**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

Where construction, alteration, or demolition operations are conducted, the provisions of 4.6.10.2 shall apply.

42.1.1.5

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

Diagram

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.)

UpCodes Diagrams

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Example: Fire Station Occ. Groups and Corridor Ratings (NFPA)

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

42.1.5.1

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

42.1.5.2

New storage occupancies, where high-hazard contents as defined in 6.2 2.4 exceed the maximum allowable quantities (MAQ) as permitted in the fire code, shall be classified as high-hazard storage occupancies.

42.1.6 Minimum Construction Requirements. (Reserved.)

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 occupant load factors of Table 7.3.1.2 that are characteristic of the use of the space, or shall be determined as the maximum probable population of the space under consideration, whichever is greater.

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.

42.2.1.3

Newly installed bathtubs, bathtub-shower combinations, and nonemergency showers shall be provided with grab bars in accordance with the provisions of 24.2.8.

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 electrical locking systems complying with 7.2.1.6.1 shall be permitted.

42.2.2.2.3

Sensor-release of electrical locking systems complying with 7.2.1.6.2 shall be permitted.

42.2.2.2.4

Locks in accordance with 7.2.1.6.4 shall be permitted.

42.2.2.2.5

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

They are held open by fusible links.

The fusible links are rated at not less than 165°F (74°C).

The fusible links are located not more than 10 ft (3050 mm) above the floor.

The fusible links are in immediate proximity to the door opening.

The fusible links are not located above a ceiling.

The door is not credited with providing any protection under this Code.

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:

Noncombustible grated stair treads and noncombustible grated landing floors shall be permitted.

Industrial equipment access stairs in accordance with 40.2.5.3 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 7.2.4.3.8, 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 40.2.5.3 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/ASSP A1264.1, Safety Requirements for Workplace Walking/Working Surfaces and Their Access; Workplace Floor, Wall and Roof Openings; Stairs and Guardrail/Handrail 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

The number of means of egress shall comply with 42.2.4.1 through 42.2.4.2. (See also Section 7.4.)

42.2.4.1

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

In low-hazard storage occupancies, a single means of egress shall be permitted from any story or section.

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.

All buildings or structures not complying with 42.2.4.1(1) or 42.2.4.1(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

Diagram

Means of egress, arranged in accordance with Section 7.5, shall not exceed that provided by Table 42.2.5, unless otherwise permitted by the fire code.

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

Dead-End Corridor

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

Common Path of Travel

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.

UpCodes Diagrams

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Dead End Corridors (NFPA)

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, unless otherwise permitted by the fire code.

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 400 122 100 30

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 NA NA NA 150 46

NL: Not limited. NA Not applicable.

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.

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 22.4.6.

42.2.11.2.2

Lockups in existing storage occupancies, other than approved existing lockups, shall comply with the requirements of 23.4.6.

42.2.11.3 Hazardous Materials

Where hazardous materials are present, the provisions of 7.12.2 shall apply.

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:

Vertical openings in accordance with 8.6.9.1 or 8.6.9.2 shall be permitted.

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

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, smoke-proof enclosures in accordance with 7.2.3, or horizontal exits in accordance with 7.2.4.

42.3.2 Protection From Hazards

Where hazardous materials are stored, used, or handled, the provisions of 8.7.3.1 shall apply.

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 shall be Class A, Class B, or Class C in accordance with Section 10.2 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 and in exit access corridors shall be Class I or 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 10.2.7.

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 ft2 (9300 m2) 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:

Manual means in accordance with 9.6.2.1(1)

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

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:

It shall provide occupant notification in accordance with 9.6.3.

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 9.6.3.5 shall be permitted.

42.3.4.3.3

Existing presignal systems in accordance with 9.6.3.4 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. (Reserved)

42.3.6 Corridors

The provisions of 7.1.3.1 shall not apply.

42.4 Special Provisions

42.4.1 Limited-Access or Underground Structures

Limited-access or underground structures shall comply with Section 11.7.

42.4.2 High-Rise Buildings

New high-rise storage occupancies shall comply with Section 11.8.

42.4.3 Alcohol-Based Hand-Rub Dispensers

Alcohol-based hand-rub dispensers in accordance with 8.7.3.3 shall be permitted.

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 Waste Chutes, Incinerators, and Laundry Chutes

Waste 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.

Upcodes Diagrams

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 egress 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 42.7.5.2.

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:

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

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 Means of Egress to Finished Ground Level

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 Extinguishment Requirements. (Reserved)

42.7.5 Underground Spaces

42.7.5.1 Number of Means of Egress

42.7.5.1.1

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 42.7.5.1.2.

42.7.5.1.2

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.

42.7.5.2 Travel Distance to Exits

Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 42.7.5.2.

Table 42.7.5.2 Travel Distance to 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 Opening Requirements for Open Parking Structures

Open parking structures shall comply with 42.8.1.3.1 through 42.8.1.3.5.

42.8.1.3.1

For natural ventilation purposes, the exterior sides of the structure shall have uniformly distributed openings on two or more sides. [88A:5.5.1]

42.8.1.3.2

The area of such openings in exterior walls on a level shall be not less than 20 percent of the total perimeter wall area of each level. [88A:5.5.2]

42.8.1.3.3

The aggregate length (i.e., total of widths) of the openings considered to be providing natural ventilation shall be not less than 40 percent of the perimeter of the level. [88A:5.5.3]

42.8.1.3.4

Where the required openings are uniformly distributed over two opposing sides of the building, 42.8.1.3.3 shall not apply. [88A:5.5.4]

42.8.1.3.5

Interior wall lines and column lines shall be at least 20 percent open, with openings uniformly distributed to provide ventilation. [88A:5.5.5]

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

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 occupant load factors of Table 7.3.1.2 that are characteristic of the use of the space, or shall be determined as the maximum probable population of the space under consideration, whichever is greater.

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 7.2.2.4.6.3(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:

Ramps complying with 7.2.5 shall be permitted and shall not be subject to normal vehicular traffic where used as an exit.

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.

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 7.2.2.4.6.3(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

The number of means of egress shall comply with 42.8.2.4.1 and 42.8.2.4.2. (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:

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.

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 61 400 122 400 122

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:

The travel distance to an exit shall not exceed the travel distance specified in Table 42.8.2.6.1.

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

Unless otherwise provided in 42.8.3.1.1.3, 42.8.3.1.1.4, or 42.8.3.1.1.5, vertical openings through floors in enclosed parking structures four stories or more in height shall be enclosed with walls or partitions having a fire resistance rating of not less than 2 hours. [88A:5.4.3]

42.8.3.1.1.2

Unless otherwise provided in 42.8.3.1.1.3, 42.8.3.1.1.4, or 42.8.3.1.1.5, vertical openings through floors in enclosed parking structures less than four stories in height shall be enclosed with walls or partitions having a fire resistance rating of not less than 1 hour. [88A:5.4.4]

42.8.3.1.1.3

Ramps in enclosed parking structures shall not be required to be enclosed in accordance with 42.8.3.1.1.1 or 42.8.3.1.1.2 where the parking structure is protected throughout by an approved, automatic sprinkler system. [88A:5.4.5]

42.8.3.1.1.4

Ramps in enclosed parking structures shall not be required to be enclosed in accordance with 42.8.3.1.1.1 or 42.8.3.1.1.2 where the parking structure is protected throughout by an approved, supervised, automatic fire detection system and a mechanical ventilation system in accordance with 6.3.1 of NFPA 88A. [88A:5.4.6]

42.8.3.1.1.5

Openings in the floor assembly between an enclosed parking structure and an open parking structure, except exit openings, shall not be required to be enclosed where the enclosed parking structure is protected in accordance with 42.8.3.1.1.3 or 42.8.3.1.1.4. [88A:5.4.7]

42.8.3.1.1.6

Sprinkler systems provided in accordance with 42.8.3.1.1.3 or 42.8.3.1.1.5 shall be supervised in accordance with 9.7.2.

42.8.3.1.2

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 and exit access corridors shall be Class I or 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 ft2 (9300 m2) 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:

Manual means in accordance with 9.6.2.1(1)

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

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 9.6.3.5 shall be permitted.

42.8.3.4.3.3

Existing presignal systems in accordance with 9.6.3.4 shall be permitted.

42.8.3.5 Extinguishing Requirements. (Reserved)

42.8.3.6 Corridors

The provisions of 7.1.3.1 shall not apply.

42.8.4 Special Provisions — High-Rise Buildings

42.8.4.1

The provisions of Section 11.8 shall not apply to new high-rise, open parking structures, except as otherwise required by 42.8.4.2.

42.8.4.2

The provisions of 11.8.3 shall apply to new high-rise, open parking structures.

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 Waste Chutes, Incinerators, and Laundry Chutes

Waste 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 10.3.8 for containers for waste, or linen with a capacity of 20 gal (75.7 L) or more shall not apply.

42.9.3 Inspection of Door Openings

42.9.4 Integrated Fire Protection and Life Safety Systems

42.9.4.1

Integrated fire protection and life safety systems shall be tested in accordance with 9.11.4.1.

42.9.4.2

Integrated fire protection and life safety systems in high-rise buildings shall be tested in accordance with 9.11.4.2.



