

**40.6.1.3** Where horizontal exits are provided, doors shall be provided in the horizontal exit fire barrier at intervals not exceeding 100 ft (30 m).

**40.6.1.4** Where dwarf, or "smash," doors are provided in doors that accommodate aircraft, such doors shall be permitted for compliance with 40.6.1.1 through 40.6.1.3.

**40.6.2** Means of egress from mezzanine floors in aircraft servicing areas shall be arranged so that the travel distance to the nearest exit from any point on the mezzanine does not exceed 75 ft (23 m), and such means of egress shall lead directly to a properly enclosed stair discharging directly to the exterior, to a suitable cutoff area, or to outside stairs.

**40.6.3** Dead ends shall not exceed 50 ft (15 m) for other than high hazard contents areas and shall not be permitted for high hazard contents areas.

#### **40.7 Operating Features.**

**40.7.1 Upholstered Furniture and Mattresses.** The provisions of 10.3.2 shall not apply to upholstered furniture and mattresses.

**40.7.2 Soiled Linen and Trash Receptacles.** The requirements of 10.3.9 for containers for rubbish, waste, or linen with a capacity of 20 gal (75.7 L) or more shall not apply.

### **Chapter 41 Reserved**

### **Chapter 42 Storage Occupancies**

#### **42.1 General Requirements.**

##### **42.1.1 Application.**

**42.1.1.1** The requirements of this chapter shall apply to both new and existing storage occupancies.

**42.1.1.2 Administration.** The provisions of Chapter 1, Administration, shall apply.

**42.1.1.3 General.** The provisions of Chapter 4, General, shall apply.

**42.1.1.4** Storage occupancies shall include all buildings or structures used primarily for the storage or sheltering of goods, merchandise, products, or vehicles.

##### **42.1.2 Classification of Occupancy.**

**42.1.2.1** Storage occupancies shall include all buildings and structures or parts thereof with occupancy as defined in 6.1.13.

**42.1.2.2** Incidental storage in another occupancy shall not be the basis for overall occupancy classification.

**42.1.2.3** Storage occupancies or areas of storage occupancies that are used for the purpose of packaging, labeling, sorting, special handling, or other operations requiring an occupant load greater than that normally contemplated for storage shall be classified as industrial occupancies. (See Chapter 40.)

**42.1.3 Multiple Occupancies.** All multiple occupancies shall be in accordance with 6.1.14.

##### **42.1.4 Definitions.**

**42.1.4.1 General.** For definitions, see Chapter 3, Definitions.

**42.1.4.2 Special Definitions.** Special terms applicable to this chapter are defined in Chapter 3.

**42.1.5 Classification of Hazard of Contents.** Contents of storage occupancies shall be classified as low hazard, ordinary hazard, or high hazard in accordance with Section 6.2, depending on the character of the materials stored, their packaging, and other factors.

**42.1.6 Minimum Construction Requirements.** (No requirements.)

**42.1.7\* Occupant Load.** The occupant load, in number of persons for whom means of egress and other provisions are required, shall be determined on the basis of the maximum probable population of the space under consideration.

#### **42.2 Means of Egress Requirements.**

##### **42.2.1 General.**

**42.2.1.1** Each required means of egress shall be in accordance with the applicable portions of Chapter 7.

**42.2.1.2\*** Normally unoccupied utility chases that are secured from unauthorized access and are used exclusively for routing of electrical, mechanical, or plumbing equipment shall not be required to comply with the provisions of Chapter 7.

##### **42.2.2 Means of Egress Components.**

**42.2.2.1 Components Permitted.** Components of means of egress shall be limited to the types described in 42.2.2.2 through 42.2.2.12.

##### **42.2.2.2 Doors.**

**42.2.2.2.1** Doors complying with 7.2.1 shall be permitted.

**42.2.2.2.2** Delayed-egress locks complying with 7.2.1.6.1 shall be permitted.

**42.2.2.2.3** Access-controlled egress doors complying with 7.2.1.6.2 shall be permitted.

**42.2.2.2.4** Approved existing horizontal-sliding fire doors shall be permitted in the means of egress where they comply with all of the following conditions:

- (1) They are held open by fusible links.
- (2) The fusible links are rated at not less than 165°F (74°C).
- (3) The fusible links are located not more than 10 ft (3050 mm) above the floor.
- (4) The fusible links are in immediate proximity to the door opening.
- (5) The fusible links are not located above a ceiling.
- (6) The door is not credited with providing any protection under this Code.

**F 42.2.2.2.5** Where horizontal or vertical security grilles or doors are used as a part of the required means of egress from a tenant space, **L** such grilles or doors shall comply with 7.2.1.4.1. **F**

##### **42.2.2.3 Stairs.**

**42.2.2.3.1** Stairs shall comply with 7.2.2 and shall be permitted to be modified by any of the following:

- (1) Noncombustible grated stair treads and noncombustible grated landing floors shall be permitted.
- (2) Industrial equipment access stairs in accordance with 40.2.5.2 shall be permitted.

**42.2.2.3.2** Spiral stairs complying with 7.2.2.2.3 shall be permitted.

**42.2.2.3.3** Existing winders complying with 7.2.2.2.4 shall be permitted.

**42.2.2.4 Smokeproof Enclosures.** Smokeproof enclosures complying with 7.2.3 shall be permitted.

**42.2.2.5 Horizontal Exits.**

**42.2.2.5.1** Horizontal exits complying with 7.2.4 shall be permitted.

**42.2.2.5.2\*** In horizontal exits where the opening is protected by a fire door assembly on each side of the wall in which it is located, one fire door shall be of the swinging type, as provided in 7.2.4.3.7, and the other shall be permitted to be an automatic-sliding fire door that shall be kept open whenever the building is occupied.

**42.2.2.6 Ramps.**

**42.2.2.6.1** Ramps complying with 7.2.5 shall be permitted.

**42.2.2.6.2** Industrial equipment access ramps in accordance with 40.2.5.2 shall be permitted.

**42.2.2.7 Exit Passageways.** Exit passageways complying with 7.2.6 shall be permitted.

**42.2.2.8 Fire Escape Stairs.** Existing fire escape stairs complying with 7.2.8 shall be permitted.

**42.2.2.9 Fire Escape Ladders.**

**42.2.2.9.1** Fire escape ladders complying with 7.2.9 shall be permitted.

**42.2.2.9.2** Fixed industrial stairs in accordance with the minimum requirements for fixed stairs in ANSI A1264.1, *Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems*, shall be permitted where fire escape ladders are permitted in accordance with 7.2.9.1.

**42.2.2.10 Slide Escapes.** Existing slide escapes complying with 7.2.10 shall be permitted.

**42.2.2.11 Alternating Tread Devices.** Alternating tread devices complying with 7.2.11 shall be permitted.

**42.2.2.12 Areas of Refuge.** Areas of refuge complying with 7.2.12 shall be permitted.

**42.2.3 Capacity of Means of Egress.** The capacity of means of egress shall be in accordance with Section 7.3.

**42.2.4 Number of Means of Egress.** See also Section 7.4.

**42.2.4.1** The number of means of egress shall comply with any of the following:

- (1) In low hazard storage occupancies, a single means of egress shall be permitted from any story or section.
- (2) In ordinary hazard storage occupancies, a single means of egress shall be permitted from any story or section, provided that the exit can be reached within the distance permitted as a common path of travel.
- (3) All buildings or structures not complying with 42.2.4.1(1) or (2) and used for storage, and every section thereof considered separately, shall have not less than two separate means of egress as remotely located from each other as practicable.

**42.2.4.2** In new buildings, floors or portions thereof with an occupant load of more than 500 persons shall have the minimum number of separate and remote means of egress specified by 7.4.1.2.

**42.2.4.3** Areas with high hazard contents shall comply with Section 7.11.

**42.2.5 Arrangement of Means of Egress.** Means of egress, arranged in accordance with Section 7.5, shall not exceed that provided by Table 42.2.5.

**Table 42.2.5 Arrangements of Means of Egress**

Level of Protection	Low Hazard Storage Occupancy	Ordinary Hazard Storage Occupancy		High Hazard Storage Occupancy
		ft	m	
<b>Dead-End Corridor</b>				
Protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	100	30	Prohibited, except as permitted by 7.11.4
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	50	15	Prohibited, except as permitted by 7.11.4
<b>Common Path of Travel</b>				
Protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	100	30	Prohibited, except as permitted by 7.11.4
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	50	15	Prohibited, except as permitted by 7.11.4

NL: Not limited.

**42.2.6\* Travel Distance to Exits.** Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 42.2.6.

**42.2.7 Discharge from Exits.** Discharge from exits shall be in accordance with Section 7.7.

**42.2.8 Illumination of Means of Egress.**

**42.2.8.1** Means of egress shall be illuminated in accordance with Section 7.8.

**42.2.8.2** In structures occupied only during daylight hours, means of egress shall be permitted to be illuminated with windows arranged to provide the required level of illumination on all portions of the means of egress during such hours, when approved by the authority having jurisdiction.

**Table 42.2.6 Maximum Travel Distance to Exits**

Level of Protection	Low Hazard Storage Occupancy	Ordinary Hazard Storage Occupancy		High Hazard Storage Occupancy	
		ft	m	ft	m
		Protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	400	122
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	NL	200	61	75	23
Flammable and combustible liquid products stored and protected in accordance with NFPA 30, <i>Flammable and Combustible Liquids Code</i>	NA	NA	NA	150	46

NL: Not limited. NA: Not applicable.

**42.2.9 Emergency Lighting.** Emergency lighting shall be provided in normally occupied storage occupancies in accordance with Section 7.9, except for spaces occupied only during daylight hours with natural illumination in accordance with 42.2.8.2.

**42.2.10 Marking of Means of Egress.** Means of egress shall have signs in accordance with Section 7.10.

**42.2.11 Special Means of Egress Features.**

**42.2.11.1 Reserved.**

**42.2.11.2 Lockups.**

**42.2.11.2.1** Lockups in new storage occupancies shall comply with the requirements of 22.4.5.

**42.2.11.2.2** Lockups in existing storage occupancies, other than approved existing lockups, shall comply with the requirements of 23.4.5.

**42.3 Protection.**

**42.3.1 Protection of Vertical Openings.** Any vertical opening shall be protected in accordance with Section 8.6, unless otherwise permitted by one of the following:

- (1) Existing open stairs, existing open ramps, and existing open escalators shall be permitted where connecting only two floor levels.

- (2) Existing unprotected vertical openings in buildings with low or ordinary hazard contents, and protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1), shall be permitted where they do not serve as required exits, and where all required exits consist of outside stairs in accordance with 7.2.2, smokeproof enclosures in accordance with 7.2.3, or horizontal exits in accordance with 7.2.4.

**42.3.2 Protection from Hazards.** (No requirements.) (See also Section 8.7.)

**42.3.3 Interior Finish.**

**42.3.3.1 General.** Interior finish shall be in accordance with Section 10.2.

**42.3.3.2 Interior Wall and Ceiling Finish.** Interior wall and ceiling finish materials complying with Section 10.2 shall be Class A, Class B, or Class C in storage areas and shall be as required by 7.1.4 in exit enclosures.

**42.3.3.3 Interior Floor Finish.**

**42.3.3.3.1** Interior floor finish in exit enclosures shall be not less than Class II.

**42.3.3.3.2** Interior floor finish in areas other than those specified in 42.3.3.3.1 shall not be required to comply with Section 10.2.

**42.3.4 Detection, Alarm, and Communications Systems.**

**42.3.4.1 General.** A fire alarm system shall be required in accordance with Section 9.6 for storage occupancies, except as modified by 42.3.4.1.1, 42.3.4.1.2, and 42.3.4.1.3.

**42.3.4.1.1** Storage occupancies limited to low hazard contents shall not be required to have a fire alarm system.

**42.3.4.1.2** Storage occupancies with ordinary or high hazard contents not exceeding an aggregate floor area of 100,000 ft<sup>2</sup> (9300 m<sup>2</sup>) shall not be required to have a fire alarm system.

**42.3.4.1.3** Storage occupancies protected throughout by an approved automatic sprinkler system in accordance with Section 9.7 shall not be required to have a fire alarm system.

**42.3.4.2 Initiation.** Initiation of the required fire alarm system shall be by any of the following means:

- (1) Manual means in accordance with 9.6.2.1(1)
- (2) Approved automatic fire detection system in accordance with 9.6.2.1(2) throughout the building, plus a minimum of one manual fire alarm box in accordance with 9.6.2.6
- (3) Approved, supervised automatic sprinkler system in accordance with 9.6.2.1(3) throughout the building, plus a minimum of one manual fire alarm box in accordance with 9.6.2.6

**42.3.4.3 Notification.**

**42.3.4.3.1** The required fire alarm system shall meet one of the following criteria:

- (1) It shall provide occupant notification in accordance with 9.6.3.
- (2) It shall sound an audible and visible signal in a constantly attended location for the purposes of initiating emergency action.

**42.3.4.3.2** Positive alarm sequence in accordance with 9.6.3.4 shall be permitted.

**42.3.4.3.3** Existing presignal systems in accordance with 9.6.3.3 shall be permitted.

**42.3.4.3.4** In high hazard storage occupancies, the required fire alarm system shall automatically initiate an occupant evacuation alarm signal in accordance with 9.6.3.

**42.3.5 Extinguishment Requirements.** (No requirements.)

**42.3.6 Corridors.** The provisions of 7.1.3.1 shall not apply.

**42.4 Special Provisions — High-Rise Buildings.** New high-rise storage occupancies shall comply with Section 11.8.

**42.5 Building Services.**

**42.5.1 Utilities.** Utilities shall comply with the provisions of Section 9.1.

**42.5.2 Heating, Ventilating, and Air-Conditioning.** Heating, ventilating, and air-conditioning equipment shall comply with the provisions of Section 9.2.

**42.5.3 Elevators, Escalators, and Conveyors.** Elevators, escalators, and conveyors shall comply with the provisions of Section 9.4.

**42.5.4 Rubbish Chutes, Incinerators, and Laundry Chutes.** Rubbish chutes, incinerators, and laundry chutes shall comply with the provisions of Section 9.5.

**42.6\* Special Provisions for Aircraft Storage Hangars.**

**42.6.1** The requirements of Sections 42.1 through 42.5 shall be met, except as modified by 42.6.1.1 through 42.6.3.

**42.6.1.1** There shall be not less than two means of egress from each aircraft storage area.

**42.6.1.2** Exits from aircraft storage areas shall be provided at intervals not exceeding 150 ft (46 m) on all exterior walls.

**42.6.1.3** Where horizontal exits are provided, doors shall be provided in the horizontal exit fire barrier at intervals not exceeding 100 ft (30 m).

**42.6.1.4** Where dwarf, or "smash," doors are provided in doors that accommodate aircraft, such doors shall be permitted for compliance with 42.6.1.1, 42.6.1.2, and 42.6.1.3.

**42.6.2** Means of egress from mezzanine floors in aircraft storage areas shall be arranged so that the travel distance to the nearest exit from any point on the mezzanine does not exceed 75 ft (23 m), and such means of egress shall lead directly to a properly enclosed stair discharging directly to the exterior, to a suitable cutoff area, or to outside stairs.

**42.6.3** Dead ends shall not exceed 50 ft (15 m) for other than high hazard contents areas and shall not be permitted for high hazard contents areas.

**42.7\* Special Provisions for Grain Handling, Processing, Milling, or Other Bulk Storage Facilities.**

**42.7.1 General.** The requirements of Sections 42.1 through 42.5 shall be met, except as modified by 42.7.2 through 42.7.4.2.

**42.7.2 Number of Means of Egress.** There shall be not less than two means of egress from all working levels of the head house, as modified by 42.7.2.1, 42.7.2.2, and 42.7.2.3.

**42.7.2.1** One of the two means of egress shall be a stair to the level of exit discharge, and, if this means of egress is interior to the structure, it shall be enclosed by a dust-resistant, 1-hour fire resistance-rated enclosure in accordance with 7.1.3.2. Exterior stair means of egress shall be protected from the structure by a 1-

hour fire resistance-rated wall that extends at least 10 ft (3050 mm) beyond the stair.

**42.7.2.2** The second means of egress shall be one of the following:

- (1) Exterior stair or basket ladder-type fire escape that is accessible from all working levels of the structure and provides a passage to the finished ground level
- (2) Exterior stair or basket ladder-type fire escape that is accessible from all working levels of the structure, provides access to adjoining structures, and provides a continuous path to the means of egress described in 42.7.3

**42.7.2.3** Stair enclosures in existing structures shall be permitted to have non-fire-rated dust-resistant enclosures.

**42.7.3 Fire Escapes.** An exterior stair or basket ladder-type fire escape shall provide passage to the finished ground level from the top of the end of an adjoining structure, such as a silo, conveyor, gallery, or gantry.

**42.7.4 Underground Spaces.**

**42.7.4.1 Number of Means of Egress.**

**42.7.4.1.1** Underground spaces shall have not less than two means of egress, one of which shall be permitted to be a means of escape, except as permitted in 42.7.4.1.2.

**42.7.4.1.2** Where the horizontal travel distance to the means of egress is less than 50 ft (15 m) in normally unoccupied spaces, a single means of egress shall be permitted.

**42.7.4.2 Travel Distance to Exits.** Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 42.7.4.2.

**Table 42.7.4.2 Maximum Travel Distance to Means of Escape or Exits**

Level of Protection	Travel Distance	
	ft	m
Protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	400	122
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	200	61
Existing structures	Unlimited	

**42.8 Special Provisions for Parking Structures.**

**42.8.1 General Requirements.**

**42.8.1.1 Application.** The provisions of 42.8.1 through 42.8.5.4 shall apply to parking structures of the closed or open type, above or below grade plane, but shall not apply to assisted mechanical-type or automated-type parking facilities that are not occupied by customers. The requirements of Sections 42.1 through 42.7 shall not apply.

**42.8.1.2 Multiple Occupancies.**

**42.8.1.2.1** Where both parking and repair operations are conducted in the same building, the entire building shall comply with Chapter 40, except as modified by 42.8.1.2.2.

**42.8.1.2.2** Where the parking and repair sections are separated by not less than 1-hour fire-rated construction, the parking and repair sections shall be permitted to be treated separately.

**42.8.1.2.3** In areas where repair operations are conducted, the means of egress shall comply with Chapter 40.

**42.8.1.3 Open Parking Structures.** Open parking structures shall comply with 42.8.1.3.1 through 42.8.1.3.3.

**42.8.1.3.1** Each parking level shall have wall openings open to the atmosphere for an area of not less than 1.4 ft<sup>2</sup> for each linear foot (0.4 m<sup>2</sup> for each linear meter) of its exterior perimeter. [88A: 5.5.1]

**42.8.1.3.2** The openings addressed in 42.8.1.3.1 shall be distributed over 40 percent of the building perimeter or uniformly over two opposing sides. [88A: 5.5.2]

**42.8.1.3.3** Interior wall lines and column lines shall be at least 20 percent open, with openings distributed to provide ventilation. [88A: 5.5.3]

**42.8.1.4 Classification of Occupancy.** Incidental vehicle parking in another occupancy shall not be the basis for overall occupancy classification.

**42.8.1.5 Classification of Hazard of Contents.** Parking structures used only for the storage of vehicles shall be classified as ordinary hazard in accordance with Section 6.2.

**42.8.1.6 Minimum Construction Requirements.** (No requirements.)

**42.8.1.7 Occupant Load.** (No requirements.)

**42.8.2 Means of Egress Requirements.**

**42.8.2.1 General.** Means of egress shall be in accordance with Chapter 7 and 42.8.2.

**42.8.2.2 Means of Egress Components.**

**42.8.2.2.1 Components Permitted.** Components of means of egress shall be limited to the types described in 42.8.2.2.2 through 42.8.2.2.9.

**42.8.2.2.2 Doors.**

**42.8.2.2.2.1** Doors complying with 7.2.1 shall be permitted.

**42.8.2.2.2.2** Special locking arrangements complying with 7.2.1.6 shall be permitted.

**42.8.2.2.2.3** An opening for the passage of automobiles shall be permitted to serve as an exit from a street floor, provided that no door or shutter is installed therein.

**42.8.2.2.3 Stairs.**

**42.8.2.2.3.1** Stairs complying with 7.2.2 shall be permitted, unless otherwise permitted by 42.8.2.2.3.2.

**42.8.2.2.3.2** In open parking structures, stairs complying with 7.2.2.5.1 shall not be required.

**42.8.2.2.3.3** Existing winders complying with 7.2.2.2.4 shall be permitted.

**42.8.2.2.3.4** Paragraph 7.2.2.4.5.3(2) shall not apply to guards for parking garages that are accessible to the general public.

**42.8.2.2.4 Smokeproof Enclosures.** Smokeproof enclosures complying with 7.2.3 shall be permitted.

**42.8.2.2.5 Horizontal Exits.** Horizontal exits complying with 7.2.4 shall be permitted.

**42.8.2.2.6 Ramps.**

**42.8.2.2.6.1** Ramps shall be permitted in accordance with any of the following conditions:

- (1) Ramps complying with 7.2.5 shall be permitted and shall not be subject to normal vehicular traffic where used as an exit.
- (2) In a ramp-type open parking structure with open vehicle ramps not subject to closure, the ramp shall be permitted to serve in lieu of the second means of egress from floors above the level of exit discharge, provided that the ramp discharges directly outside at the street level.
- (3) For parking structures extending only one floor level below the level of exit discharge, a vehicle ramp leading directly to the outside shall be permitted to serve in lieu of the second means of egress, provided that no door or shutter is installed therein.

**42.8.2.2.6.2** Paragraph 7.2.2.4.5.3(2) shall not apply to guards for parking structures that are accessible to the general public.

**42.8.2.2.7 Exit Passageways.** Exit passageways complying with 7.2.6 shall be permitted.

**42.8.2.2.8 Fire Escape Stairs.** Fire escape stairs complying with 7.2.8 shall be permitted for existing parking structures only.

**42.8.2.2.9 Areas of Refuge.**

**42.8.2.2.9.1** Areas of refuge complying with 7.2.12 shall be permitted, as modified by 42.8.2.2.9.2.

**42.8.2.2.9.2** In open-air parking structures, the area of refuge requirements of 7.2.12.1.2(2) shall not apply.

**42.8.2.3 Capacity of Means of Egress.** See also 42.8.2.4 and 42.8.2.5.

**42.8.2.4 Number of Means of Egress.** See also Section 7.4.

**42.8.2.4.1** Not less than two means of egress shall be provided from every floor or section of every parking structure.

**42.8.2.4.2** In new buildings, floors or portions thereof with an occupant load of more than 500 persons shall have the minimum number of separate and remote means of egress specified by 7.4.1.2.

**42.8.2.5 Arrangement of Means of Egress.** See also Section 7.5.

**42.8.2.5.1** A common path of travel shall be permitted for the first 50 ft (15 m) from any point in the parking structure.

**42.8.2.5.2** Dead ends shall not exceed 50 ft (15 m).

**42.8.2.5.3** Where fuel-dispensing devices are located within a parking structure, 42.8.2.5.3.1 and 42.8.2.5.3.2 shall apply.

**42.8.2.5.3.1** Travel away from the fuel-dispensing device in any direction shall lead to an exit with no dead end in which occupants might be trapped by fire.

**42.8.2.5.3.2** Within closed parking structures containing fuel-dispensing devices, exits shall be arranged and located to meet all of the following additional requirements:

- (1) Exits shall lead to the outside of the building on the same level or to stairs, with no upward travel permitted, unless direct outside exits are available from that floor.

(2) Any story below the story at which fuel is being dispensed shall have exits leading directly to the outside via outside stairs or doors at the finished ground level.

**42.8.2.6 Travel Distance to Exits.**

**42.8.2.6.1** Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 42.8.2.6.1, except as otherwise permitted in 42.8.2.6.2.

**Table 42.8.2.6.1 Maximum Travel Distance to Exits**

Level of Protection	Enclosed Parking Structure		Open Parking Structure		Parking Structure Open Not Less than 50% on All Sides	
	ft	m	ft	m	ft	m
	Protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	200	61	400	122	400
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)	150	46	300	91	400	122

**42.8.2.6.2** In open parking structures, travel distance shall comply with one of the following:

- (1) The travel distance to an exit shall not exceed the travel distance specified in Table 42.8.2.6.1.
- (2) The travel distance to a stair that does not meet the provisions for an exit enclosure shall not exceed the travel distance specified in Table 42.8.2.6.1, and travel along the stair shall not be limited.

**42.8.2.7 Discharge from Exits.** Exit discharge shall comply with Section 7.7.

**42.8.2.8 Illumination of Means of Egress.** Means of egress shall be illuminated in accordance with Section 7.8 or with natural lighting that provides the required level of illumination in structures occupied only during daylight hours.

**42.8.2.9 Emergency Lighting.** Parking structures shall be provided with emergency lighting in accordance with Section 7.9, except for structures occupied only during daylight hours and arranged to provide the required level of illumination of all portions of the means of egress by natural means.

**42.8.2.10 Marking of Means of Egress.** Means of egress shall have signs in accordance with Section 7.10.

**42.8.2.11 Special Means of Egress Features. (Reserved)**

**42.8.3 Protection.**

**42.8.3.1 Protection of Vertical Openings.**

**42.8.3.1.1 Vertical Openings in Enclosed Parking Structures.**

**42.8.3.1.1.1** Vertical openings through floors in buildings four or more stories in height shall be enclosed with walls or partitions having a minimum 2-hour fire resistance rating.

**42.8.3.1.1.2** For buildings three or fewer stories in height, the walls or partitions required by 42.8.3.1.1.1 shall have a minimum 1-hour fire resistance rating.

**42.8.3.1.1.3** Ramps in enclosed parking structures shall not be required to be enclosed when one of the following safeguards is provided:

- (1) An approved automatic sprinkler system fully protecting the enclosed parking structure
- (2) An approved, supervised automatic fire detection system installed throughout the enclosed parking structure, and a mechanical ventilation system capable of providing a minimum of 1 ft<sup>3</sup>/min/ft<sup>2</sup> (300 L/min/m<sup>2</sup>) of floor area during hours of normal operation
- (3)\* Where a parking structure consists of sprinklered enclosed parking levels, and sprinklered or non-sprinklered open parking levels

**42.8.3.1.1.4** Sprinkler systems provided in accordance with 42.8.3.1.1.3(1) or (3) shall be supervised in accordance with 9.7.2.

**42.8.3.1.2 Open Parking Structures.** Unprotected vertical openings through floors in open parking structures shall be permitted. [88A:5.4.8]

**42.8.3.2 Protection from Hazards.** (No requirements.)

**42.8.3.3 Interior Finish.**

**42.8.3.3.1 General.** Interior finish shall be in accordance with Section 10.2.

**42.8.3.3.2 Interior Wall and Ceiling Finish.** Interior wall and ceiling finish materials complying with Section 10.2 shall be Class A, Class B, or Class C in parking structures and shall be as required by 7.1.4 in exit enclosures.

**42.8.3.3.3 Interior Floor Finish.**

**42.8.3.3.3.1** Interior floor finish in exit enclosures shall be not less than Class II.

**42.8.3.3.3.2** Interior floor finish in areas other than those specified in 42.8.3.3.3.1 shall not be required to comply with Section 10.2.

**42.8.3.4 Detection, Alarm, and Communications Systems.**

**42.8.3.4.1 General.** A fire alarm system shall be required in accordance with Section 9.6 for parking structures, except as modified by 42.3.4.1.1, 42.3.4.1.2, and 42.3.4.1.3.

**42.8.3.4.1.1** Parking structures not exceeding an aggregate floor area of 100,000 ft<sup>2</sup> (9300 m<sup>2</sup>) shall not be required to have a fire alarm system.

**42.8.3.4.1.2** Open parking structures shall not be required to have a fire alarm system.

**42.8.3.4.1.3** Parking structures protected throughout by an approved automatic sprinkler system in accordance with Section 9.7 shall not be required to have a fire alarm system.

**42.8.3.4.2 Initiation.** Initiation of the required fire alarm system shall be by one of the following means:

- (1) Manual means in accordance with 9.6.2.1(1)
- (2) Approved automatic fire detection system in accordance with 9.6.2.1(2) throughout the building, plus a minimum of one manual fire alarm box in accordance with 9.6.2.6
- (3) Approved, supervised automatic sprinkler system in accordance with 9.6.2.1(3) throughout the building, plus a minimum of one manual fire alarm box in accordance with 9.6.2.6

**42.8.3.4.3 Notification.**

**42.8.3.4.3.1** The required fire alarm system shall sound an audible alarm in a continuously attended location for purposes of initiating emergency action.

**42.8.3.4.3.2** Positive alarm sequence in accordance with 9.6.3.4 shall be permitted.

**42.8.3.4.3.3** Existing presignal systems in accordance with 9.6.3.3 shall be permitted.

**42.8.3.5 Extinguishing Requirements.** (No requirements.)

**42.8.3.6 Corridors.** The provisions of 7.1.3.1 shall not apply.

**42.8.4 Special Provisions — High-Rise Buildings.** (No requirements.)

**42.8.5 Building Services.**

**42.8.5.1 Utilities.** Utilities shall comply with the provisions of Section 9.1.

**42.8.5.2 Heating, Ventilating, and Air-Conditioning.** Heating, ventilating, and air-conditioning equipment shall comply with the provisions of Section 9.2.

**42.8.5.3 Elevators, Escalators, and Conveyors.** Elevators, escalators, and conveyors shall comply with the provisions of Section 9.4.

**42.8.5.4 Rubbish Chutes, Incinerators, and Laundry Chutes.** Rubbish chutes, incinerators, and laundry chutes shall comply with the provisions of Section 9.5.

**42.9 Operating Features.**

**42.9.1 Upholstered Furniture and Mattresses.** The provisions of 10.3.2 shall not apply to upholstered furniture and mattresses.

**42.9.2 Soiled Linen and Trash Receptacles.** The requirements of 10.3.9 for containers for rubbish, waste, or linen with a capacity of 20 gal (75.7 L) or more shall not apply.

## Chapter 43 Building Rehabilitation

**43.1 General.**

**43.1.1 Classification of Rehabilitation Work Categories.** Rehabilitation work on existing buildings shall be classified as one of the following work categories:

- (1) Repair
- (2) Renovation
- (3) Modification
- (4) Reconstruction
- (5) Change of use or occupancy classification
- (6) Addition

**43.1.2 Applicable Requirements.**

**43.1.2.1** Any building undergoing repair, renovation, modification, or reconstruction (*see 43.2.2.1.1 through 43.2.2.1.4*) shall comply with both of the following:

- (1) Requirements of the applicable existing occupancy chapters (*see Chapters 13, 15, 17, 19, 21, 23, 24, 26, 29, 31, 33, 37, 39, 40, and 42*)
- (2) Requirements of the applicable section of this chapter (*see Sections 43.3, 43.4, 43.5, and 43.6*)

**43.1.2.2** Any building undergoing change of use or change of occupancy classification (*see 43.2.2.1.5 and 43.2.2.1.6*) shall comply with the requirements of Section 43.7.

**43.1.2.3** Any building undergoing addition (*see 43.2.2.1.7*) shall comply with the requirements of Section 43.8.

**43.1.2.4** Historic buildings undergoing rehabilitation shall comply with the requirements of Section 43.10.

**43.1.2.5** Nothing in this chapter shall be interpreted as excluding the use of the performance-based option of Chapter 5.

**43.1.3 Multiple Rehabilitation Work Categories.**

**43.1.3.1** Work of more than one rehabilitation work category shall be permitted to be part of a single work project.

**43.1.3.2** Where a project includes one category of rehabilitation work in one building area and another category of rehabilitation work in a separate area of the building, each project area shall comply with the requirements of the respective category of rehabilitation work.

**43.1.3.3** Where a project consisting of modification and reconstruction is performed in the same work area, or in contiguous work areas, the project shall comply with the requirements applicable to reconstruction, unless otherwise specified in 43.1.3.4.

**43.1.3.4** Where the reconstruction work area is less than 10 percent of the modification work area, the two shall be considered as independent work areas, and the respective requirements shall apply.

**43.1.4 Compliance.**

**43.1.4.1** Repairs, renovations, modifications, reconstruction, changes of use or occupancy classification, and additions shall conform to the specific requirements for each category in other sections of this chapter.

**43.1.4.2** This chapter shall not prevent the use of any alternative material, alternative design, or alternative method of construction not specifically prescribed herein, provided that the alternative has been deemed to be equivalent and its use authorized by the authority having jurisdiction in accordance with Section 1.4.

**43.1.4.3** Where compliance with this chapter, or with any provision required by this chapter, is technically infeasible or would impose undue hardship because of structural, construction, or dimensional difficulties, the authority having jurisdiction shall be authorized to accept alternative materials, design features, or operational features.

**43.1.4.4** Elements, components, and systems of existing buildings with features that exceed the requirements of this *Code* for new construction, and not otherwise required as part of previously documented, approved, alternative arrangements, shall not be prevented by this chapter from being modified, provided that such elements, components, and systems remain in compliance with the applicable *Code* provisions for new construction.