

## Florida Fire Prevention Code 8<sup>th</sup> Edition

### NFPA 101

The following are the **DRAFT** Florida Specific Amendments to the **2021** edition of the Life Safety Code® (NFPA 101). Words stricken are deletions; words underlined are additions to the base edition of NFPA 101. Yellow highlighting indicates a newly added or newly deleted section (compared to the 7<sup>th</sup> edition). Note that some section numbering differs from the 7<sup>th</sup> edition due to numbering changes in NFPA 101(2021).

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.

1.1.10 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.

1.3.1.1 If deemed necessary by a fire official for a complete, accurate, and thorough firesafety plans review or inspection, the fire official may request assistance from the building, electrical, plumbing, 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.

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

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

**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 Building Code. It is not the intent of this 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 shall resolve the dispute by the procedure set forth in Chapter 633 and Chapter 553, Florida Statutes, as required by Section 633.104(5), Florida Statutes.

**2.2** NFPA 220, Standard on Types of Building Construction, 2009 edition.

**2.3.13 Other Publication.** ~~Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.~~

**2.4** ~~NFPA 5000, Building Construction and Safety Code, 2021 Edition.~~

**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, 11th edition, shall be the source for the ordinarily accepted meaning included, common usage of the terms shall apply. The following terms, for the purposes of this Code, shall have the meanings given in this chapter, if not otherwise modified by another chapter. Words used in the present tense shall include the future; words used in the masculine gender shall include the feminine and neuter; the singular number shall include the plural, and the plural number shall include the singular. Where terms are not defined in this chapter or within another chapter, they shall be defined using the definition within the Florida Building Code.

**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.

**3.3.99 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.

**6.1.14.1.3\*** Where incidental to another occupancy, areas used as follows shall be permitted to be considered part of the predominant occupancy and shall be subject to the provisions of the Code that apply to the predominant occupancy:

- (1) Mercantile, business, industrial, or storage use
- (2)\* Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold
- (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.
- (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.

**6.1.14.1.3.1** Incidental use areas shall be separated as required by Table 509 of the Florida Building Code where Table 509 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.

**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(3)
- (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.

**Table 6.1.14.4.1(b)** \*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.

**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 fire-rating provisions for occupancy separation as defined in the Florida Building Code.

7.2.1.3.3.1 Thresholds at exterior sliding doorways serving dwelling units shall not exceed ¾ inch (19.1mm) in height.

**7.2.1.13 Special-Purpose Horizontally Sliding Accordion or Folding Door Assemblies.**

Special-purpose horizontally sliding accordion or folding door assemblies shall be permitted in means of egress, provided that all of the following criteria are met:

- (1) The door is readily operable from the egress side without special knowledge or effort.
- (2) The force that, when applied to the operating device in the direction of egress, is required to operate the door is not more than 15 lbf (67 N).
- (3) The force required to operate the door in the direction of travel is not more than 30 lbf (133 N) to set the door in motion and is not more than 15 lbf (67 N) to close the door or open it to the minimum required width.
- (4) The door is operable using a force of not more than 50 lbf (222 N) when a force of 250 lbf (1100 N) is applied perpendicularly to the door adjacent to the operating device, unless the door opening is an existing special-purpose horizontally sliding accordion or folding exit access door assembly serving an area with an occupant load of fewer than 50.
- (5) The door assembly complies with the fire protection rating, if required, and, where rated, is self-closing or automatic-closing by means of smoke detection in accordance with 7.2.1.8 and is installed in accordance with NFPA 80.
- (6) The door, if power operated, shall be capable of being operated manually in the event of power failure.

**7.2.2.2.3.3** Where the occupant load served does not exceed ~~three~~ five, spiral stairs shall be permitted, provided that the following criteria are met:

**7.2.2.4.5.5** New handrails shall be installed to provide a clearance of not less than ~~24~~41-1/2 in. (~~573~~8 mm) between the handrail and the wall to which it is fastened.

**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.

**7.2.2.6.3.1\*** Outside stairs shall be separated from the interior of the building by construction with the fire resistance rating required for enclosed stairs with fixed or self-closing opening protectives, except as follows:

- (1) Outside stairs serving an exterior exit access balcony that has two remote outside stairways or ramps shall be permitted to be unprotected.
- (2) Outside stairs serving two or fewer adjacent stories, including the story where the exit discharges, shall be permitted to be unprotected where there is a remotely located second exit.

(3) In existing buildings, existing outside stairs serving three or fewer adjacent stories, including the story where the exit discharges, shall be permitted to be unprotected where there is a remotely located second exit.

(4) The fire resistance rating of a separation extending 10 ft (3050 mm) from the stairs shall not be required to exceed 1 hour where openings have a minimum 3/4 -hour fire protection rating.

(5) Outside stairs in existing buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7 shall be permitted to be unprotected.

(6) As specifically permitted within Chapter 30, outside stairs serving four or fewer stories shall be permitted to be unprotected if connected to each end of an open-ended corridor that is an interior exit access corridor open on each end with no intervening doors or separation from the corridor, provided the following requirements are met:

(a) The building, including open-ended corridors, and stairways and ramps, shall be equipped throughout with an approved, supervised automatic sprinkler system in accordance with Section 9.7.

(b) The open-ended corridors otherwise comply with applicable requirements for exit access corridors.

(c) At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3.3 m<sup>2</sup>) or an outside stair shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

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 of escape from each occupied unit shall be within the first 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.

8.2.1.2\* NFPA-220The Florida Building Code shall be used to determine the requirements for the construction classification.

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 ft on-center.

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 or new fire alarm system is required by the Florida Building Code.

9.6.3.6 Unless otherwise provided in 9.6.3.6.1 through 9.6.3.6.8, notification signals for occupants to evacuate shall be audible and visible signals in accordance with NFPA 72, 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.

**11.1.6 Minimum Construction Requirements.** Minimum construction requirements shall be in accordance with the applicable occupancy chapter and with the Florida Building Code.

~~12.2.1.2 Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.~~

~~12.3.5.1~~ **12.3.5.1** ~~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 9.7.1.1(1):

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

~~13.3.5.1~~ **13.3.5.1** 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 9.7.1.1(1):

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

~~14.2.1.5 Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.~~

**14.3.5.2** The requirement of 14.3.5.1 shall not apply to any of the following:

- (1) Non-relocatable buildings having an area not exceeding 1000 ft<sup>2</sup> (93 m<sup>2</sup>)
- (2) Non-relocatable buildings containing a single classroom
- ~~(3) Relocatable buildings complying with all of the following:~~
  - ~~(a) Building area does not exceed 1000 ft<sup>2</sup> (93 m<sup>2</sup>)~~
  - ~~(b) Building contains a single classroom~~
  - ~~(c) Building is located not less than 30 ft (9.1 m) from another building.~~

(3) The requirement of 14.3.5.1 shall not apply to relocatable buildings not exceeding 12,000 ft<sup>2</sup> (1120 m<sup>2</sup>) or complying with the allowed square footage and construction type requirements as indicated by the Florida Building Code, whichever is more stringent. Refer to the Florida Building Code, Types of Construction and the State Requirements for Educational Facilities.

**14.3.5.2.1 Relocatable Buildings.** Relocatable buildings sited after March 1, 2002 shall be separated as required by the Florida Building Code and comply with the requirements of F.A.C. 69A-58.0082.

~~16.2.1.1 Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.~~

**16.7.2.2** Emergency egress and relocation drills shall be conducted as follows:

- (1) Not less than one emergency egress and relocation drill shall be conducted every month the facility is in session, unless both of the following criteria are met:
  - (a) In climates where the weather is severe, the monthly emergency egress and relocation drills shall be permitted to be deferred.
  - (b) The required number of emergency egress and relocation drills shall be conducted, and not less than four shall be conducted before the drills are deferred.
- (2) The monthly frequency specified by 16.7.2.2(1) shall be permitted to be bimonthly in adult day-care centers.
- (3) All occupants of the building occupancy shall participate in the drill.
- (4) One additional emergency egress and relocation drill, other than for day-care occupancies that are open on a year-round basis, shall be required within the first 30 days of operation.
- (5) Fire emergency egress and relocation drills conducted must include, at a minimum:
  - (a) One fire emergency egress and relocation drill using the established napping or sleeping times.
  - (b) One fire emergency egress and relocation drill using an alternate evacuation route. Occupants of rooms that are not on the ground level or that have a window for rescue shall be permitted to use the main classroom door to exit and then travel in a different direction from that point.
  - (c) One fire drill in the presence and at the request of the authority having jurisdiction.

**17.7.2.2** Emergency egress and relocation drills shall be conducted as follows:

- (1) Not less than one emergency egress and relocation drill shall be conducted every month the facility is in session, unless both of the following criteria are met:
  - (a) In climates where the weather is severe, the monthly emergency egress and relocation drills shall be permitted to be deferred.
  - (b) The required number of emergency egress and relocation drills shall be conducted, and not less than four shall be conducted before the drills are deferred.
- (2) The monthly frequency specified by 16.7.2.2(1) shall be permitted to be bimonthly in adult day-care centers.
- (3) All occupants of the building occupancy shall participate in the drill.
- (4) One additional emergency egress and relocation drill, other than for day-care occupancies that are open on a year-round basis, shall be required within the first 30 days of operation.
- (5) Fire emergency egress and relocation drills conducted must include, at a minimum:
  - (a) One fire emergency egress and relocation drill using the established napping or sleeping times.
  - (b) One fire emergency egress and relocation drill using an alternate evacuation route. Occupants of rooms that are not on the ground level or that have a window for rescue shall be permitted to use the main classroom door to exit and then travel in a different direction from that point.
  - (c) One fire drill in the presence and at the request of the authority having jurisdiction.

**18.3.4.3.1 Occupant Notification.**

Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

- (1) Paragraph 9.6.3.2.3 shall not be permitted to be used.
- (2)\* Where the private operating mode in accordance with NFPA 72 is used, alarm notification appliances shall not be required in patient care spaces where alarm notification adversely affects patient care.

(a) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or buildings shall be required to be notified.

(b) Notification of personnel as specified in 18.3.4.3.1(2)(a) shall include means to readily identify the zone, area, floor, or building in need of evacuation.

(3) The provision of 18.3.2.5.3(13)(c) shall be permitted to be used.

#### **19.3.4.3.1 Occupant Notification.**

Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

(1)\* In lieu of audible alarm signals, visible alarm-indicating appliances shall be permitted to be used in critical care areas.

(2) Where visual devices have been installed in patient sleeping areas in place of an audible alarm, they shall be permitted where approved by the authority having jurisdiction.

(3) The provision of 19.3.2.5.3(13)(c) shall be permitted to be used.

(4)\* Where the private operating mode in accordance with NFPA 72 is used, alarm notification appliances shall not be required in patient care spaces where alarm notification adversely affects patient care.

(a) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or buildings shall be required to be notified.

(b) Notification of personnel as specified in 18.3.4.3.1(2)(a) shall include means to readily identify the zone, area, floor, or building in need of evacuation.

**22.7.2\* Combustible Personal Property.** Books, clothing, and other combustible personal property allowed in sleeping rooms shall be stored in closable metal lockers or an approved fire-resistant container. This does not apply to one and two occupant rooms equipped with an approved automatic fire sprinkler system in which the storage container shall be no larger than 3 cubic feet per person.

#### ~~24.2.8 \* Grab Bars for Bathtubs, Bathtub-Shower Combinations, and Showers.~~

##### ~~24.2.8.1 General.~~

##### ~~24.2.8.1.1~~

~~New bathtubs, bathtub-shower combinations, and showers shall be provided with grab bars unless otherwise permitted by 24.2.8.1.2.~~

##### ~~24.2.8.1.2 \*~~

~~Grab bars shall not be required in showers where the transition from the room floor to the shower floor does not exceed 0.5 in. (13 mm) in height and all shower surfaces are slip resistant when wet.~~

##### ~~24.2.8.1.3~~

~~Where provided, grab bars shall comply with 24.2.8.2 through 24.2.8.4.~~

##### ~~24.2.8.1.4~~

~~All dimensions shall be measured to the centerline of the grab bar unless otherwise stated.~~

##### ~~24.2.8.2 \* Vertical Grab Bar or Pole.~~

~~A vertical grab bar shall be provided on the control end wall or the end wall opposite the control end wall of the bathtub or bathtub-shower combination in accordance with 24.2.8.2.1, or shall be provided as a vertical pole in accordance with 24.2.8.2.3. For showers, either a vertical grab bar~~

that is usable by a person stepping into and out of the shower enclosure in accordance with 24.2.8.2.2, or a vertical pole in accordance with 24.2.8.2.3, shall be provided.

#### **24.2.8.2.1 \* Bathtub End Wall Vertical Grab Bars.**

End wall vertical grab bars for bathtubs shall comply with all of the following:

- (1) — Vertical grab bars shall have a length of not less than 36 in. (914 mm).
- (2) — Vertical grab bars shall be located between 24 in. (610 mm) and 27 in. (686 mm) above the finished floor, measured to the lower end.
- (3) — Vertical grab bars shall be installed at the end that is least obstructed for entry and egress.
- (4) — Vertical grab bars shall be located between 9 in. (228 mm) and 12 in. (305 mm) from the open entry and egress side of the bathtub or bathtub-shower combination, measured horizontally from the exterior plane of the bathtub or bathtub-shower combination.

#### **24.2.8.2.2 Shower Grab Bars.**

Vertical grab bars for showers shall comply with all of the following:

- (1) — Vertical grab bars shall have a length of not less than 24 in. (610 mm).
- (2) — Vertical grab bars shall be located between 36 in. (914 mm) and 39 in. (991 mm) above the finished floor, measured to the lower end.

#### **24.2.8.2.3 \* Vertical Poles.**

Vertical, pole-type grab bars shall be fixed to the floor or to the bathtub and either the room ceiling or an adjacent wall and shall comply with all of the following:

- (1) — Poles shall be located within 6 in. (150 mm), measured horizontally, of the outside or outer edge of the bathtub, bathtub-shower combination, or shower.
- (2) — Poles shall be located within 30 in. (760 mm), measured horizontally, of the vertical plane of the control end wall of a bathtub or bathtub-shower combination.

#### **24.2.8.3 Back Wall Grab Bar.**

For bathtubs and bathtub-shower combinations bounded on two or three sides by walls, a diagonal grab bar in accordance with 24.2.8.3.1 or horizontal grab bar in accordance with 24.2.8.3.2 shall be provided on the back wall.

##### **24.2.8.3.1 \* Back Wall Diagonal Grab Bars.**

Diagonal grab bars shall comply with all of the following:

- (1) — Diagonal grab bars shall have a length of not less than 24 in. (600 mm).
- (2) — Diagonal grab bars shall be located so the higher end is closest to the control end wall.
- (3) — Higher ends of diagonal grab bars shall be located a maximum of 12 in. (305 mm) from the control end wall.
- (4) — Higher ends of diagonal grab bars shall be located 25 in. (635 mm) minimum and 27 in. (685 mm) maximum above the rim of the bathtub.
- (5) — Lower ends of diagonal grab bars shall be located 8 in. (203 mm) minimum and 10 in. (254 mm) maximum above the rim of the bathtub.

##### **24.2.8.3.2 Back Wall Horizontal Grab Bars.**

Horizontal grab bars shall comply with all of the following:

- (1) — Horizontal grab bars shall be located 8 in. (205 mm) minimum and 10 in. (255 mm) maximum above the bathtub rim.
- (2) — Horizontal grab bars shall be located so one end is 12 in. (305 mm) maximum from the control end wall and the other end is located 24 in. (610 mm) maximum from the opposite, or head, end of the bathtub.



#### **24.2.8.4 \* Grab Bar Details.**

##### **24.2.8.4.1**

Grab bars shall be circular in cross section with a minimum diameter of 1 1/4 in. (32 mm) and a maximum diameter of 2 in. (51 mm).

##### **24.2.8.4.2**

Where attached to a wall, grab bars shall provide a clearance for hand grasp of 1 1/2 in. (38 mm) minimum.

##### **24.2.8.4.3**

Grab bars shall be designed and constructed to the structural loading conditions in accordance with the building code.

#### **24.3.5.1**

All new one- and two-family dwellings shall be protected throughout by an approved automatic sprinkler system in accordance with 24.3.5.2.

#### **26.2.4 \* Grab Bars for Bathtubs, Bathtub-Shower Combinations, and Showers.**

Where new bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

**28.2.1.4** Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

#### **30.2.1.3**

Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

**30.2.2.3.5** Outside stairs complying with the exception in 7.2.2.6.3.1(6) shall be permitted.

**31.3.4.3.5.1** Fire Department Notification shall not be required in existing apartment buildings 4 stories or less in height, when all of the following are provided:

(1) An approved sign is provided at each manual fire alarm pull box reading "Local Alarm Only - In Case of Fire Call 911." The lettering and numbers on approved signs shall have a minimum height of 1/2 inch 2 inches, with a minimum 1/8 inch 3/8 inch stroke width, and shall be white red in color on red white background located no higher than 4 inches directly above the manual fire alarm box and;

(2) A combination visual and audible notification device is provided at an approved location on the outside wall

**31.3.5.9.1\*** All high-rise buildings, other than those meeting 31.3.5.9.2 or 31.3.5.9.3, shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 31.3.5.2 by January 1, 2033. For high-rise buildings that are condominiums, this requirement shall not apply until January 1, 2024.

**31.3.5.9.4.1** When used to satisfy the requirements of 31.3.5.9.3, the term "Engineered Life Safety System" shall only apply as an alternative to complete automatic fire sprinkler protection in existing high-rise buildings.

#### **32.2.2.7**

Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

### **32.3.2.1.3**

Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

### **36.2.1.6.1**

Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

### **36.2.1.6.2**

The provisions of 36.2.1.6.1 shall not apply to display bathtubs, bathtub-shower combinations, or showers.

### **38.2.1.5.1**

Where bathtubs, bathtub-shower combinations, or showers are present, grab bars shall be provided in accordance with the provisions of 24.2.8.

### **38.2.1.5.2**

The provisions of 38.2.1.5.1 shall not apply to display bathtubs, bathtub-shower combinations, or showers.

### **40.2.1.3**

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

### **42.2.1.3**

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

## **Annex**

A.18.3.4.3.1(2) ~~It is the intent of this provision to permit a visible fire alarm signal instead of an audible signal to reduce interference between the fire alarm and medical equipment monitoring alarms for the use of the private operating mode in the patient care areas, including patient sleeping areas, of health care facilities and to provide notification of a fire event only to the staff trained to direct emergency response. This may be accomplished by visual or audible alarm signals in areas usually occupied by staff such as the nurse station, utility rooms, medication room, and staff break room.~~

A.19.3.4.3.1(1) ~~It is the intent of this provision to permit a visible fire alarm signal instead of an audible signal to reduce interference between the fire alarm and medical equipment monitoring alarms the use of the private operating mode in the patient care areas, including patient sleeping areas, of health care facilities and to provide notification of a fire event only to the staff trained to direct emergency response. This may be accomplished by visual or audible alarm signals in areas normally occupied by staff such as the nurse station, utility rooms, medication room, and staff break room.~~

### **A.24.2.8**

The grab bars required by 24.2.8 are designed to improve safety of showering and bathing by ambulatory users, typically entering and exiting a bath, bathtub-shower combination, or shower facility for showering while standing, or for other forms of bathing that can entail transition to/from a crouching or sitting position.

For grab bar requirements appropriate for other uses and users, especially users with disabilities, refer to the requirements in ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities. Generally, the grab bars specified for this Code will not interfere with other grab bars installed in accordance with the requirements of ICC/ANSI A117.1, and they can contribute to meeting the requirements of ICC/ANSI A117.1 and vice versa. For example, combination vertical and horizontal grab bars (e.g., in an L configuration), as addressed by ICC/ANSI A117.1, can meet the requirements of this Code for a vertical grab bar. Similarly, requirements for a horizontal grab bar on the back wall are compatible.

Dimensions for the height of grab bars are based on typical, mass-produced bathtubs with a wall height above the finished floor of about 15 in. (380 mm) and the bottom of the bathtub within 1 in. to 2 in. (25 mm to 51 mm) of the finished floor elevation. Adjustments to stipulated grab bar height limits and ranges, referenced to the bath tub rim, should be considered for bathtubs having higher walls and, thus, rim heights, above the bottom of the tub and, possibly, also the wall height above the finished floor. ICC/ANSI A117.1 references grab bar height dimensions to the bathtub rim and, for consistency with this widely used ANSI standard, that convention is maintained in this Code.

#### **A.24.2.8.1.2**

The provision of 24.2.8.1.2 is intended to ensure that grab bars, if provided voluntarily (i.e., as nonrequired) for dedicated showers, meet the requirements of 24.2.8, so that something appearing to be a grab bar can effectively perform as one. However, such grab bars would only be considered nonrequired in the case of dedicated showers not involving misstep and fall dangers addressed by 7.1.6.2 and 7.1.6.4. This means that walking surfaces must be at least as safe, in terms of underfoot conditions, as any other portion of the means of egress (where, for example, handrails are not required) for users not having mobility disabilities. This would require exceptionally careful choice and maintenance of underfoot materials as well as very effective control of water within and adjacent to the dedicated shower facility.

#### **A.24.2.8.2**

The requirements within this section provide design options for points of control when entering and/or exiting a bathtub or shower. Points of control are critical to providing guidance and stability to an occupant much the same as a handrail provides on stairs. The different points of control specified by this section, wall-mounted grabs or vertical poles, provide options for compliance in a wide range of conditions. It is important to note that only one point of control is required for entry and egress transfers. The use of a vertical pole is not required and is offered as an option to wall-mounted grab bars.

#### **A.24.2.8.2.1**

Grab bars located where they interfere with sealing or with a shower curtain against escape of water — especially to the floor surface outside the shower facility — might introduce safety problems in the form of greatly reduced slip resistance of the walking surface, which could violate this Code. This can be avoided with a 6 in. (150 mm) horizontal separation between the shower curtain rod and the grab bar. It is assumed that other forms of water control, such as an installed enclosure, will not interfere with the use of grab bars.

#### **A.24.2.8.2.3**

A freestanding pole satisfying requirements for a grab bar can offer flexibility in placement, for example, within the close quarters of a small bathroom where there is a water closet adjacent to the bathing facility and a single grab bar can serve both facilities. Where the bathing facility is freestanding, without walls, especially with large soaking tubs, including those on pedestals, the vertical pole-type grab bar is especially useful. The pole also can solve attachment problems where walls are nonexistent or difficult to use for installing conventional, wall-mounted grab bars.

#### **A.24.2.8.3.1**

Using the midpoints of the distance ranges and the minimum distance from the control end wall results in a 45-degree angle for the diagonal grab bar. Such a diagonal grab bar (or alternatively, a horizontal grab bar fairly similar to the option provided by 24.2.8.3.1, which meets requirements of ICC/ANSI A117.1, Standard for Accessible and Usable Buildings and Facilities) was found suitable in tests performed of several grab bar options with 103 independent-living seniors with an average age of 70 [Sveistrup et al., 2003].

#### **A.24.2.8.4**

The best-performing grab bars are in the middle third of the permitted range for circular diameter. For some grab bar designs, with undulations and other surface geometry features to improve slip resistance for users' hands, these dimensions will be nominal with small variations depending on where measurements are taken. Children and others with smaller hands will be able to use the diameters within the lower part of the permitted range. When using a freestanding pole for a grab bar, structural considerations, especially for stiffness, might dictate using diameters in the upper part of the permitted range.

Note that a minimum clearance between the grab bar and an adjacent surface is specified. With grab bars, especially horizontal ones, on which large, downward loads are imposed by the arms of users, there is some concern about people's hands slipping into the clear space; however, this can occur even with an absolute 1.5 in. (38 mm) clearance, as some standards specify and most grab bar designs provide. Thus the main difference in the end result is where, along its length, the arm gets wedged behind the grab bar, not the complete prevention of this happening at all.