- 2. Twenty-three inches (584 mm) between a stepped aisle handrail and seating where an aisle does not serve more than five rows on one side.

(c) Twenty inches (508 mm) between a stepped aisle handrail or guard and seating when the aisle is subdivided by the handrail.

(d) Forty-two inches (1067 mm) for level or ramped aisles having seating on both sides.

**Exception:** Thirty-six inches (914 mm) where the aisle serves less than 50 seats.

(e) Thirty-six inches (914 mm) for level or ramped aisles having seating on only one side.

**Exception:** Thirty inches (760 mm) for catchment areas serving not more than 60 seats.

(f) In Group I-2, where aisles are used for movement of patients in beds, aisles shall comply with paragraph (E)(5)(h)(1105.5.8) of this rule.

(24) **1104.24 Stairway floor number signs.** Existing stairways shall be marked in accordance with *paragraph* (W)(9)(1023.9) of rule 1301:7-7-10 of the Administrative Code.

(25) **1104.25** Egress path markings. Existing high-rise buildings of Group A, B, E, I, M and R-1occupancies shall be provided with luminous egress path markings in accordance with paragraph (Y)(1025) of rule 1301:7-7-10 of the Administrative Code.

**Exception:** Open, unenclosed stairwells in historic buildings designated as historic under a state or local historic preservation program.

# (E) Section 1105 Construction requirements for existing Group I-2

- (1) 1105.1 General. Existing Group I-2 shall meet all of the following requirements:
  - (a) The minimum fire safety requirements in paragraph (C)(1103) of this rule.
  - (b) The minimum means of egress requirements in paragraph (D)(1104) of this rule.
  - (c) The additional egress and construction requirements in paragraph (E)(1105) of this rule.

Where the provisions of this *rule* conflict with the construction requirements that applied at the time of construction, the most restrictive provision shall apply.

(2) **1105.2 Construction.** Group I-2 Condition 2 shall not be located on floor level higher than the floor level limitation in Table 1105.2 *of this rule* based on the type of construction.

Table 1105.2
Floor level limitations for Group I-2 Condition 2

Construction tune	Automotic enviolence evetore	Allowable floor levela						
Construction type	Automatic sprinkler system	<u>1</u>	<u>2</u>	<u>3</u>	4 or more			
<u>IA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			
	<u>Note c</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			
<u>IB</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			
	Note c	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>			
<u>IIA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>NP</u>			
	<u>Note c</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>			

<u>IIB</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
IIIA	<u>Note b</u>	<u>P</u>	PI	<u>NP</u>	<u>NP</u>
	Note c	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
IIIB	<u>Note b</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>IV</u>	<u>Note b</u>	<u>P</u>	PI	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>VA</u>	<u>Note b</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
<u>VB</u>	<u>Note b</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>
	<u>Note c</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>

P = Permitted; NP = Not permitted.

(3) **1105.3** Incidental uses in existing Group I-2. Incidental uses associated with and located within existing single-occupancy or mixed-occupancy Group I-2 buildings and that generally pose a greater level of risk to such occupancies shall comply with the provisions of *paragraphs* (E)(3)(a)(1105.3.1) to (E)(3)(c)(ii)(a)(1105.3.3.2.1) of this rule. Incidental uses in Group I-2 occupancies are limited to those listed in Table 1105.3 of this rule.

Table 1105.3
Incidental uses in existing Group I-2 occupancies

Down or the second	Compatible and I amount atting				
Room or area	Separation and/or protection				
Furnace room where any piece of equipment is over	1 hour or provide automatic sprinkler system				
400,000 Btu per hour input	1 Hour of provide automatic sprinkler system				
Rooms with boilers where the largest piece of	1 hour or provide automatic sprinkler system				
equipment is over 15 psi and 10 horsepower	1 flour of provide automatic sprinkler system				
Refrigerant machinery room	1 hour or provide automatic sprinkler system				
Hydrogen fuel gas rooms, not classified as Group H	2 hours				
<u>Incinerator rooms</u>	2 hours and provide automatic sprinkler system				
Paint shops not classified as Group H	2 hours; or 1 hour and provide automatic sprinkler				
	<u>system</u>				
Laboratories and vocational shops, not classified as	1 hour or provide automatic sprinkler system				
Group H	1 hour or provide automatic sprinkler system				
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system				
Patient rooms equipped with padded surfaces	1 hour or provide automatic sprinkler system				
Physical plant maintenance shops	1 hour or provide automatic sprinkler system				
Waste and linen collection rooms with containers with	1 hour or provide outomatic sprinkler system				
total volume of 10 cubic feet or greater	1 hour or provide automatic sprinkler system				
Storage rooms greater than 100 square feet	1 hour or provide automatic sprinkler system				
Stationary storage battery systems having a liquid					
electrolyte capacity of more than 50 gallons for flooded					
lead-acid, nickel cadmium or VRLA, or more than 1,000	2 hours				
pounds for lithium-ion and lithium metal polymer used	<u>2 hours</u>				
for facility standby power, emergency power or					
uninterruptable power supplies					

For SI: 1 square foot = 0.0929 m², 1 pound per square inch (psi) = 6.9 kPa, 1 British thermal unit (Btu) per hour = 0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L.

a. Floor level shall be counted based on the number of stories above grade.

b. The building is equipped throughout with an automatic sprinkler system in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) of rule 1301:7-7-09 of the Administrative Code.

c. The building is equipped with an automatic sprinkler system in accordance with paragraph (E)(8)(1105.8) of this rule.

(a) **1105.3.1** Occupancy classification. Incidental uses shall not be individually classified in accordance with section 302.1 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*. Incidental uses shall be included in the building occupancies within which they are located.

- (b) **1105.3.2** Area limitations. Incidental uses shall not occupy more than 10 *per cent* of the building area of the story in which they are located.
- (c) **1105.3.3 Separation and protection.** The incidental uses listed in Table 1105.3 *of this rule* shall be separated from the remainder of the building or equipped with an automatic sprinkler system, or both, in accordance with the provisions of that table.
  - (i) **1105.3.3.1 Separation.** Where Table 1105.3 *of this rule* specifies a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the building in accordance with section 509.4.1 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.
  - (ii) **1105.3.3.2 Protection.** Where Table 1105.3 *of this rule* permits an automatic sprinkler system without a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke in accordance with section 509.4.2 of the *building code* as listed in rule 1301:7-7-80 of the Administrative Code.
    - (a) 1105.3.3.2.1 Protection limitation. Except as otherwise specified in Table 1105.2 of this rule for certain incidental uses, where an automatic sprinkler system is provided in accordance with Table 1105.3 of this rule, only the space occupied by the incidental use need be equipped with such a system.
- (4) 1105.4 Corridor construction. Group I-2, in areas housing patient sleeping or care rooms, corridor walls and the opening protectives therein shall provide a barrier designed to resist the passage of smoke in accordance with paragraphs (E)(4)(a)(1105.4.1) to (E)(4)(g)(1105.4.7) of this rule.
  - (a) 1105.4.1 Materials. The walls shall be of materials permitted by the building type of construction.
  - (b) 1105.4.2 Fire-resistance rating. Unless required elsewhere in this code, corridor walls are not required to have a fire-resistance rating.
  - (c) 1105.4.3 Corridor wall continuity. Corridor walls shall extend from the top of the foundation or floor below to one of the following:
    - (i) The underside of the floor or roof sheathing, deck or slab above.
    - (ii) The underside of a ceiling above where the ceiling membrane is constructed to limit the passage of smoke.
    - (iii) The underside of a lay-in ceiling system where the ceiling system is constructed to limit the passage of smoke and where the ceiling tiles weigh not less than 1 pound per square foot (4.88 kg/m²) of tile.
  - (d) **1105.4.4 Openings in corridor walls.** Openings in corridor walls shall provide protection in accordance with paragraphs (E)(4)(d)(i)(1105.4.4.1) to (E)(4)(d)(iii)(1105.4.4.3) of this rule.
    - (i) **1105.4.4.1 Windows.** Windows in corridor walls shall be sealed to limit the passage of smoke, or the window shall be automatic-closing upon detection of smoke, or the window opening shall be protected by an automatic closing device that closes upon detection of smoke.

**Exception:** In smoke compartments not containing patient sleeping rooms, pass-through windows or similar openings shall be permitted in accordance with *paragraph* (E)(4)(d)(iii)(1105.4.4.3) *of this rule*.

(ii) **1105.4.4.2 Doors.** Doors in corridor walls shall comply with *paragraphs* (E)(4)(d)(ii)(a)(1105.4.4.2.1) to (E)(4)(d)(ii)(a)(1105.4.4.2.3) of this rule.

(a) 1105.4.4.2.1 Louvers. Doors in corridor walls shall not include louvers, transfer grills or similar openings.

**Exception:** Doors shall be permitted to have louvers, transfer grills or similar openings at toilet rooms or bathrooms; storage rooms that do not contain storage of flammable or combustible material; and storage rooms that are not required to be separated as incidental uses.

- (b) **1105.4.4.2.2 Corridor doors.** Doors in corridor walls shall limit the transfer of smoke by complying with the following:
  - (i) Doors shall be constructed of not less than 1¾ inch-thick (44 mm) solid bonded-core wood or capable of resisting fire not less than 1/3 hour.

**Exception:** Corridor doors in buildings equipped throughout with an automatic sprinkler system.

- (ii) Frames for side-hinged swinging doors shall have stops on the sides and top to limit transfer of smoke.
- (iii) Where provided, vision panels in doors shall be a fixed glass window assembly installed to limit the passage of smoke. Existing wired glass panels with steel frames shall be permitted to remain in place.
- (iv) Door undercuts shall not exceed 1 inch (25 mm).
- (v) Doors shall be positive latching with devices that resist not less than 5 pounds (22.2 N). Roller latches are prohibited.
- (vi) Mail slots or similar openings shall be permitted in accordance with paragraph (E)(4)(d)(iii)(1105.4.4.3) of this rule.
- (c) 1105.4.4.2.3 Dutch doors. Where provided, dutch doors shall comply with paragraph (E)(4)(d)(ii)(b)(1105.4.4.2.2) of this rule. In addition, dutch doors shall be equipped with latching devices on either the top or bottom leaf to allow leaves to latch together. The space between the leaves shall be protected with devices such as astragals to limit the passage of smoke.
- (d) 1105.4.4.2.4 Self- or automatic-closing doors. Where self- or automatic-closing doors are required, closer shall be maintained in operational condition.
- (iii) 1105.4.4.3 Openings in corridor walls and doors. In other than smoke compartments containing patient sleeping rooms, mail slots, pass-through windows or similar openings shall not be required to be protected where the aggregate area of the openings between the corridor and a room are not greater than 80 square inches (51 613 mm²) and are located with the top edge of any opening not higher than 48 inches above the floor.
- (e) **1105.4.5 Penetrations.** The space around penetrating items shall be filled with an approved material to limit the passage of smoke.
- (f) 1105.4.6 Joints. Joints shall be filled with an approved material to limit the passage of smoke.
- (g) 1105.4.7 Duct and air transfer openings. The space around a duct penetrating a smoke partition shall be filled with an approved material to limit the passage of smoke. Air transfer openings in smoke partitions shall

be provided with a smoke damper complying with section 717.3.2.2 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

- Exception: Where the installation of a smoke damper will interfere with the operation of a required smoke control system in accordance with *paragraph* (I)(909) of rule 1301:7-7-09 of the Administrative Code, approved alternative protection shall be utilized.
- (5) **1105.5 Means of egress.** In addition to the means of egress requirements in *paragraph* (D)(1104) *of this rule*, Group I-2 facilities shall meet the means of egress requirements in *paragraphs* (E)(5)(a)(1105.5.1) *to* (E)(5)(g)(1105.5.8) *of this rule*.
  - (a) **1105.5.1 Exit signs and emergency illumination.** The power system for exit signs and emergency illumination for the means of egress shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.
  - (b) **1105.5.2** Emergency power for operational needs. The essential electrical system shall be capable of supplying services in accordance with NFPA 99 as listed in rule 1301:7-7-80 of the Administrative Code.
  - (c) 1105.5.3 Size of door. Means of egress doors used for the movement of patients in beds shall provide a minimum clear width of 41½ inches (1054 mm). The height of the door opening shall be not less than 80 inches (2032 mm).

- 1. Door closers and door stops shall be permitted to be 78 inches (1981 mm) minimum above the floor.
- 2. In Group I-2 Condition 1, existing means of egress doors used for the movement of patients in beds that provide a minimum clear width of 32 inches (813 mm) shall be permitted to remain.
- (d) 1105.5.4 Ramps. In areas where ramps are used for movement of patients in beds, the clear width of the ramp shall be not less than 48 inches (1219 mm).
- (e) 1105.5.5 Corridor width. In areas where corridors are used for movement of patients in beds, the clear width of the corridor shall be not less than 48 inches (1219 mm).
- (f) **1105.5.6 Dead-end corridors.** In smoke compartments containing patient sleeping rooms and treatment rooms, dead-end corridors shall not exceed 30 feet (9144 mm) unless approved by the fire code official.
- (g) **1105.5.7 Separation of exit access doors.** Patient sleeping rooms, or any suite that includes patient sleeping rooms, of more than 1,000 square feet (92.9 m<sup>2</sup>) shall have not less than two exit access doors placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the patient sleeping room or suite to be served, measured in a straight line between exit access doors.
- (h) **1105.5.8** Aisles. In areas where aisles are used for movement of patients in beds, the clear width of the aisle shall be not less than 48 inches (1219 mm).
- (6) **1105.6 Smoke compartments.** Smoke compartments shall be provided in existing Group I-2 Condition 2, in accordance with *paragraphs* (E)(6)(a)(1105.6.1) *to* (E)(6)(f)(1105.6.6) *of this rule*.
  - (a) **1105.6.1 Design.** Smoke barriers shall be provided to subdivide each story used for patients sleeping with an occupant load of more than 30 patients into not fewer than two smoke compartments.

(i) **1105.6.1.1 Refuge areas.** Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate the occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments.

The size of the refuge area shall provide the following:

- (a) Not less than 30 net square feet (2.8 m²) for each care recipient confined to a bed or stretcher.
- (b) Not less than 15 square feet (1.4 m<sup>2</sup>) for each resident in a Group I-2 using mobility assistance devices.
- (c) Not less than 6 square feet (0.56 m<sup>2</sup>) for each occupant not addressed in (a) and (b).

Areas of spaces permitted to be included in the calculation of the refuge area are corridors, sleeping areas, treatment rooms, lounge or dining areas and other low-hazard areas.

(b) **1105.6.2 Smoke barriers.** Smoke barriers shall be constructed in accordance with section 709 of the *building* code as listed in rule 1301:7-7-80 of the Administrative Code.

#### **Exceptions:**

- 1. Existing smoke barriers are permitted to remain where the existing smoke barrier has a minimum fire-resistance rating of ½ hour.
- 2. Smoke barriers shall be permitted to terminate at an atrium enclosure in accordance with section 404.6 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.

(c) 1105.6.3 Opening protectives. Openings in smoke barriers shall be protected in accordance with section 716 of the building code as listed in rule 1301:7-7-80 of the Administrative Code. Opening protectives shall have a minimum fire-protection-rating of ½ hour.

**Exception:** Existing wired glass vision panels in doors shall be permitted to remain.

(d) **1105.6.4 Penetrations.** Penetrations of smoke barriers shall comply with the *building code as listed in rule* 1301:7-7-80 of the Administrative Code.

**Exception:** Approved existing materials and methods of construction.

(e) **1105.6.5 Joints.** Joints made in or between smoke barriers shall comply with the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

**Exception:** Approved existing materials and methods of construction.

(f) **1105.6.6 Duct and air transfer openings.** Penetrations in a smoke barrier by duct and air transfer openings shall comply with section 717 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

Exception: Where existing duct and air transfer openings in smoke barriers exist without smoke dampers, they shall be permitted to remain. Any changes to existing smoke dampers shall be submitted for review and approved in accordance with section 717 of the building code as listed in rule 1301:7-7-80 of the Administrative Code.

(7) **1105.7 Group I-2 care suites.** Care suites in existing Group I-2 Condition 2 occupancies shall comply with sections 407.4.4 to 407.4.4.6.2 of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*.

(8) **1105.8 Group I-2 automatic sprinkler system.** An automatic sprinkler system installed in accordance with paragraph (C)(3)(a)(i)(903.3.1.1) of rule 1301:7-7-09 of the Administrative Code shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.

- (9) **1105.9 Group I-2 automatic fire alarm system.** An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with *paragraph* (G)(2)(f)(ii)(907.2.6.2) *of rule 1301:7-7-09 of the Administrative Code.* 
  - **Exception:** Manual fire alarm boxes in patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in *paragraph* (G)(4)(b)(i)(907.4.2.1) of rule 1301:7-7-09 of the Administrative Code are not exceeded.
- (10) **1105.10 Essential electrical systems.** Essential electrical systems in Group I-2 Condition 2 occupancies shall be in accordance with *paragraphs* (E)(10)(a)(1105.10.1) and (E)(10)(b)(1105.10.2) of this rule.
  - (a) **1105.10.1** Where required. In Group I-2 Condition 2 occupancies where life support is being provided, an essential electrical system shall be provided in accordance with NFPA 99 as listed in rule 1301:7-7-80 of the Administrative Code.
  - (b) **1105.10.2 Installation and duration.** In Group I-2 Condition 2 occupancies, the installation and duration of operation of existing essential electrical systems shall be based on a hazard vulnerability analysis conducted in accordance with NFPA 99 as listed in rule 1301:7-7-80 of the Administrative Code.

### (F) Section 1106 Requirements for outdoor operations

- (1) 1106.1 Tire storage yards. Existing tire storage yards shall be provided with fire apparatus access roads in accordance with paragraphs (F)(1)(a)(1106.1.1) and (F)(1)(b)(1106.1.2) of this rule.
  - (a) 1106.1.1 Access to piles. Access roadways shall be within 150 feet (45 720 mm) of any point in the storage yard where storage piles are located not less than 20 feet (6096 mm) from any storage pile.
  - (b) **1106.1.2 Location within piles.** Fire apparatus access roads shall be located within all pile clearances identified in *paragraph* (E)(4)(3405.4) *of rule 1301:7-7-34 of the Administrative Code* and within all fire breaks required in *paragraph* (E)(5)(3405.5) *of rule 1301:7-7-34 of the Administrative Code*.

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