# FFPC 6<sup>th</sup> edition Update



# Rule #1

Don't shoot the messenger

# Rule # 2



# The debate is over, this is the Code





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# 1 & 101 Chapter 1

#### 1:1.1.2 & 101:1.1.1 Title.

1:1.1.2 Title. The title of this Code shall be NFPA 1, Fire Code, of the National Fire Protection Association (NFPA).

101:1.1.1 Title. 101, Life Safety Code, shall be known as the Life Safety Code<sup>®</sup>, is cited as such, and shall be referred to herein as "this Code" or "the Code."

1:1.1.2.1 or 101:1.1.1.1 Anytime a reference is made to NFPA 1 or NFPA 101 within this Code, it shall be the Florida specific version of NFPA 1 and NFPA 101.

1:1.3.2.5 The Florida Building Code shall be referred to anytime a reference is made to the building code or to NFPA 220, Standard on Types of Building Construction in this Code or an adopted standard.

#### 101:1.7 Conflicts.

101:1.7.1. When a requirement differs between this Code and a referenced document, the requirement of this Code shall apply.

101:1.7.2 When a conflict between a general requirement and a specific requirement occurs, the specific requirement shall apply.

101:1.1.6 Areas Not Addressed.

101:1.1.7 The Florida Building Code shall be referred to anytime a reference is made to the building code or to NFPA 220, Standard on Types of Building Construction, in this Code or an adopted standard. 1:1.7.4.1 or 101:1.3.1.1 If deemed necessary by an AHJ for a complete, accurate, and thorough firesafety plans review or inspection, the AHJ may request assistance from the building, electrical, plumbing, mechanical or similar specialty inspector; however, nothing in this rule gives authority or jurisdiction to any person other than a firesafety inspector certified under Section 633.216, Florida Statutes, to perform firesafety inspections required by law, rule, ordinance, or code.

101:1.8 Florida Fire Prevention Code and Florida Building Code Interrelation. The Florida Fire Prevention Code contains several provisions and requirements that may interrelate with the Florida It is not the intent of this Building Code. Code that such interrelation result in duplicate reviews and inspections by either the firesafety authority or the building official. The authority having jurisdiction over firesafety is responsible for enforcement of the Florida Fire Prevention Code hereof, and, in the event that a dispute arises regarding the enforcement of the Florida Fire Prevention Code as related to the enforcement of the Florida Building Code, the authority having jurisdiction over firesafety resolve the dispute by the procedure set forth in Chapter 633 553, Florida Statutes, as required Section and Chapter bv 633.104(5), Florida Statutes.

- 1:1.12.8 Permits shall be required in accordance with Table 1.12.8(a) through Table 1.12.8(d).
- The authority having jurisdiction shall have the authority to require permits for the operations in Table 1.12.8(a).
- 1:1.13 Certificates of Fitness {STRIKE ALL}

# 1 & 101 Chapter 2

# 1/101:2.2\* NFPA Publications

# **Check Publications**

Most publications have been update to the edition in effect on the date of the adoption of the 2015 editions of NFPA 1 (Fire Code<sup>®</sup> and NFPA 101 (Life Safety Code<sup>®</sup>)

# 1 & 101 Chapter 3

### 101:3.1 General

The definitions contained in this chapter shall apply to the terms used in this Code. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. Merriam-Webster's Collegiate Dictionary, 11<sup>th</sup> edition, shall be the source for the ordinarily accepted meaning included, common usage the terms shall apply. The following terms, for the purposes **O**T chapter. t his not oth Ø ven er\ mascu ture: words IISEC the INP gen ρι are sha efinition within the Florida Building Code.

101:3.1.1 Where terms are not defined in this chapter, within another chapter, or the Florida Building Code, they shall be defined using their ordinarily accepted meanings within the context in which they are used. Webster's Third New International Dictionary of the English Language, Unabridged, shall be a source for ordinarily accepted meaning.

# Definitions

About 14 changes to definitions

A few of the more significant changes are:

### 101:3.3.21.2.1\* Gross Floor Area 1:3.3.130.1

The floor area within the inside perimeter of the outside walls of the building under consideration with no deductions for hallways, stairs, closets, thickness of interior walls, columns, elevator and building services shafts, or other features, <u>but excluding floor openings associated with atriums and communicating spaces</u>.

A.3.3.21.2.1 Gross Floor Area Where t he term floor area is used, it should be understood to be gross floor area, unless otherwise specified.

#### Commentary

The definition of the term *gross floor area* was revised for the 2015 edition of the *Code* to clarify that large vertical openings, such as atria and other convenience openings (see 8.6.6, 8.6.7, and 8.6.9), where occupants cannot walk because there is no floor, are permitted to be excluded from the gross area calculation.

It is not the intent to permit the space occupied by stairwells, elevator shafts, or HVAC shafts to be omitted from the gross area calculation.

### 101:3.3.21.2.2 Net Floor Area **1:3.3.130.2**

The floor area within the inside perimeter of the outside walls, or the outside walls and fire walls of a building, or outside and/or inside walls that bound an occupancy or incidental use area requiring the occupant load to be calculated using net floor area under consideration with deductions for hallways, stairs, closets, thickness of interior walls, columns, or other features.

# 101:3.3.31.1\* Fire Barrier

A continuous membrane or a membrane with discontinuities created by protected openings with a specified fire protection rating, where such membrane is designed and constructed with a specified fire resistance rating to limit the spread of fire, that also restricts the movement of smoke.

**A.3.3.31.1 Fire Barrier.** A fire barrier, such as a wall or floor assembly, might be aligned vertically or horizontally. Although the continuity of a fire barrier will often limit the transfer of smoke, it should not be confused with either a smoke barrier or a smoke partition.

# 101:3.3.49\* Consumer Fireworks

Formerly known as Class C, Common Fireworks.

Delete definition: NFPA 1124 was withdrawn

Retained as a Florida Specific Amendment in FFPC 1 Chapter 65.

# 101:3.3.55 Deep-Fat Frying

A cooking method that involves fully immersing food in hot oil.

Commentary: The definition of the term deep-fat frying is new to the 2015 edition of the Code. The term is used in describing a prohibited use within kitchens that are open to corridors in health care occupancies. See 18.3.2.5.3 and 19.3.2.5.3.

## 101:3.3.62.1\* Emergency Stair Travel Device



Illustrates an emergency stair travel device in an exit stair enclosure at NFPA headquarters. Device designed and constructed to facilitate travel over interior floor surfaces, interior and exterior stairs, and exterior accessible pathways.

A.3.3.61.1 An emergency stair travel device should be designed, constructed, and operated in accordance with ANSI/RESNA ED-1, Emergency Stair Travel Devices Used by Individuals with Disabilities.

The device typically requires the assistance of a trained operator.

### 101:3.3.83\* Exit

That portion of a means of egress that is separated from all other spaces of the building or structure by construction, <u>location</u>, or equipment as required to provide a protected way of travel to the exit discharge.

Commentary: The definition of the term exit was revised for the 2015 edition of the Code to add the word location so as to clarify that the requisite protected way of travel might be accomplished relative to where the exit is located.

### 101:3.3.96 Fire Code

The fire code enforced by the jurisdiction or agency enforcing this Code The Florida Fire Prevention Code as defined in F.S. 633.202.

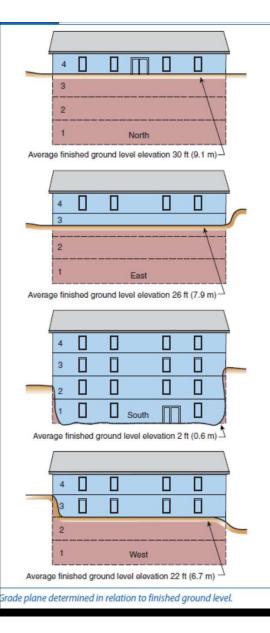
### 101:3.3.109 Fire-Retardant – Treated Wood

A wood product impregnated with chemical by a pressure process or other means during manufacture, treated to exhibit reduced surface-burning characteristics and resist propagation of fire

### 101:3.3.126\* Grade Plane

A reference plane upon which vertical measurements of a building are based representing the average of the finished ground level adjoining the building at all exterior walls.

A.3.3.126 Grade Plane. See 4.6.15 for provisions for establishing the grade plane. Vertical measurements might be used in determining the number of stories or building height.



#### 101:4.6.15 Grade Plane.

The grade plane shall be established bv calculating the average of the finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes down from the exterior walls, the grade plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 ft (1.8 m) from the building, between the building and a point 6 ft (1.8 m) from the building.

101:3.3.78\* Evacuation. The withdrawal of occupants from a building.

101:3.3.135.1 Fire Exit Hardware. A type of panic hardware that additionally provides fire protection where used as part of a fire door assembly.

101:3.3.158 Joint. A linear opening in or between adjacent assemblies that is designed to allow independent movement of the building.

101:3.3.230 Relocation. The movement of occupants to a safer area within the same building.

101:3.3.265.1 Aisle Stair. A stair within a seating area of an assembly occupancy that directly serves rows of seats to the side of the stair, including transition stairs that connect to an aisle or a landing. 1:3.3.278 Consumer Fireworks. See 3.3.282 1:3.3.279 Consumer Fireworks Retail Sales Area. The portion of a consumer fireworks retail sales facility or store,...

Consumer Fireworks retained in FFPC 1 Chapter 65 as a Florida Specific amendement

# 1 & 101 Chapter 4

# Code Conflicts within 101

4.4.2.3 Where a requirement of this Code conflicts with another requirement of this Code, the following shall apply:

(1)\* Where a specific requirement contained in Chapters 11 through 43 conflicts with a general requirement contained in Chapters 1 through 4 and Chapters 6 through 10, the requirement of Chapters 11 through 43 shall govern.

#### Code Conflicts within 101 continued

(2)\* Where a requirement contained in Chapters 1 through 4 and Chapters 6 through 10 conflicts with another requirement contained in Chapters 1 through 4 and Chapters 6 through 10, the more specific requirement shall govern.

(3)\* Where a requirement contained in Chapters 11 through 43 conflicts with another requirement contained in Chapters 11 through 43, the more specific requirement shall govern. 1:4.5.9.2 Where the term limited-combustible is used in this Code, it shall also include the term noncombustible. [5000: 7.1.4.1.2]

# 1 & 101: Chapter 5 Performance-Based Option

No changes

# 1 & 101 Chapter 6

## 1/101:6.1.14 Multiple Occupancies

6.1.14.1.3\* Where incidental to another occupancy... (3) Portions of buildings used as accessory offices or for customary non-hazardous uses necessary for transacting the principal business in storage and industrial occupancies need not be separated from the principal use. 1/101:6.1.14 Multiple Occupancies continued

(4) Industrial occupancies producing, using, or storing low hazard products in accordance with Subdivision 6.2.2 need not be separated by fire-resistant construction from the occupancies to which they are accessory. 1/101:6.1.14.1.3.1 Incidental use areas shall be separated as required by Table 508.2.5 of the Florida Building Code where Table 508.2.5 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated by construction capable of resisting the passage of smoke. 1/101:6.1.14.1.4 The following accessory occupancies shall not be required to be separated from the primary occupancy as required in 6.1.14.4:

(1) A kitchen in an assembly occupancy does not constitute a mixed occupancy.

(2) Accessory uses in industrial and storage occupancies as otherwise provided in 6.1.14.1.3(1)

(3) Rooms or spaces used for customary storage of non-hazardous materials in assembly, business, educational, industrial, mercantile, hotel and dormitory, and apartment occupancies which in **aggregate do not exceed 10%** of the major floor area in which they are located. Protection from hazards shall be as otherwise provided in the specific occupancy chapter.

1/101:Table 6.1.14.4.1 Footnote:

\*Where the building is two stories or less in height and the total building square footage is less than 10,000 square feet, no separation is required. 101:6.1.14.4.5\* Each separated portion of the building shall comply with the requirements for the occupancy therein.

A.6.1.14.4.5 Where the Code text states that the provision has applicability to the building, rather than just to the occupancy, the provision applies to the entire building, regardless of whether the separated occupancies form of protection is used. For example, the provision of 18.3.5.1 requires that the entire building housing a health care occupancy be sprinklered. Contrast that with the requirement of 20.3.4.1, which requires an ambulatory health care facility, and not the entire building, to be provided with a fire alarm system.

#### 101:6.1.14.4.7 Separated Occupancies

101:6.1.14.4.7 One-story or two-story structures that are less than 10,000 square feet, whose occupancy is defined in the Florida Building Code and the Florida Fire Prevention Code as business or mercantile, the authority having jurisdiction shall enforce the wall firerating provisions for occupancy separation as defined in the Florida Building Code.

# 101 Chapter 7

## 7.1.3.2 Exits.

#### 7.1.3.2.1

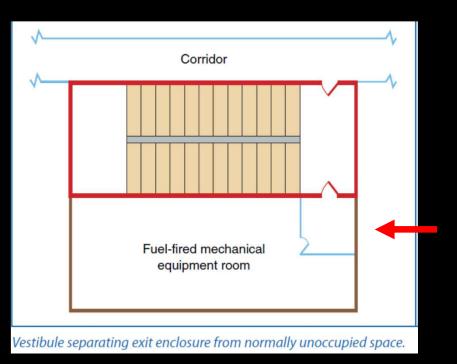
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(9)\* Openings in exit enclosures shall be limited to door assemblies from normally occupied spaces and corridors and door assemblies for egress from the enclosure, unless one of the following conditions exists:

#### 101:7.1.3.2.1 (9)\*

(a) Vestibules that separate normally unoccupied spaces from an exit enclosure shall be permitted, provided the vestibule is separated from adjacent spaces by corridor walls and related opening protectives as required for the occupancy involved but not less than a smoke partition in accordance with Section 8.4.

# Commentary



The provision of 7.1.3.2.1(9)(a)is new to the 2015 edition of the Code. It recognizes the practiced, often but heretofore noncompliant, arrangement whereby а vestibule is created to prevent a normally unoccupied space from opening directly onto an exit enclosure.

#### 101:7.1.3.2.1 (9)\*

(b) In buildings of Type I or Type II construction, as defined in NFPA 220, Standard on Types of Building Construction, (see 8.2.1.2) fire protection—rated door assemblies to normally unoccupied building service equipment support areas as addressed in Section 7.13 shall be permitted, provided the space is separated from the exit enclosure by fire barriers as required by 7.1.3.2.1(3).

#### Commentary

The provision of 7.1.3.2.1(9)(b) is new to the 2015 edition of the Code. It treats a normally unoccupied building service equipment support area (see Section 7.13) as a normally occupied space, but it requires that the separation between such space and the exit enclosure be based on the provisions applicable to an exit enclosure that connects four or more stories. In other words, a minimum 2-hour fire resistance–rated separation is required unless one of the exemptions to 7.1.3.2(3) is met, in which case a minimum 1-hour fire resistance–rated separation is required.

#### 101:7.1.6.3.2 Vehicle Ramps

7.1.6.3.2 Vehicle ramps in parking structures, as permitted in 42.8.2.2.6, and not on an accessible means of egress or other accessible element shall be exempt from the provisions of 7.1.6.3.1.

Paragraphs 42.8.2.2.6.1(2) and (3) permit the use of vehicle ramps as part of the means of egress. Properly arranged ramps can facilitate safe egress to a degree well in excess of that required for the given number of occupants.

#### 101:7.1.6.4\* Slip Resistance

Walking surfaces in the means of egress shall be slip resistant under foreseeable conditions.

Two sentences combined so as to delete requirement for uniform slip resistance along general egress path, but see 7.2.2.3.3.3 for stair tread and landing surface traction requirement

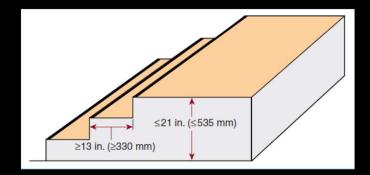
#### 101:7.1.7 Changes in Level in Means of Egress

7.1.7.2\* Changes in level in means of egress not in excess of 21 in. (535 mm) shall be achieved either by a ramp complying with the requirements of 7.2.5 or by a stair complying with the requirements of 7.2.2.

101:7.1.7.2.1 Where a ramp is used to meet the requirements of 7.1.7.2, the presence and location of ramped portions of walkways shall be readily apparent.

101:7.1.7.2.2 Where a stair is used to meet the requirements of 7.1.7.2, the tread depth of such stair shall be not less than 13 in. (330 mm).

Commentary: Prior to 1988, the Code prohibited stairs where changes of elevation were less than 21 in. (535 mm), because steps spanning such small elevation differences often go unnoticed and create conditions conducive to missteps. The minimum 13 in. (330 mm) tread depth and the requirement to make the presence and location of each step readily apparent were established to help reduce missteps.





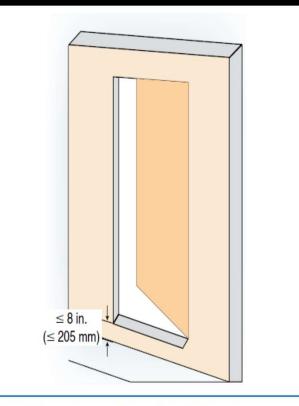
Patterned carpet obscures any indication of tread edge location.

#### 101:7.1.8\* Guards

Guards in accordance with 7.2.2.4 shall be provided at the open sides of means of egress that exceed 30 in. (760 mm) above the floor or the finished ground level below <u>except where guards are specifically exempted</u> by provisions of Chapters 11 through 43. 101:7.2.1.3 Floor Level.

101:7.2.1.3.3 Thresholds at door openings shall not exceed ½ in. (13 mm) in height.

<u>101:7.2.1.3.3.1 Thresholds at exterior sliding doorways</u> serving dwelling units shall not exceed <sup>3</sup>/<sub>4</sub> inch (19.1mm) in height. 101:7.2.1.3.7 Where doors serve spaces that are not normally occupied, the floor level shall be permitted to be lower than that of the door opening but shall be not more than 8 in. (205 mm) lower.



Elevation difference between floor and door leaf opening to a normally unoccupied room.

Commentary: The provision of 7.2.1.3.7 is new for the 2015 edition of the Code. It permits a maximum 8 in. (205 mm) elevation difference between the door opening and the floor, where the door serves a space that is normally unoccupied. The exemption can be used for new construction or existing situations. The elevation difference between the door opening and the floor can occur at one or both sides of the door opening.

101:7.2.1.14 Horizontal-Sliding Door Assemblies. Horizontal sliding door assemblies shall be permitted in means of egress, provided that all of the following criteria are met: ...

(6) The door, if power operated, shall be capable of being operated manually in the event of power failure.

101:7.2.1.4.1\* Swinging-Type Door Assembly Requirement

101:7.2.1.4.1(3)(b) On or adjacent to the grille or door opening, there shall be a readily visible, durable sign in letters not less than 1 in. (25 mm) high on a contrasting background that reads as follows:

THIS DOOR TO REMAIN OPEN WHEN THE BUILDING SPACE IS OCCUPIED.

#### 101:7.2.1.4.3\* Door Leaf Encroachment

101:7.2.1.4.3.2 When fully open, any door leaf in a means of egress shall not project more than 7 in. (180 mm) into the required width of an aisle, a corridor, a passageway, or a landing, <u>unless the door leaf is equipped with an approved self-closing device and is not required by the provisions of 7.2.1.4.2 to swing in the direction of egress travel.</u>

### 101:7.2.1.6.1 Delayed-Egress Locking Systems

(4)\* A readily visible, durable sign in letters not less than 1 in. (25 mm) high and not less than 1/8 in. (3.2 mm) in stroke width on a contrasting background shall be located on the door leaf adjacent to the release device in the direction of egress, and shall read as follows:

(a) PUSH UNTIL ALARM SOUNDS, DOOR CAN BE OPENED IN 15 SECONDS, for doors that swing in the direction of egress travel
(b) PULL UNTIL ALARM SOUNDS, DOOR CAN BE OPENED IN 15 SECONDS, for doors that swing against the direction of egress travel 101:7.2.1.7.2 Only approved panic hardware shall be used on door assemblies that are not fire-rated door assemblies. Only approved fire exit hardware shall be used on fire-rated door assemblies. New panic hardware and new fire exit hardware shall comply with ANSI/UL 305, Standard for Safety Panic Hardware, and ANSI/BHMAA156.3, Exit Devices.

Commentary: It is not the intent of 7.2.1.7.2 to require the use of panic hardware or fire exit hardware. Only approved hardware is to be used, which means such hardware must be acceptable to the AHJ

<u>101:7.2.1.14</u> Special-Purpose Horizontally Sliding <u>Accordion or Folding Door Assemblies</u> Horizontal <u>Sliding Door Assemblies</u>. Horizontal Sliding Door <u>Assemblies</u> <u>Special-purpose horizontally sliding</u> <u>accordion or folding door assemblies</u> shall be permitted in means of egress, provided that all of the following criteria are met:

Standardization of term special purpose horizontally sliding accordion or folding door assemblies made throughout Code

### 101:7.2.1.15 Inspection of Door Openings

**101:7.2.1.15.6** As a minimum, the following items shall be verified:

(12) Where required by 7.2.2.5.5.7, door hardware marking is present and intact.

(13) Emergency lighting on access-controlled egress doors and doors equipped with delayed-egress locking systems is present and functioning in accordance with Section 7.9. Commentary: The occupancies requiring inspection of door openings are as follows:

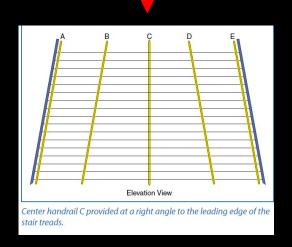
- 1. Assembly occupancies (12/13.7.1.3)
- 2. Educational occupancies (14/15.7.3.3)
- 3. Day-care occupancies (16/17.7.3.4)
- 4. Residential board and care occupancies (32/33.7.7)

101:7.2.2.3 Spiral Stairs.

7.2.2.3.3 Where the occupant load served does not exceed three <u>five</u>, spiral stairs shall be permitted, provided that all of the following criteria are met:
(1) The clear width of the stairs shall be not less than...

101:7.2.2.3.3.3\* Stair treads and landings within the same stairway shall have consistent surface traction.

101:7.2.2.4.4 Direction. For standard stairs, at least one handrail shall be installed at a right angle to the leading edge of the stair treads.



101:7.2.2.5.3.2 Enclosed, usable space shall be permitted under stairs, provided that both all of the following criteria are met:

(1) The space shall be separated from the stair enclosure by the same fire resistance as the exit enclosure.

(2) Entrance to the enclosed, usable space shall not be from within the stair enclosure. (See also 7.1.3.2.3.)

(3) The space is not used for the storage of combustible or flammable liquids, or otherwise hazardous materials.

### 7.2.2.5.4\* Stairway Identification

. . .

7.2.2.5.4.1 New enclosed stairs serving three or more stories and existing enclosed stairs, other than those addressed in 7.2.2.5.4.1(P), serving five or more stories shall comply with 7.2.2.5.4.1(A) through 7.2.2.5.4.1(M).

(P) Previously approved, existing signage shall not be required to comply with 7.2.2.5.4.1(L) through (O).



### 101:7.2.2.5.5(B)(2)(a) Exit Path Markings

(2) Where panic hardware is installed, both of the following criteria shall be met:

(a) The marking stripe shall have a minimum horizontal width of 1 in. (25 mm) and be applied to the entire length of the actuating bar or touch pad.

### 101:7.2.4 Horizontal Exits

101:7.2.4.3 Fire Barriers

7.2.4.3.2\* The separation required by 7.2.4.3.1(2) shall not be required to extend below the lowest level providing discharge to the exterior where both of the following are met:

(1) Stories below the lowest level providing discharge to the exterior do not have a horizontal exit.

(2) Stories below the lowest level providing discharge to the exterior are separated from the level above by a minimum of 2-hour fire resistance-rated construction.

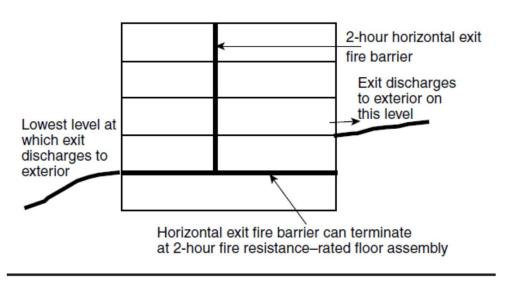
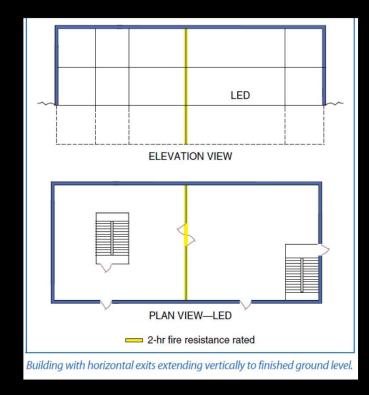


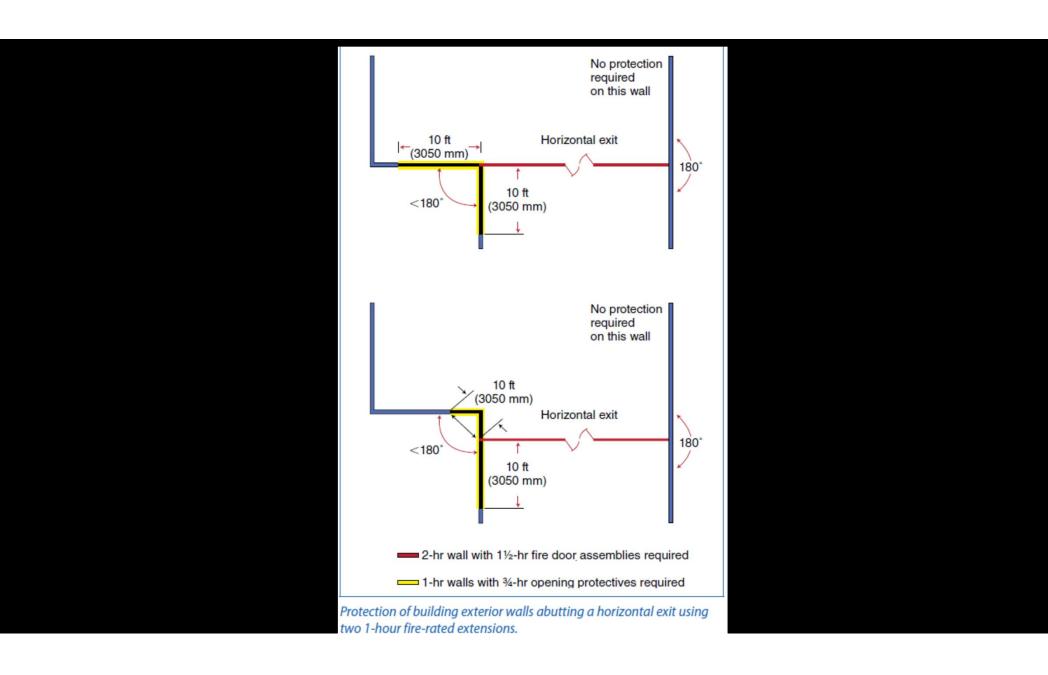
Figure A.7.2.4.3.2 Example of Horizontal Exit Termination.



101:7.2.4.3.4 Where fire barriers serving horizontal exits, other than existing horizontal exits, terminate at outside walls, and the outside walls are at an angle of less than 180 degrees for a distance of 10 ft (3050 mm) on each side of the horizontal exit, the outside walls shall be protected by <u>one of the following methods</u>:

(1) The outside walls shall have a minimum 1-hour fire resistance rating, with opening protectives having a minimum <sup>3</sup>/<sub>4</sub>-hour fire protection rating, for a distance of 10 ft (3050 mm) on each side of the horizontal exit.
(2) One of the outside walls shall have a 2-hour fire

(2) One of the outside walls shall have a 2-hour fire resistance rating with opening protectives having a minimum 1 ½-hour fire protection rating, for a distance of 10 ft (3050 mm) from intersection with the horizontal exit.



### 101:7.2.5.2 Vehicle Ramps

Vehicle ramps in parking structures, as permitted in 42.8.2.2.6, and not an accessible means of egress or other accessible element, shall be exempt from the provisions of 7.2.5.

7.2.5.1 General. Every ramp used as a component in a means of egress shall conform to the general requirements of Section 7.1 and to the special requirements of 7.2.5.

### Fire Escape Stairs

**101:7.2.8.1.1** Where permitted in Chapters 11 through 43, fire escape stairs shall comply with the provisions of 7.2.8, unless they are approved existing fire escape stairs.

101:7.2.8.4.2 Slip Resistance. Stair treads and landings of new or replacement fire escape stairs shall have slipresistant surfaces. Fire escape stairs are acceptable as an egress component in existing buildings only in the following occupancies:

- 1. Existing assembly occupancies (13.2.2.9)
- 2. Existing detention and correctional occupancies (23.2.2.8)
- 3. Existing hotels and dormitories (29.2.2.9)
- 4. Existing apartment buildings (31.2.2.9)
- 5. Existing mercantile occupancies (37.2.2.9)
- 6. Existing business occupancies (39.2.2.9)
- 7. Existing industrial occupancies (40.2.2.9)
- 8. Existing storage occupancies (42.2.2.8)

### AREA OF REFUGE

101:7.2.12.3.5.2 Signs required by 7.2.12.3.5 shall be illuminated as required for exit signs where exit sign illumination is required special signs in accordance with 7.10.8.1.

### 101: Table 7.3.1.2 Occupant Load Factors

<u>Concentrated Business Use</u> <u>50 ft<sup>2</sup>/person / 4.6 m<sup>2</sup>/person</u>

Ambulatory health care 100150 ft<sup>2</sup>/person / 9.313.9 m<sup>2</sup>/person

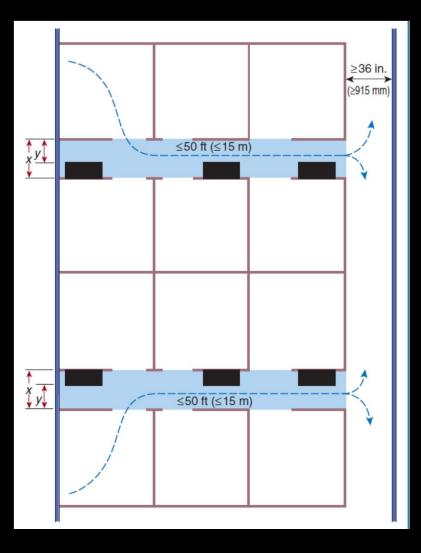
# 101:7.3.1.6 Egress Capacity from Balconies and Mezzanines

Where any required egress capacity from a balcony or mezzanine passes through the room below, that required capacity shall be added to the required egress capacity of the room in which it is located.

7.3.4.1.1\* The width of exit access that is formed by furniture and movable partitions serving not more than six people and having a length not exceeding 50 ft (15 m) shall meet both of the following criteria:

(1) The width shall be not less than 18 in. (455 mm), at and below a height of 38 in. (965 mm), and not less than 28 in. (710 mm) above a height of 38 in. (965 mm).

(2) A width of not less than 36 in. (915 mm) for new exit access, and not less than 28 in. (710 mm) for existing exit access, shall be capable of being provided without moving permanent walls.



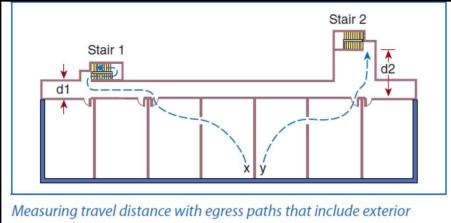
The minimum 28" width (shown as dimension x) is a relaxation of the 36 in. minimum.

This width can be further reduced to 18" (shown as dimension y) at floor level up to a height of 38" above the floor.

Both width reduction options are conditional on a maximum of six people traveling not more than 50' along a resultant mini-aisle to reach a minimum 36 in. wide exit access component. **101:7.5.2.1\*** Access to an exit shall not be through kitchens, storerooms other than as provided in Chapters 36 and 37, restrooms, workrooms, closets, bedrooms or similar spaces, or other rooms or spaces subject to locking, unless passage through such rooms or spaces is permitted for the occupancy by Chapter 18, 19, 22, or 23.

101:7.5.2.3 Hurricane Protection Devices. The temporary installation or closure of storm shutters, panels, and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings in residential occupancies during the threat of a storm. Such devices shall not be required to comply with the operational constraints of 7.2.1.5. While such protection is provided, at least one means escape from each occupied unit shall be within the first of floor of the unit and shall not be located within a garage. Occupants in any part of the unit shall be able to access the means of escape without passing through a lockable door not under their control.

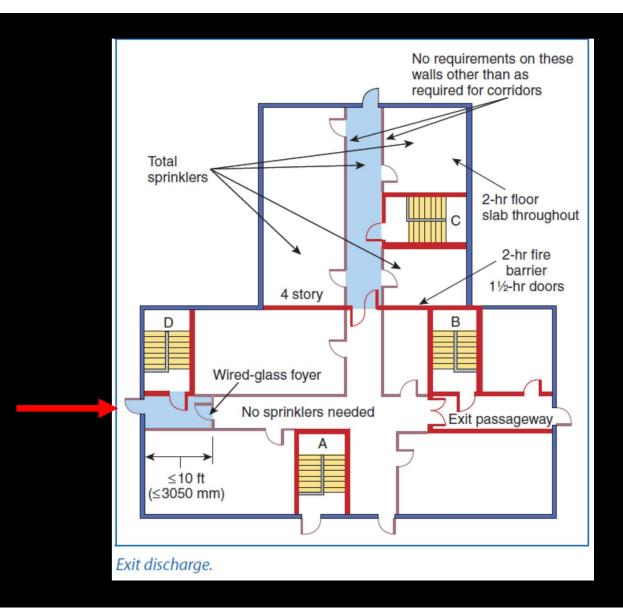
101:7.6.2 Where outside stairs that are not separated from the building are permitted as required exits, the travel distance shall be measured from the most remote point subject to occupancy to the leading nosing of the stair landing at the floor level under consideration.



stairs.

# 101:7.7.2 Exit Discharge Through Interior Building Areas.

101:7.7.2(4)(b)ii. The foyer shall be separated from the remainder of the level of discharge by construction providing protection not less than the equivalent of wired glass in steel frames or 45 minutes fire-resistive discharge fire barriers with a minimum 1-hour fire resistance rating, and existing installations of wired glass in steel frames shall be permitted to be continued in use.



101:7.7.3.3 Stairs and ramps shall be arranged so as to make clear the direction of egress travel from the exit discharge to a public way.

101:7.7.3.3\* Stairs and ramps that continue more than one-half story beyond the level of discharge shall be provided with an approved means to prevent or dissuade occupants from traveling past the level of discharge during emergency building evacuation. 101:7.8.1.2.2\* Unless prohibited by Chapters 11 through 43, automatic motion sensor-type lighting control devices switches shall be permitted to temporarily turn off the illumination within the means of egress, provided that the switch controllers comply each lighting control device complies with all of the following:

(1) <u>In new installations</u>, the switch controller lighting control device is listed.

(2) The switch controllers are lighting control device is equipped for failsafe operation and to automatically energize the controlled lights upon loss of normal power and is evaluated for this purpose.

(3) Illumination timers are provided and are set for a minimum 15-minute duration.

(4) The motion sensor lighting control device is activated by any occupant movement in the area served by the lighting units.

(5) <u>In new installations, the lighting control device is</u> The motion sensor is activated by activation of the building fire alarm system, if provided.

(6) The lighting control device does not turn off any lights relied upon for activation of photo-luminescent exit signs or path markers.

(7) The lighting control device does not turn off any battery-equipped emergency luminaires, unit equipment, or exit signs.

101:7.14 <u>Occupant Evacuation</u> Elevators <del>for</del> Occupant-Controlled Evacuation Prior to Phase I Emergency Recall Operations.

**101:7.14.1.3\*** The occupant evacuation elevators shall be in accordance with the occupant evacuation operation (OEO) requirements of ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators,* and the building emergency action plan required by 7.14.3.1.

## 101: Chapter 8 Features of Fire Protection

#### 101:8.2.1 Construction.

101:8.2.1.1 Buildings or structures occupied or used in accordance with the individual occupancy chapters, Chapters 11 through 43, shall meet the minimum construction requirements of those chapters.

101:8.2.1.2 <u>The Florida Building Code</u> NFPA 220, <u>Standard on Types of Building Construction</u>, shall be used to determine the requirements for the construction classification. 101:8.2.2.2 Fire compartments shall be formed with fire barriers that comply with 8.3.1.2 Section 8.3.

101:8.2.2.3 Smoke compartments shall be formed with smoke barriers that comply with Section 8.5.

**101:8.2.2.4** Where door assemblies are required elsewhere in this *Code* to be smoke leakage—rated in accordance with 8.2.2.4, door assemblies shall comply with all of the following:

•••

(3) Door assemblies shall be installed <u>and maintained</u> in accordance with NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*.

#### 101:8.3.2 Walls.

101:8.3.2.4 Each new Fire Wall, Fire Barrier, Fire Partition, Smoke Barrier, Smoke Partition, or any other new wall required to have protected openings shall be permanently identified with signs or stenciling above any decorative ceiling and in concealed spaces with the wording, "FIRE AND SMOKE BARRIER – PROTECT ALL OPENINGS," or similar language. Such signs or stenciling shall be in 4 inch high letters, ½ inch stroke, and not more than 15 feet on-center

### 101:8.3.3.2.3\* (1:12.7.3.2.3.2) Labels

<u>101:8.3.3.2.3.1</u> Labels on fire door assemblies shall be maintained in a legible condition.

101:8.3.3.2.3.2 In existing installations, steel door frames without a label shall be permitted where approved by the authority having jurisdiction.

101:8.3.3.13 Fire-rated door assemblies shall be inspected and tested in accordance with NFPA 80, *Standard for Fire Doors and Other Opening Protectives*.

### 101:Table 8.3.4.2 (1:12.7.4.2) Minimum Fire Ratings for Opening Protectives

101:8.3.5.6.3 Where walls or partitions are required to have a minimum 1-hour fire resistance rating, recessed fixtures shall be installed in the wall or partition in such a manner that the required fire resistance is not reduced, unless one of the following is met:

(4) <u>Membrane penetrations by electrical boxes of any</u> size or type, which have been listed as part of a wall opening protective material system for use in fire resistance-rated assemblies and are installed in accordance with the instructions included in the listing, shall be permitted. 101:8.5.2.2 Smoke barriers <u>required by this Code</u> shall be continuous through all concealed spaces, such as those found above a ceiling, including interstitial spaces. 101:8.5.4.1\* (1:12.9.4.1) Doors in smoke barriers shall close the opening, leaving only the minimum clearance necessary for proper operation, and shall be without louvers or grilles. For other than previously approved existing doors, the clearance under the bottom of the doors shall be a maximum of  $\frac{3}{4}$  in. (19 mm).

### 101:8.5.5.3 (1:12.9.5.3) Smoke Damper Exemptions

Smoke dampers shall not be required under any of the following conditions:

(2) Where ducts or air-transfer openings are part of an engineered smoke control system <u>and the smoke</u> <u>damper will interfere with the operation of a smoke</u> <u>control system</u>

101:8.5.5.4.1 (1:12.9.5.4.1) Air-conditioning, heating, ventilating ductwork, and related equipment, including smoke dampers and combination fire and smoke dampers, shall be installed in accordance with NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, NFPA 90B, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems, NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives, or NFPA 80, Standard for Fire Doors and Other Opening Protectives, as applicable.

# 101:8.5.5.5 (1:12.9.5.5) Access and Identification

101:8.5.5.5.1 Access to the dampers shall be provided for inspection, testing, and maintenance. The access openings shall not reduce the fire resistance rating of the fire barrier assembly.

101:8.5.5.2 Smoke and combination fire and smoke dampers in new construction shall be provided with an approved means of access, as follows:

(1) The means of access shall be large enough to allow inspection and maintenance of the damper and its operating parts.

(2) The access shall not affect the integrity of fire resistance-rated assemblies or smoke barrier continuity.

(3) The access openings shall not reduce the fire resistance rating of the assembly.

(4) Access doors in ducts shall be tight-fitting and suitable for the required duct construction.

(5) Access and maintenance shall comply with the requirements of the mechanical code.

101:8.5.5.5.3 Identification. Access points to fire and smoke dampers in new construction shall be permanently identified by one of the following:

(1) A label having letters not less than ½ in. (13 mm) in height and reading as one of the following:

(a) FIRE/SMOKE DAMPER

(b) SMOKE DAMPER

(c) FIRE DAMPER

(2) Symbols as approved by the authority having jurisdiction

101:8.5.6.5 Where the penetrating item uses a sleeve to penetrate the smoke barrier, the sleeve shall be securely set in the smoke barrier, and the space between the item and the sleeve shall be filled with a listed system or a material capable of restricting the transfer of smoke.

101:8.5.7.5 (1:12.9.7.5) Testing of the joint system in a smoke barrier that also serves as fire barrier shall be representative of the actual installation suitable for the required engineering demand without compromising the fire resistance rating of the assembly or the structural integrity of the assembly.

As in the case of fire barriers, it is important to maintain the integrity of smoke barriers over the life of a building. Exhibit 8.10 illustrates some of the key items regarding smoke barrier penetrations discussed in 8.5.3 through 8.5.7. 101:8.6.4 Shafts. Shafts that do not extend from to the bottom to or the top of the building or structure shall comply with 8.6.4.1, 8.6.4.2, or 8.6.4.3, as modified by 8.6.4.4 or 8.6.4.5.

101:8.6.4.1 Shafts that do not extend to the top of the building or structure shall be enclosed at the highest level of the shaft with construction in accordance with 8.6.5.

101:8.6.4.2 Shafts that do not extend to the bottom of the building or structure shall be enclosed at the lowest level of the shaft with construction in accordance with 8.6.5.

101:8.6.4.3 Shafts that do not extend to the bottom and to the top of the building or structure shall be enclosed at the lowest and highest level of the shaft with construction in accordance with 8.6.5. **101:8.6.4.4** In lieu of any enclosure required at lowest or highest level of a shaft by 8.6.4.1 through 8.6.4.3, shafts shall be permitted to terminate in a room or space having a use related to the purpose of the shaft, provided that the room or space is separated from the remainder of the building by construction having a fire resistance rating and opening protectives in accordance with 8.6.5 and 8.3.4.

**101:8.6.4.5** Any enclosure required at the lowest or highest level of a shaft by 8.6.4.1 through 8.6.4.3 shall be permitted to be protected by approved fire dampers installed in accordance with their listing.

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#### 101:8.6.7\* Atriums

Unless prohibited by Chapters 11 through 43, an atrium shall be permitted, provided that <u>all of</u> the following conditions are met:

(6)\* For In other than existing, previously approved <u>smoke control systems</u> atriums, where an engineered smoke control system is installed to meet the requirements of 8.6.7, the system is independently activated by each of the following:

(6)(a) Upon actuation of the required automatic sprinkler system within the atrium or areas open to the atrium

(b) Manual controls that are readily accessible to the fire department

**101:8.6.9.2** Where permitted by Chapters 11 through 43, unenclosed vertical openings created by convenience stairways shall comply with all of the following be permitted as follows:

• • •

(5) For new construction, such openings shall not connect more than four contiguous stories, unless otherwise permitted by Chapters 11 through 43.

101:8.6.9.7 Any escalators and moving walks not constituting an exit shall have their floor openings enclosed or protected as required for other vertical openings, unless otherwise permitted by one of the following:

. . .

(2)\* In <u>existing</u> buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected in accordance with the method detailed in NFPA 13, Standard for the Installation of Sprinkler Systems, or in accordance with a method approved by the authority having jurisdiction.

(3) In new buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected in accordance with the method detailed in NFPA 13, Standard for the Installation of Sprinkler Systems, or in accordance with a method approved by the authority having jurisdiction, and the opening shall not connect more than four contiguous stories unless otherwise permitted by Chapters 11 by rolling steel shutters...The shutters...A through 43 manual...The shutters...The shutters...The leading edge...The shutter...The operating mechanism.

(4) In buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7, escalator and moving walk openings shall be permitted to be protected by rolling steel shutters appropriate for the fire resistance rating of the vertical opening and complying with all of the following:

(a) The shutters shall close automatically and independently of each other upon smoke detection and sprinkler operation.

(b) A manual means of operating and testing the operation of the shutters shall be provided.

(c) The shutters shall be operated not less than once a week to ensure that they remain in proper operating condition.

(d) The shutters shall operate at a speed not to exceed 30 ft/min (0.15 m/s) and shall be equipped with a sensitive leading edge.

(e) The leading edge shall arrest the progress of a moving shutter and cause it to retract a distance of approximately 6 in. (150 mm) upon the application of a force not exceeding 20 lbf (90 N) applied to the surface of the leading edge.

### (f) The shutter, following the retraction specified in 8.6.9.7(3)(e), shall continue to close.

(g) The operating mechanism for the rolling shutter shall be provided with standby power complying with the provisions of NFPA 70, National Electrical Code. 101:8.6.11.3\* Draftstopping materials shall be not less than  $\frac{1}{2}$  in. (13 mm) thick gypsum board, 15/32 in. (12 mm) thick <u>plywood</u> <u>wood</u> structural panel, or other approved materials that are adequately supported.

A.8.6.11.3 A wood structural panel is a panel manufactured from veneers, or wood strands or wafer, or a combination of veneer and wood strands or wafers bonded together with waterproof synthetic resins or other suitable bonding systems, including composite panels, oriented strand board, and plywood.

### 101:8.7.3.3\* Alcohol-Based Hand-Rub Dispensers

101:8.7.3.3\* Alcohol-Based Hand-Rub Dispensers. Where permitted by Chapters 11 through 43, alcohol-based hand-rub dispensers shall be permitted provided they meet all of the following criteria:

See Code for complete text

# ABHR dispensers in accordance with 8.7.3.3 are permitted include the following:

- 1. Assembly occupancies (12.4.5, 13.4.5)
- 2. Detention and correctional occupancies (22.4.6, 23.4.6)
- 3. Lodging or rooming houses (26.3.2)
- 4. Hotels and dormitories (28.4.2, 29.4.2)
- 5. Apartment buildings (30.4.2, 31.4.2)
- 6. Residential board and care occupancies (32.2.4, 32.3.4.2, 33.2.4, 33.3.4.2)
- 7. Mercantile occupancies (36.4.6, 37.4.6)
- 8. Business occupancies (38.4.4, 39.4.4)
- 9. Industrial occupancies (40.4.3)

Occupancies in which the use of ABHR dispensers are regulated separately by the applicable occupancy chapter and not by 8.7.3.3, include the following:

- 1. Educational occupancies (14.4.4, 15.4.4)
- 2. Day care occupancies (16.4.4, 17.4.4)
- 3. Health care occupancies (18.4.3, 19.4.3)
- 4. Ambulatory health care occupancies (20.4.3, 21.4.3).

### 101:8.8\* Inspection and Testing of Door Assemblies

Doors, other than those listed in 8.2.2.4 and 8.3.3.13, that are required to be self-closing or automatic closing shall comply with all of the following:

- (1) Door assemblies shall be inspected annually.
- (2) Doors shall be operated to confirm full closure.
- (3) Parts found to be damaged or inoperative shall be replaced.

#### (4) Door openings and the surrounding areas shall be kept clear of anything that could obstruct or interfere with the free operation of the door.

(5) Blocking or wedging of doors in the open position shall be prohibited.

(6) Self-closing and automatic closing devices shall be kept in working condition at all times.

101: Chapter 9 Building Service and Fire Protection Equipment

### 101:9.2.3 Commercial Cooking Equipment Operations

Where required by another section of this Code, commercial cooking equipment operations shall be protected in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, unless such installations are approved existing installations, which shall be permitted to be continued in service.

### 101:9.2.4 Ventilating Systems in Laboratories Using Chemicals

Ventilating systems in laboratories using chemicals shall be in accordance with NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, or NFPA 99, Health Care Facilities Code, as appropriate. 101:9.5 Rubbish Waste Chutes, Incinerators, and Laundry Chutes.

Terminology throughout Code standardized to waste chutes

#### 101:9.6.1\* General.

101:9.6.1.1 The provisions of Section 9.6 shall apply only where specifically required by another section of this Code or where supervision of a new fire sprinkler system <u>or new fire alarm system is required by the</u> <u>Florida Building Code</u>.

101:9.6.1.3 Fire alarm systems <u>required by this Code</u> shall be installed, tested, and maintained in accordance with the applicable requirements of NFPA 70, *National Electrical Code*, and NFPA 72, *National Fire Alarm and Signaling Code*, unless it is an approved existing installation, which shall be permitted to be continued in use. 101:9.6.1.5\* Fire alarm system impairment procedures shall comply with NFPA 72, National Fire Alarm and <u>Signaling Code</u>. Where a required fire alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated, or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service. 101:9.6.2.10.2 Where automatic smoke detection is required by Chapters 11 through 43, smoke alarms shall not be used as a substitute.

101:9.6.2.10.4\* Smoke alarms and smoke detectors shall not be installed within an area of exclusion determined by a 10 ft (3.0 m) radial distance along a horizontal flow path from a stationary or fixed cooking appliance, unless listed for installation in close proximity to cooking appliances. Smoke alarms and smoke detectors installed between 10 ft (3.0 m) and 20 ft (6.1 m) along a horizontal flow path from a stationary or fixed cooking appliance shall be equipped with an alarm-silencing means or use photoelectric detection.

Exception: Smoke alarms or smoke detectors that use photoelectric detection shall be permitted for installation at a radial distance greater than 6 ft (1.8 m) from any stationary or fixed cooking appliance when the following conditions are met:

(1)The kitchen or cooking area and adjacent spaces have no clear interior partitions or headers

(2)The 10 ft (3.0 m) area of exclusion would prohibit the placement of a smoke alarm or smoke detector required by other sections of this NFPA 72. [**72:**29.8.3.4(4)]

101:9.6.2.10.5\* Smoke alarms and smoke detectors shall not be installed within a 36 in. (910 mm) horizontal path from a door to a bathroom containing a shower or tub unless listed for installation in close proximity to such locations. [72:29.8.3.4 (6)]

**101:9.6.2.10.7** Smoke alarms, other than existing battery-operated smoke alarms as permitted by other sections of this *Code*, shall be powered in accordance with the requirements of *NFPA 72*, *National Fire Alarm and Signaling Code*.

101:9.6.2.10.9 The alarms <u>described in 9.6.2.10.8</u> shall sound only within an individual dwelling unit, suite of rooms, or similar area and shall not actuate the building fire alarm system, unless otherwise permitted by the authority having jurisdiction.

101:9.6.2.10.10 Smoke alarms shall be permitted to be connected to the building fire alarm system for the purpose of annunciation in accordance with NFPA 72.

101:9.6.3.5 Unless otherwise provided in 9.6.3.5.1 through 9.6.3.5.8, notification signals for occupants to evacuate shall be audible, and visible signals in accordance with NFPA 72, National Fire Alarm and Signaling Code. and ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities, or other means of notification acceptable to the authority having jurisdiction shall be provided

101:9.6.3.6.2\* Where total evacuation of occupants is impractical due to building configuration, only the occupants in the affected zones shall be <u>initially</u> notified <del>initially</del>, and The provisions shall be made to selectively notify occupants in other zones to afford orderly evacuation of the entire building, provided that such arrangement is approved by the authority having jurisdiction.

101:9.6.4.4 For other than existing installations, where fire alarm systems are required to provide emergency forces notification, supervisory signals and trouble signals shall sound and be visibly displayed either at an approved, remotely located receiving facility or at a location within the protected building that is constantly attended by qualified personnel. 101:9.6.7.4.3 Where the building is protected by a water mist system in accordance with 9.8.1 and Table 9.8.1, the area of the fire alarm zone shall be permitted to coincide with the allowable area of the water mist system.

101:9.6.7.4.4 Unless otherwise prohibited by another section of this Code, where a building not exceeding four stories in height is protected by an automatic water mist system in accordance with 9.7.3, the water mist system shall be permitted to be annunciated on the fire alarm system as a single zone.

101:9.6.7.5 A system trouble signal shall be annunciated by means of audible and visible indicators in accordance with NFPA 72, National Fire Alarm and Signaling Code.

101:9.6.7.6 A system supervisory signal shall be annunciated by means of audible and visible indicators in accordance with NFPA 72, National Fire Alarm and Signaling Code.

101:9.6.7.8 Where permitted by another section of this Code, the alarm zone shall be permitted to coincide with the permitted area for smoke compartments.

## 101:9.7 Automatic Sprinklers and Other Extinguishing Equipment.

## 101:9.8 Other Automatic Extinguishing Equipment.

<u>101:9.8.1\*</u> Alternative Systems. In any occupancy where the character of the fuel for fire is such that extinguishment or control of fire is accomplished by a type of automatic extinguishing system in lieu of an automatic sprinkler system...

<u>101:9.9\* Portable Fire Extinguishers</u>. Where required by another section of this Code, portable fire extinguishers shall ...

101:9.10 Standpipe Systems. ...

101:9.11 Fire Protection System Operating Features. ...

101: Chapter 10 Interior Finish, Contents, and Furnishings 101:10.2.1.2 (1:12.5.2.2) Materials applied directly to the surface of walls and ceilings in a total thickness of less than <sup>1</sup>/<sub>28</sub> in. (0.9 mm) shall not be considered interior finish and shall be exempt from tests simulating actual installation if they meet the requirements Class A interior wall or ceiling finish when tested accordance with 10.2.3 using fiber cement board as the substrate material. The provisions of 10.2.1.1 shall not apply to materials having a total thickness of less than (28 in. (0.9 mm) that are applied directly to the surface walls and ceilings where both of the following Ο conditions are met:

(1) The wall or ceiling surface is a noncombustible or limited-combustible material.

(2) The materials applied meet the requirements of Class A interior wall or ceiling finish when tested in accordance with 10.2.3, using fiber cement board as the substrate material.

101:10.2.1.3 If a material having a total thickness of less than  $\frac{1}{28}$  in. (0.9 mm) is applied to a surface that is not noncombustible or not limited-combustible, the provisions of 10.2.1.1 shall apply.

101:10.2.2.2\* (1:12.5.3.2) Requirements for interior Interior floor finish shall apply <u>comply with 10.2.7</u> under any of the following conditions:

(1) Where floor finish requirements are specified elsewhere in the Code

(2)\* Where carpet or carpetlike material not meeting the requirements of ASTM D 2859, Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials, is used

(3) Where the fire performance of the floor finish cannot be demonstrated to be equivalent to floor finishes with a critical radiant flux of at least 0.1 W/cm<sup>2</sup>

(4) Where the fire performance of the floor finish is unknown

101:10.2.4.3.2 Cellular or foamed plastic shall be permitted for trim not in excess of 10 percent of the <u>specific</u> wall or ceiling area <u>to which it is applied</u>, provided that it is not less than 20 lb/ft<sup>3</sup> (320 kg/m<sup>3</sup>) in density, is limited to ½ in. (13 mm) in thickness and 4 in. (100 mm) in width, and complies with the requirements for Class A or Class B interior wall and ceiling finish as described in 10.2.3.4; however, the smoke developed index shall not be limited.

## 101:10.2.5 Trim and Incidental Finish

101:10.2.5.1 General. Interior wall and ceiling trim and incidental finish, other than wall base in accordance with 10.2.5.2 and bulletin boards, posters, and paper in accordance with 10.2.5.3, not in excess of 10 percent of the <u>specific</u> wall and ceiling areas of any room or space to which it is applied shall be permitted to be Class C materials in occupancies where interior wall and ceiling finish of Class A or Class B is required.

101:10.2.6.2\* (1:12.5.7.2) In new construction Surfaces of walls, partitions, columns, and ceilings shall be permitted to be finished with factory-applied fireretardant-coated assemblies products that have been listed and labeled to demonstrate compliance with the requirements of <u>ASTM E 2768</u>, Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials, on the coated surface 101:10.2.8.2 Where an approved automatic sprinkler system is installed in accordance with Section 9.7, throughout the fire compartment or smoke compartment containing the interior floor finish, Class II interior floor finish shall be permitted in any location where Class I interior floor finish is required, and where Class II is required, the provisions of 10.2.7.2 shall apply.

101:10.3.1\* (1:12.6.3.1) Where required by the applicable provisions of this Code, draperies, curtains, and other similar loosely hanging furnishings and decorations shall meet the flame propagation performance criteria contained in <u>Test Method 1 or Test Method 2</u>, as appropriate, of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

101:10.3.2.1\* Upholstered Furniture. Newly introduced upholstered furniture, except as otherwise permitted by Chapters 11 through 43, shall be resistant to a cigarette ignition (i.e., smoldering) in accordance with one of the following:

(1) The components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture, or with ASTM E 1353, Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture.* 

(2) Mocked-up composites of the upholstered furniture shall have a char length not exceeding 1½ in. (38 mm) when tested in accordance with NFPA 261, Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes, or with ASTM E 1352, Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies.

The cigarette ignition testing of upholstered furniture and mattresses is exempted for the following occupancies:

- Day-care homes (16/17.7.4.4)
- Health care occupancies, if sprinklered (18/19.7.5.2)
- Ambulatory health care occupancies, if sprinklered (20/21.7.5.2)
- One- and two-family dwellings (24.3.3.4)
- Lodging or rooming houses (26.7.1.1)

- Apartment buildings (30/32.7.2.1)
- Residential board and care occupancies, with smoke alarm in sleeping room (32/33.7.5.2.2, 32/33.7.5.3.2)
- Mercantile occupancies (36/37.7.5)
- Business occupancies (38/39.7.5)
- Industrial occupancies (40.7.1)
- Storage occupancies (42.9.1)

101:10.3.9.1 Where required by Chapters 11 through 43, newly introduced containers for rubbish, waste, or linen, with a capacity of 20 gal (75.7 L) or more, shall meet both of the following:

(1) Such containers shall be provided with lids.

(2) Such containers and their lids shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m<sup>2</sup> when tested, at an incident heat flux of 50 kW/m<sup>2</sup> in the horizontal orientation, and at a thickness as used in the container but not less than 1/4 in. (6.3 mm), in accordance with ASTM E 1354, Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter, or Standard Method of Toct for atoc for A Natoria lc and Nvugon Concumption Cal an Oxygen consumption

101: Chapter 11 Special Structures and High-Rise Buildings 101:11.1.6 Minimum Construction Requirements. Minimum construction requirements shall be in accordance with the applicable occupancy chapter <u>and</u> <u>with the Florida Building Code</u>.

## 101:11.3 Towers. 101:11.3.1.3 Use of Accessory Levels

101:11.3.1.3.2 Electronic supervision of supervisory signals shall be provided in accordance with 9.7.2.1. Waterflow alarms shall be monitored in accordance with 9.7.2.2.

### 101:11.3 Towers 101:11.3.2.4\* Number of Means of Egress:

101:11.3.2.4.3 Electronic supervision of sprinkler system supervisory signals shall be provided in accordance with 9.7.2.1 and waterflow alarms shall be monitored in accordance with 9.7.2.2.

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101:11.8 High-Rise Buildings
101:11.8.5 Emergency Lighting and Standby Power.
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101:11.8.5.2.4 The standby power system shall be connected to the following: (1)...

(8) Stairway video monitoring equipment as required by 11.8.8

### 101:11.8 High-Rise Buildings

101:11.8.6.2 The emergency command center shall contain the following:

(1) ....

• • •

(12) Stairway video monitoring equipment as required by 11.8.8

101:11.8.8 Stairway Video Monitoring

101:11.8.8.1\* General.

101:11.8.8.1.1 For high-rise buildings having an occupant load of 4,000 or more persons, real-time remote monitoring of exit stair usage shall be provided in accordance with 11.8.8.2 through 11.8.8.4 and shall be displayed at the emergency command center.

101:11.8.8.1.2 Where the monitoring system is integrated with a security system, the security system shall be in accordance with NFPA 731, *Standard for the Installation of Electronic Premises Security Systems*.

101:11.8.8.1.3 Where the monitoring system includes video cameras also used for video image smoke detection, the portions of the system used for such detection shall be in accordance with NFPA 72, *National Fire Alarm and Signaling Code*.

101:11.8.8.4 Approved video monitoring equipment shall be provided, at locations stipulated by the authority having jurisdiction, for exit stairs below the level of exit discharge where levels are normally occupied by the public.

The equipment is required adjacent to the exit stairway discharge doors in all of the exit stairs throughout the building to monitor the flow of occupants in the stairways, additional monitoring equipment must be provided at the floor entry landings at intervals not exceeding five stories for all exit stairs serving floors above the level of exit discharge

1 Chapter 10 General Safety Requirements

# 1: Section 10.4 Maintenance, Inspection, and Testing

### The Section was deleted in its entirety, duplicate text in 4.5.8

#### 1:10.6.3 Competency

1:10.6.3 Competency. Responsibility for the planning and conducting of drills shall be assigned only to competent persons qualified to exercise leadership. 1:10.8.2.1\* Emergency plans shall include the following: ...

(3)\* Evacuation, <u>relocation and shelter-in-place</u> procedures appropriate to the building, its occupancy, <del>and</del> emergencies (see Section 4.3 of NFPA 101), <u>and</u> <u>hazards</u>

(4) Appropriateness of the use of elevators ...

[101:4.8.2.1]

#### 1:10.9.3\* Training and Education

1:10.9.3.1\* The entity shall develop and implement a training and education curriculum to support the program.

[1600:6.11.1]

1:10.9.3.2 The goal of the curriculum shall be to create awareness and enhance the knowledge, skills, and abilities required to implement, support, and maintain the program. ...

[1600:6.11.2]

#### 1:10.10.6 Cooking Equipment

1:10.10.6.1 For other than one- and two-family dwellings, no hibachi, grill, or other similar devices used for cooking, heating, or any other purpose shall be used or kindled on any balcony, under any overhanging portion, or within 10 ft (3 m) of any structure.

1:10.10.6.1.1 Listed electric portable, tabletop grills, not to exceed 200 square inches of cooking surface, or other similar apparatus shall be permitted.

1:10.10.9.3 The use of unmanned, free-floating sky lanterns and similar devices utilizing an open flame shall be prohibited.

#### 1:10.11 Fire Protection Markings

1:10.11.1.4 Numerals shall be not less than three inches in height for residential buildings, structures, or portions thereof, and at least six inches in height for all other buildings, structures, or portions thereof.

1:10.11.1.5 Where address identification is required by the AHJ on other elevations of buildings, structures, or portions thereof, such numbers shall be not less than three inches in height for residential and at least six inches in height for all other buildings, structures, or portions thereof. 1:10.11.3.1.7 The bottom of the signage shall be located a minimum of 48 in. (15251220 mm) above the floor landing and the top of the signage shall be located a maximum of 84 in. (2135 mm) above the floor landing. [101: 7.2.2.5.4.1(G)]

# 1:10.14 Special Outdoor Events, Carnivals, and Fairs

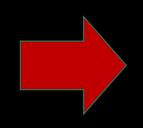
1:10.14.3.1\* General. Where a life safety evaluation is required by other provisions of the Code, it shall comply with all of the following: ...

(2) The life safety evaluation shall include a written assessment of safety measures for conditions listed in <u>10.15.3.2</u> <u>10.14.3.2 and of the building systems and facility management in accordance with 10.14.3.3</u>

(3) The life safety evaluation shall be approved annually by the AHJ and shall be updated for special or unusual conditions. in accordance with the provisions of 13.4.1 of NFPA 101 for existing assembly occupancies.

[101:12.4.1.1]

See text



Approved FFPC 1:10.14.11 Crop Maze 1:10.18.3.2 The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater. [13:8.6.6.1]

1:10.18.3.3 The 18 in. (457 mm) dimension shall not limit the height of shelving on a wall or shelving against a wall in accordance with 10.18.3, and 8.7.6, 8.8.6, and Section 8.9 of NFPA 13. [13:8.6.6.2]

See text

1: Chapter 11 Building Services

#### 1:11.1 Electrical Fire Safety.

1:11.1.1 <u>General</u>. Section <u>11.1</u>11.1 shall apply to <del>new,</del> existing, permanent, <del>or</del> <u>and</u> temporary electrical appliances, equipment, fixtures, <del>or</del> <u>and</u> wiring.

1:11.1.1.1 Existing installations shall be permitted to be continued in use provided the lack of conformity does not present an imminent hazard danger.

## <u>1:11.1.2 Permanent Wiring, Fixtures, and</u> <u>Equipment</u>

1:11.<u>1.2.1</u> All <u>new</u> electrical <del>appliances</del> <u>wiring</u>, fixtures, <u>appliances</u> and equipment, <del>or</del> wiring shall be installed <del>and</del> <del>maintained</del> in accordance with NFPA 70, *National Electrical Code*.

1:11.1.3 Permanent 2.2 Unless determined to present an imminent danger, existing electrical wiring, fixtures, appliances, and equipment shall be installed and permitted to be maintained in accordance with the edition of NFPA 70, *National Electrical Code*, in effect at the time of the installation.

1:11.1.4<u>2.3</u> Permanent wiring abandoned in place shall be tagged or otherwise identified at its termination and junction points as "Abandoned in Place" or removed from all accessible areas and insulated from contact with other live electrical wiring or devices.

#### 1:11.3.6 Standardized Fire Service Elevator Keys Elevators

1:11.3.6.1 <u>Buildings with elevators</u> equipped with <del>Phase I</del> <u>Emergency Recall, and emergency recall</u>, Phase II emergency in-car operation, <del>and First Responder Use/Fire</del> <u>Service Access Elevators</u>, <u>or a fire service access elevator</u> shall be equipped to operate with a standardized fire service key <u>approved complying with ASME A17.1/CSA</u> <u>B44, Safety Code for Elevators and Escalators, except as</u> <u>otherwise permitted by the AHJ.11.3.6.</u> 1:11.3.6.2 Existing buildings shall with elevators equipped with Phase I emergency recall or Phase II emergency in-car operation shall be permitted to comply with <u>11.3.6.<del>5</del>3</u>.

See FAC 69A-47 See Code Section for complete change 1:11.3.7 Elevators for Occupant-Controlled Evacuation Prior to Phase I Emergency Recall Operations and Fire Service Access Elevators. An approved method to prevent automatic sprinkler water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the enclosed occupant evacuation elevator lobby shall be provided where the hoistway serves elevators in accordance with any of the following:

- (1) Occupant-controlled evacuation elevators in accordance with Section 7.14 of NFPA 101, Life Safety Code
- (2) Occupant-controlled evacuation elevators in accordance with the building code
- (3) Fire service access elevators in accordance with the building code

1: Chapter 12 Features of Fire Protection 12.4.6 Care and Maintenance of Fire Doors and Other Opening Protectives.

12.4.6.1 Subsection <u>12.4.6</u> shall cover the care inspection, testing, and maintenance of fire doors, <u>fire shutters, fire windows</u>, and <del>other</del> opening protectives other than fire dampers and fabric fire safety curtains. [80:5.1.1.1]

See Code Section for complete (extensive) change

1:12.7.3.2.3.2 In existing installations, steel door frames without a label shall be permitted where approved by the AHJ. [101: 8.3.3.2.3.2]

1:12.7.3.13 Fire-rated door assemblies shall be inspected and tested in accordance with NFPA 80, Standard for Fire Doors and Other Opening Protectives. [101: 8.3.3.13] 1:12.7.5.6.3 Where walls or partitions are required to have a minimum 1-hour fire resistance rating, recessed fixtures shall be installed in the wall or partition in such a manner that the required fire resistance is not reduced, unless one of the following is met:...

(4) Membrane penetrations by electrical boxes of any size or type, which have been listed as part of a wall opening protective material system for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing shall be permitted. [101:8.3.5.6.3] 1: Chapter 13 Fire Protection Systems 1:13.2.2.6\* The AHJ shall be authorized to permit the removal of existing occupant-use hose lines where all of the following are met:

(1) This Code does not require their installation.

(2) The current building code does not require their installation.

(3) The AHJ determines that the occupant-use hose line will not be utilized by trained personnel or the fire department.

#### 1: Table 13.3.1.9(b) Temperature Ratings of Sprinklers in Specified Locations

Table revised per NFPA 13 extract

1:13.3.2.6.5 Sprinklers shall be installed under roofs, canopies, porte-cocheres, balconies, decks, or similar projections greater than 2 ft (0.6 m) wide over areas where combustibles are stored.

1:13.3.2.6.5.1 The requirement of 13.3.2.6.5 may be omitted if the separation of roofs, canopies, porte-cocheres, balconies, decks, or similar projections are a minimum of 5 ft (1.5 m) from the sprinklered building. This provision is effective for new construction projects only.

## 1:13.3.2.7 New Assembly Occupancies.

1:13.3.2.7.1 The Where the occupant load exceeds 100, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 13.3.1.2:

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Assembly occupancies with festival seating

# 1:13.3.2.8 Existing Assembly Occupancies.

1:13.3.2.8.1 Where the occupant load exceeds 100 300, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with NFPA 13:

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Assembly occupancies with festival seating

1:13.3.2.15.2 Automatic sprinkler protection shall not be required in buildings where all guest sleeping rooms or guest suites have a door opening directly to either of the following:

(1) Outside at the street or grade level

(2) Exterior exit access arranged in accordance with 7.5.3 of NFPA 101 in buildings up to and including three stories in height above grade [101:28.3.5.2]

1:13.3.2.17.4 & 1:13.3.2.18.3 In buildings sprinklered in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, bathrooms not greater than 55 ft<sup>2</sup> (5.1 m<sup>2</sup>) in individual dwelling units shall not be required to be sprinklered. [101:30/31.3.5.4] 1:13.3.2.19.2 An automatic sprinkler system shall not be required where every sleeping room has a door opening directly to the outside of the building at street or the finished ground level, or has a door opening directly to the outside leading to an exterior stairway that meets the requirements of 26.2.1.1.2 of NFPA 101. [101:26.3.6.2]

### 1:13.3.2.20 One- and Two-Family Dwellings

<del>20.1 All</del> ew onefamily dwollings and Gwenngs bγ protected throughout thro <del>be</del> an in automatic sprinkler system accordance 

1:13.3.2.21.2.7 Attics shall be protected in accordance with 13.3.2.21.2.7.1 or 13.3.2.21.2.7.2. [101: 32.2.3.5.7]

1:13.3.2.21.2.7.1 Where an automatic sprinkler system is required by 13.3.2.21.2, attics used for living purposes, storage, or fuel fired equipment shall be protected with automatic sprinklers that are part of the required, approved automatic sprinkler system in accordance with 13.3.1.2. [101:32.2.3.5.7.1]

See text for complete change

1:13.3.2.22.4.2 Where an automatic sprinkler system is installed, attics not used for living purposes, storage, or fuel-fired equipment shall meet one of the following criteria: ...

(5) Attics shall be protected by heat alarms arranged to provide occupant notification in accordance with 33.2.3.4.2. [101: 33.2.3.5.7.2]

### 1:13.3.2.26 High-Rise Buildings.

1:13.3.2.26.2\* Existing high-rise buildings shall be protected throughout by an approved automatic sprinkler system in accordance with this chapter and 13.3.2.26.2.1 through 13.3.2.26.2.3.

1:13.3.2.26.2.3 The entire high-rise apartment building that condominium shall be required to be protected sprinkler system automatic bv <del>an</del> c sprinkler m within 12 vears . 2019 this Code December or comp requirement of FFPC 101: Chapter 31.

1:13.3.2.26.2.4 All existing high-rise apartment buildings that are condominiums shall be subject to the provisions of Section 718.111 and 718.112, Florida Statutes, which shall supercede the requirement for an approved automatic sprinkler system.

1:13.3.2.26.2.5 All existing high-rise apartment buildings that are cooperatives shall be subject to the provisions of Section 719.1055, Florida Statutes, which shall supercede the requirements for an approved automatic sprinkler system. 1:13.3.2.30 New Industrial Occupancies. New industrial occupancies, other than low-hazard industrial occupancies, shall be protected by an approved automatic sprinkler system in accordance with NFPA 13 in any of the following locations:

(1) Throughout all industrial occupancies three or more stories in height

(2) Throughout all industrial occupancies exceeding 12,000 ft<sup>2</sup> (1115 m<sup>2</sup>) in fire area

(3) Where the total area of all floors, including mezzanines, exceeds 24,000 ft<sup>2</sup> (2230 m<sup>2</sup>) [5000:29.3.5.1.1]

1:13.3.3.4.1.1\* Responsibility for Inspection, Testing, Maintenance, and Impairment. The property owner or designated representative shall be responsible for properly maintaining a water-based fire protection system. [25:4.1.1]

See text for complete changes (several)

1:13.4.1.4\*13.4.1.4 Other Pumps.

13.4.1.4.1 Pumps other than those specified in this section and having different design features shall be permitted to be installed where such pumps are listed by a testing laboratory. [20:4.1.2.1]

See text for complete changes (several)

1:13.6.1 General Requirements.

1:13.6.1.1 Scope. The selection, installation, distribution, inspection, maintenance, recharging, and testing of portable fire extinguishers shall be in accordance with NFPA 10 and Section 13.6.

1:13.6.1.1 Portable fire extinguishers are intended as a first line of defense to cope with fires of limited size. [10:1.1.1]

See text for complete changes (extensive)

1:13.7.1.2\*13.7.1.2 Building Fire Alarm Systems. Protected premises fire alarm systems that serve the general fire alarm needs of a building or buildings shall include one or more of the following systems or functions:

See text for complete changes (several)

1:13.7.1.5\* Where a Impaired and Nuisance Alarm Prone Systems.

1:13.7.1.5.1 Impaired fire alarm systems shall include, but shall not be limited to, required systems that are not fully operational, are no longer monitored as required by the AHJ, or are under renovation or repair. 1:13.7.1.5.2 <u>The system owner or designated</u> representative shall immediately notify the AHJ in an <u>approved manner when a</u> fire alarm system is <del>out of</del> service for more than 4 hours in a 24-hour period, the AHJ shall be notified, and the building impaired. <u>1:13.7.1.5.3 The AHJ</u> shall be evacuated <u>authorized to</u> require standby fire personnel or an approved fire watch in accordance with 1.7.16 at premises in which required fire alarm systems are impaired or classified as chronic nuisance alarm prone systems. 1:13.7.1.5.4 Fire alarm systems that have produced five or more nuisance alarms in a 365-day period shall be classified as chronic nuisance alarm prone systems.

1:13.7.1.5.5\* The AHJ shall be authorized to require central station service be provided for chronic nuisance alarm prone systems.

See text for complete changes

# 1: Chapter 14 Means of Egress See 101 Chapter 7 and text for changes

1:14.4.4 There shall be no storage above any component of the means of egress unless it is on a separate floor, mezzanine, or engineered and approved platform constructed in accordance with the Florida Building Code.

# 1: Chapter 15 Fire Department Service Delivery Concurrency Evaluation

No changes

# 1: Chapter 16 Safeguarding Construction, Alteration, and Demolition Operations

NFPA 241 extract update

See text for complete changes

1:16.4.3.1.3\* Where underground water mains and hydrants are to be provided, they shall be installed, completed, and in service prior to commencing construction work on any structure. [241:8.7.2.3]

1:16.4.3.1.3.1 Completion of the water mains and hydrants may be on an alternate schedule approved by the AHJ.

## 1:16.8 Rubberized Asphalt Melters for Roof Deck Systems

1:16.8.1 General.

1:16.8.1 The provisions of Section 16.8 shall apply to any type of fully enclosed chassis-mounted or portable Rubberized Asphalt Melter using indirect heating of a mix of asphalt and inert material for application on roofs decks.

See Florida Amendments for complete changes

# 1: Chapter 17 Wildland Urban Interface

No technical changes

1: Chapter 18 Fire Department Access and Water Supply

#### 1:18.2.3.2 Access to Building

1:18.2.3.2.1.2 When required by the authority having jurisdiction, road(s) or parking lots providing access to the main entrance door(s) shall be considered access roads and shall comply with the requirements of 18.2.3.4.1.1 and 18.2.3.4.1.2.

### 1:18.2.3.5 Marking of Fire Apparatus Access Road

1:18.2.3.5.3 Fire lanes shall be marked with signs that are readily visible to the street with the wording, "NO PARKING FIRE LANE BY ORDER OF THE FIRE DEPARTMENT" or similar wording. Such signs shall be 12 in by 18 in. with a white background and red letters and shall be a maximum of seven feet in height from the roadway to the bottom part of the sign. The signs shall be within sight of the traffic flow and be a maximum of 60 feet apart.

### 1:18.4 Fire Flow Requirements for Buildings

1: 18.4.1.3 Sections 18.3 and 18.4 shall be considered a recommendation for construction of one and two-family dwellings located on in-fill lots in existing neighborhoods and subdivisions.

## 1:18.4.3.1 Decreases. in Fire Flow Requirements

1:18.4.3.1.12 The AHJ shall be authorized to establish conditions on fire flow reductions approved in accordance with 18.4.3.118.4.3.1.1 including, but not limited to, fire sprinkler protection, type of construction of the building, occupancy, development density, building size, and setbacks.

# 1:18.4.5.1 One- and Two-Family Dwellings. Not Exceeding 5000 ft<sup>2</sup> (464.5 m<sup>2</sup>).

See text for complete changes

1: Table 18.4.5.1.4

# 1:18.4.5.1 One- and Two-Family Dwellings. Exceeding 5000 ft<sup>2</sup> (464.5 m<sup>2</sup>).

See text for complete changes

1:18.5.1 Fire Hydrant Locations and Distribution. Fire hydrants shall be provided in accordance with Section 18.5 for all new buildings, or buildings relocated into the jurisdiction unless otherwise permitted by 18.5.1.1 or 18.5.1.2.

See text for complete changes

1:18.5.3 Buildings Other than Detached One- and Two-Family Dwellings. Fire hydrants shall be provided for buildings other than detached one- and two-family dwellings in accordance with both of the following:

(1) The maximum distance to a fire hydrant from the closest point on the building shall not exceed 400 ft (122 m).

(2) The maximum distance between fire hydrants shall not exceed 500 ft (152 m).

# 1:18.5.4 Minimum Number of Fire Hydrants for Fire Flow

1:18.5.4.2 The aggregate fire flow capacity of all fire hydrants within 1000 ft (305 m) of the building, measured in accordance with 18.5.1.4 and 18.5.1.5, shall be not less than the required fire flow determined in accordance with Section 18.4.

1:18.5.4.3\* The maximum fire flow capacity for which a fire hydrant shall be credited shall be as specified by Table 18.5.4.3. Capacities exceeding the values specified in Table 18.5.4.3 shall be permitted when local fire department operations have the ability to accommodate such values as determined by the fire department.

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#### 1:18.5.7 Clear Space Around Hydrants

1:18.5.7.1 A 36 in. (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved.

1:18.5.7.2 A clear space of not less than 60 in. (1524 mm) shall be provided in front of each hydrant connection having a diameter greater than 2 ½ in. (64 mm).

1:18.5.7.2.1 Existing, previously approved hydrant installations shall be permitted to have clear spaces less than 60 inches.

1: Chapter 19 Combustible Waste and Refuse 19.2.1.2.1\* Nonmetallic rubbish containers exceeding a capacity of 51/3 ft<sup>3</sup> [40 gal (0.15 m<sup>3</sup>)] shall be manufactured of materials having a peak rate of heat release not exceeding 300 kW/m<sup>2</sup> at a flux of 50 kW/m<sup>2</sup> when tested in the horizontal orientation, at a thickness as used in the container but not less than of 0.25 in. (6 mm), in accordance with ASTM E 1354, Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter, or NFPA 271, Standard Method of Test for eat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter.

1: Chapter 25 Grandstands and Bleachers, Folding and Telescopic Seating, Tents, and Membrane Structures 1:25.1.5.4 Open Flame Devices and Pyrotechnics. No <u>Use of open flame devices or pyrotechnic devices and</u> <u>pyrotechnics</u> shall be used in any assembly occupancy, <u>unless otherwise permitted by the following: comply</u> <u>with 20.1.5.3</u>. 1:25.1.7 Detection, Alarm, and Communications Systems.

Detection, alarm, and communications systems shall comply with Section 13.7 where required by 13.7.2.1 or 13.7.2.2.

#### 1:Chapter 26 Laboratories Using Chemicals

1:26.2\* Laboratories in Health Care Occupancies. Any building, space, room, or group of rooms in a health care facility intended to serve activities involving procedures for investigation, diagnosis, or treatment in which flammable, combustible, or oxidizing materials are to be used shall comply with Section 26.1 of this Code and Chapter 11 of NFPA 99, Health Care Facilities Code.

### 1:Chapter 30 Motor Fuel Dispensing Facilities and Repair Garages

1:30.3 <u>Operational Requirements</u>. <u>Operations</u> <u>conducted in motor fuel dispensing facilities and repair</u> <u>garages shall comply with Section 42.7</u>. 1:Chapter 32 Motion Picture and Television Production Studio Soundstages and Approved Production Facilities

See revised text extracted from NFPA 140.

#### 1: Chapter 34 General Storage

1:34.2.6.4 Group A plastics shall be further subdivided as either expanded or nonexpanded. [13:5.6.4.4] 1:34.2.6.4.1 If a cartoned commodity is more than 40 (by volume) expanded plastic, it shall percent be protected as a cartoned expanded plastic. [13:5.6.4.4.1] 1:34.2.6.4.2 Exposed commodities containing greater than 25 percent by volume expanded plastic shall be expanded plastic. protected exposed as an 13:5.6.4.4.2]

#### 1:34.4.4 Flammable and Combustible Liquids. Storage of flammable or combustible liquids shall be in accordance with Chapter 60.

1:34.4.1 Flammable or combustible liquids shall be kept in flammable liquid storage cabinets, in cutoff rooms, or in detached buildings.

#### 1:Chapter 35 Animal Housing Facilities Reserved

1:35.1 General. Animal housing facilities shall comply with NFPA 150, Standard on Fire and Life Safety in Animal Housing Facilities, and this chapter.

1:35.2 Permits. Permits, where required, shall comply with Section 1.12.

# 1:Chapter 40 Dust Explosion and Fire Prevention

NFPA 654 extract update

#### 1:Chapter 41 Welding, Cutting, and Other Hot Work

See revised text per NFPA 51B extracts.

#### 1:Chapter 42 Refueling

1:42.2.1.1 New and existing Fueling processes at automotive service stations, service stations located inside buildings, and fleet vehicle service stations as well as the refueling processes at these facilities shall comply with NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, and Sections <u>42.2</u> through <u>42.8</u>. (For repair garages, see Chapter 30.)

See text for complete changes

1: Chapter 50 Commercial Cooking <del>Equipment</del> 1:50.2.2.3.3 Where a clearance reduction system consisting of a listed and labeled field-applied grease duct enclosure material, system, product, or method of construction specifically evaluated for such purpose in accordance with ASTM E 2336, the required clearance shall be in accordance with the listing. [96:4.2.3.3] ...

1:50.4.4.3.1\* In existing <u>dry or wet chemical</u> systems, when changes <u>not</u> in the cooking media, positioning, or replacement of cooking equipment occur <u>compliance</u> with ANSI/UL 300, the fire-extinguishing system shall be made to comply with 50.4.4.3 <u>when any of the</u> following occurs: (1) The cooking medium is changed from animal oils and fats to vegetable oils.

(2) The positioning of the cooking equipment is changed.

(3) Cooking equipment is replaced.

(4) The equipment is no longer supported by the manufacturer. [96:10.2.3.1]

1:50.4.4.3.2 Effective January 1, 2014, all existing fireextinguishing systems shall meet the requirements of 50.4.4.3. [96:10.2.3.2] 1:50.4.5.2.1 Where an automatic sprinkler system is used in conjunction with a water-based fire-extinguishing system served by the same water supply, hydraulic calculations shall consider both systems operating simultaneously. [96:10.3.2.1] 1:50.4.6.3 Any gas appliance not requiring protection but located under the same ventilating equipment where protected appliances are located shall also be automatically shut off upon activation of any the extinguishing system. [96:10.4.3] 1:50.4.7.1.1 At least one manual actuation device shall be located a minimum of 10 ft (3 m) and a maximum of 20 ft (6 m) from the protected kitchen appliance hood exhaust system(s) within the path of egress or at an alternative location acceptable to the AHJ. [96:10.5.1.1] 1:50.4.12.1\* Portable fire extinguishers shall be <u>selected and</u> installed in kitchen cooking areas in accordance with Section 13.6 and shall be specifically listed for such use. [96:10.10.1]

See text for complete changes

1:50.5.1.6.1 Where the fire-extinguishing system or exhaust system is nonoperational or impaired, the systems shall be tagged as noncompliant, and the <u>system</u> owner or owner's representative shall be notified in writing of the impairment, <u>and where</u> required, the AHJ shall be notified. [96:11.1.6.1]

#### 1:50.5.6 Cleaning of Exhaust Systems

1:50.5.6.1\* If upon inspection, the exhaust system is found to be contaminated with deposits from greaseladen vapors, the contaminated portions of the exhaust system shall be cleaned by a properly trained qualified, and certified person(s) acceptable to the AHJ, or through the use of an automated exhaust cleaning system installed in the exhaust system and acceptable to the AHJ. 1:50.6.1.2.1.1 Solid fuel used for flavoring within a gasoperated appliance shall be in a solid fuel holder (smoker box) that is listed with the equipment. [96:12.1.2.1.1]...

1:50.6.1.2.2.1 A solid fuel holder shall not be added to an existing appliance until the fire-extinguishing system has been evaluated by the fire-extinguishing system service provider. [96:12.1.2.2.1] 1:50.6.3 Commercial Kitchen Cooking Oil Storage Tank Systems. Storage of cooking oil (grease) in commercial cooking operations utilizing aboveground tanks to store cooking oils with a capacity greater than 60 gal (227 L) shall also comply with 50.6.3.1 through 50.6.3.5 Commercial kitchen cooking oil storage tank systems shall comply with 66.19.7. 1:50.7 Mobile and Temporary Cooking Operations

1:50.7.1 General

1:50.7.1.1 Mobile and temporary cooking operations shall comply with Section 50.7.1 and the applicable section for the type of cooking being performed...

See Florida Amendments for complete changes Some specific Florida Code changes 1:50.7.1.4 Mobile or temporary cooking operations shall be separated from buildings or structures, combustible materials, vehicle and other cooking operations by a **minimum of 3 ft** (1 m).

#### 1:50.7.1.5 Tents

1:50.7.1.5.1 Mobile or temporary cooking shall not take place within tents occupied by the public.

1:50.7.1.5.2 Tents shall comply with NFPA 102.

1:50.7.1.5.3 Seating for the public shall not be located within any mobile or temporary cooking vehicle.

### 1:50.7.1.8 Training

- 1:50.7.1.8.1 Prior to performing mobile or temporary cooking operations, workers shall be trained in emergency response procedures including:
- (a) proper use of portable fire extinguishers and extinguishing systems
- (b) proper method of shutting off fuel sources
- (c) proper procedure for notifying the local fire department
- (d) proper refueling
- (e) how to perform leak detection
- (f) fuel properties

1:50.7.1.9.2 Fueling. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours.

1:50.7.1.9.2.1 Mobile cooking operations licensed by the Florida Department of Business and Professional Regulation prior to the adoption of this Code are exempt from this requirement. However, if there are any alterations, modifications, and/or replacements to the generator, the fuel tank shall be brought into compliance with 50.7.1.9.2. 1:50.7.1.9.3 Refueling. Refueling shall be conducted only when not in use...

### 1:50.7.2 Mobile Cooking

1:50.7.2.1 Mobile cooking operations and equipment shall comply with NFPA 96, 50.7.1 and this section...

See Florida Amendments for complete changes

#### 1:50.7.2.3 Leak Detection

1:50.7.2.3.1 Gas systems shall be inspected prior to each use by a worker trained in accordance with 50.7.1.8 training.

1:50.7.2.3.2 Leak detection testing shall be documented and available to AHJ upon request...

1:50.7.2.3.4 Leak detection shall be performed every time a new connection or a change in cylinder is made to any gas system...

### 1:50.7.3 Temporary Cooking

1:50.7.3.1 Temporary cooking operations and equipment shall comply with NFPA 96, 50.7.1 and this section.

1:50.7.3.2 Temporary cooking equipment and installations shall comply with NFPA 58.

1:50.7.3.3 Deep fat fryers, fry-o-laters, or other appliances having combustible liquids heated by LP Gas, solid fuels or electricity shall be protected by an approved hood fire suppression system, or other approved means of extinguishment in the event of fire. 1:50.7.3.4 Mobile cooking operations licensed by the Florida Department of Business and Professional Regulation prior to the adoption of this Code shall not be required to comply with the provisions of 50.7.3 until January 1, 2020.

1:50.7.4 A battery powered audible flammable / combustible gas detector shall be installed in all enclosed compartments where gas appliances, piping or cylinders are present.

### 1: Chapter 52 Stationary Storage Battery Systems

- 1:52.3.8 Signs
- 1:52.3.8.1 Doors or accesses into <del>rooms, buildings, or</del> areas containing stationary storage battery systems <u>the</u> <u>following</u> shall be provided with approved signs:
- (1) Battery storage buildings
- (2) Rooms containing stationary storage battery systems
- (3) Other areas containing stationary storage battery systems ...

See text for complete changes

### 1: Chapter 53 Mechanical Refrigeration

1:53.1.3 Reference Codes and Standards. Refrigeration systems shall be installed in accordance with ASHRAE 15 and the mechanical code. <u>Refrigeration systems</u> using ammonia as a refrigerant shall also comply with ANSI/IIAR 2, Standard for Equipment, Design and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems.

See text for complete changes

# 1: Chapter 60 Hazardous Materials

See text for complete changes

Revised text per NFPA 400 extract NFPA 1 Fire Code 2012-2015 Changes

# 1: Chapter 61 Aerosol Products

See text for complete changes

New provisions per NFPA 30B extract

# 1: Chapter 63 Compressed Gases and Cryogenic Fluids

See text for complete changes

New exception per NFPA 55 extract

1:63.3.1.2 Insulated Liquid Carbon Dioxide Systems. Insulated liquid carbon dioxide systems shall be in accordance with Chapter 13 of NFPA 55.

1:63.3.1.2.1 Small Insulated Liquid Carbon Dioxide Outdoor Systems

1:63.3.1.2.1.1 Container systems located in enclosed spaces shall be in accordance with Section 13.2 of NFPA 55.

See Florida Amendments for complete changes

### 1:63.3.1.2.4 Carbon Dioxide Beverage Systems

1:63.3.1.2.4.1 General. Systems with more than 100 lb (45 kg) of carbon dioxide used in beverage dispensing applications shall comply with 63.3.1.2.4.2 through 63.3.1.2.4.4.

1:63.3.1.2.4.2 Equipment. The storage, use, and handling of carbon dioxide shall be in accordance with Chapters 1 through 7 of NFPA 55 and the requirements of this chapter, as applicable.

# 1:63.3.1.2.4.3 Protection from Damage. Carbon dioxide system storage tanks, cylinders, piping, and fittings shall be installed so they are protected from damage by occupants or equipment during normal facility operations.

1:63.3.1.2.4.4 Required protection. Carbon dioxide storage tanks, cylinders, piping, and equipment located indoors, in rooms, and other areas where a leak of carbon dioxide can collect shall be provided with either ventilation in accordance with 63.3.1.2.4.4.1 or an emergency alarm system in accordance with 63.3.1.2.4.4.2.

1:63.3.1.2.4.4.1 Ventilation. Mechanical ventilation shall be in accordance with the Florida Mechanical Code and shall comply with all of the following:

(1) Mechanical ventilation in a room or area shall be at a rate of not less than 1 ft<sup>3</sup>/ min/ ft<sup>2</sup> (0.00508 m<sup>3</sup> /s/  $m^2$ ).

(2) Exhaust shall be taken from a point within 12 in.(305 mm) of the floor.

(3) The ventilation system shall be designed to operate with a negative pressure in relation to the surrounding area.

1:63.3.1.2.4.4.2 Emergency Alarm System. Emergency alarm systems shall comply with all of the following:

(1) Areas where carbon dioxide can accumulate, continuous gas detection shall be provided.

(2) The system shall be capable of detecting and notifying the building occupants of a gas release of carbon dioxide at, or in excess of the Time-Weighted Average-Permissible Exposure Limit (TWA-PEL) published by the Occupational Safety and Health Administration (OSHA) and the Threshold Limit Value-Short Term Exposure Limit (TLV<sup>®</sup>-STEL) as published by the American Conference of Governmental Industrial Hygienists (ACGIH). More conservative set points shall be permitted to be used.

(3) The emergency alarm system activation shall initiate a local alarm within the room or area in which the system is installed.

1: Chapter 65 Explosives, Fireworks, and Model Rocketry 1:65.2.2 All storage of display fireworks shall comply with NFPA 1124, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles.

1:65.5.1 The manufacture, transportation, or storage of fireworks shall comply with NFPA 1124.

# 1:65.10 Sale, Handling, and Storage of Consumer Fireworks.

### Section 65.10 deleted in its entirety

But...

### 1:65.10 Sale, Handling, and Storage of Consumer Fireworks

1:65.10.1\* Applicability.

1:65.10.1.1\* General Requirements. Retail sales of consumer fireworks in both new and existing buildings, structures, and facilities shall comply with the requirements of this section unless otherwise indicated.

See Florida Amendments for complete changes

# 1: Chapter 66 Flammable and Combustible Liquids

See text for complete changes

New provisions per NFPA 30 extract

### 1: Chapter 69 Liquefied Petroleum Gases and Liquefied Natural Gases

See text for complete changes

New provisions per NFPA 58 extract

### 1: Chapter 74 Ammonium Nitrate

1:74.1.1 The storage, use, and handling of ammonium nitrate (solid oxidizer) shall comply with Chapter 60.

# End part 1 of FFPC 6<sup>th</sup> edition Update