

NFPA 101®
Code for
Safety to Life from Fire in Buildings and Structures
2000 Edition

NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A. Information on referenced publications can be found in Chapter 2 and Annex B. Changes other than editorial are indicated by a vertical rule in the margin of the pages on which they appear. These lines are included as an aid to the user in identifying changes from the previous edition.

A.3.3.121 Means of Egress.

A means of egress comprises the vertical and horizontal travel and includes intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, elevators, enclosures, lobbies, escalators, horizontal exits, courts, and yards

Chapter 19 EXISTING HEALTH CARE OCCUPANCIES
SECTION 19.1 GENERAL REQUIREMENTS

19.2.3 Capacity of Means of Egress.

19.2.3.1 The capacity of any required means of egress shall be based on its width, as defined in Section 7.3.

19.2.3.2 The capacity of means of egress providing travel by means of stairs shall be 0.6 in. (1.5 cm) per person, and the capacity of means of egress providing horizontal travel (without stairs) by means such as doors, ramps, or horizontal exits shall be 0.5 in. (1.3 cm) per person. *Exception: The capacity of means of egress in health care occupancies protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.2 shall be 0.3 in. (0.8 cm) per person for travel by means of stairs and 0.2 in. (0.5 cm) per person for horizontal travel without stairs.*

19.3.5.2* Where this *Code* permits exceptions for fully sprinklered buildings or smoke compartments, the sprinkler system shall meet the following criteria: (1) It shall be in accordance with Section 9.7. (2) It shall be electrically connected to the fire alarm system. (3) It shall be fully supervised. *Exception: In Type I and Type II construction, where approved by the authority having jurisdiction, alternative protection measures shall be permitted to be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.*

A.19.3.5.2 It is intended that any valve that controls automatic sprinklers in the entire building or portions of the building, including sectional and floor control valves, be electrically supervised. Valves that control isolated sprinkler heads, such as in laundry and trash chutes, are not required to be electrically supervised. Appropriate means should be taken to ensure that valves that are not electrically supervised remain open.

19.2.3.3* Any required aisle, corridor, or ramp shall be not less than 4 ft (1.2 m) in clear width where serving as means of egress from patient sleeping rooms. The aisle, corridor, or ramp shall be arranged to avoid any obstructions to the convenient removal of nonambulatory persons carried on stretchers or on mattresses serving as stretchers. *Exception No. 1: Aisles, corridors, and ramps in adjunct areas not intended for the housing, treatment, or use of inpatients shall be not less than 44 in. (112 cm) in clear and unobstructed width. Exception No. 2: Exit access within a room or suite of rooms complying with the requirements of 19.2.5.*

19.2.5 Arrangement of Means of Egress.

19.2.5.1 Every habitable room shall have an exit access door leading directly to an exit access corridor. *Exception No. 1: If there is an exit door opening directly to the outside from the room at ground level. Exception No. 2: Exit access from a patient sleeping room with not more than eight patient beds shall be permitted to pass through one intervening room to reach the exit access corridor. Exception No. 3: Exit access from a special nursing suite shall be permitted to pass through one intervening room to reach the exit access corridor where the arrangement allows for direct and constant visual supervision by nursing personnel. Exception No. 4: Exit access from a suite of rooms, other than patient sleeping rooms, shall be permitted to pass through not more than two adjacent rooms to reach the exit access corridor where the travel distance within the suite is in accordance with 19.2.5.8.*

19.2.5.2 Any patient sleeping room, or any suite that includes patient sleeping rooms, of more than 1000 ft² (93 m²) shall have not less than two exit access doors remotely located from each other.

19.2.5.3 Any room or any suite of rooms, other than patient sleeping rooms, of more than 2500 ft² (230 m²) shall have not less than two exit access doors remotely located from each other.

19.2.5.4 Any suite of rooms that complies with the requirements of 19.2.5 shall be permitted to be subdivided with nonfire-rated, noncombustible, or limited-combustible partitions.

19.2.5.5 Intervening rooms shall not be hazardous areas as defined by 19.3.2.

19.2.5.6 Suites of sleeping rooms shall not exceed 5000 ft² (460 m²).

19.2.5.7 Suites of rooms, other than patient sleeping rooms, shall not exceed 10,000 ft² (930 m²).

19.2.5.8 Suites of rooms, other than patient sleeping rooms, shall be permitted to have one intervening room if the travel distance within the suite to the exit access door does not exceed 100 ft (30 m) and shall be permitted to have two intervening rooms where the travel distance within the suite to the exit access door does not exceed 50 ft (15 m).

19.2.5.9* Every corridor shall provide access to not less than two approved exits in accordance with Sections 7.4 and 7.5 without passing through any intervening rooms or spaces other than corridors or lobbies.

A.19.2.5.9 Every exit or exit access should be arranged, if practical and feasible, so that no corridor, passageway, or aisle has a pocket or dead end exceeding 30 ft (9.1 m). (*See also Table A.7.6.1.*)

19.2.5.10 Existing dead-end corridors shall be permitted to be continued to be used if it is impractical and unfeasible to alter them so that exits are accessible in not less than two different directions from all points in aisles, passageways, and corridors.

A.19.2.3.3 It is not the intent that the required corridor width be maintained clear and unobstructed at all times. Projections into the required width are permitted by the exception to **7.3.2**. It is not the intent that 19.2.3.3 supersede 7.3.2. Also, it is recognized that wheeled items in use (such as food service carts, housekeeping carts, gurneys, beds, and similar items) and wheeled crash carts not in use (because they need to be immediately accessible during a clinical emergency) are encountered in health care occupancy corridors. The health care occupancy's fire plan and training program should address the relocation of these items during a fire. Note that "not in use" is not the same as "in storage." Storage is not permitted to be open to the corridor unless it meets one of the exceptions to **19.3.6.1** and is not a hazardous area.

Chapter 7 MEANS OF EGRESS SECTION 7.1 GENERAL

7.1.1* Application. Means of egress for both new and existing buildings shall comply with this chapter. (*See also 4.5.3.*)

7.3.2* Measurement of Means of Egress. The width of means of egress shall be measured in the clear at the narrowest point of the exit component under consideration. *Exception: Projections not more than 3 1/2 in. (8.9 cm) on each side shall be permitted at 38 in. (96 cm) and below.*

A.7.3.2 For further information on stair capacity, see Chapter 2 of the 1998 edition of NFPA 101A, *Guide on Alternative Approaches to Life Safety*.

19.3.6 Corridors.

19.3.6.1 Corridors shall be separated from all other areas by partitions complying with 19.3.6.2 through 19.3.6.5. (*See also 19.2.5.9.*) *Exception No. 1: Smoke compartments protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.3 shall be permitted to have spaces that are unlimited in size open to the corridor, provided that the following criteria are met: (a) The spaces are not used for patient sleeping rooms, treatment rooms, or hazardous areas. (b) The corridors onto which the spaces open in the same smoke compartment are protected by an electrically supervised automatic smoke detection system in accordance with 19.3.4, or the smoke compartment in which the space is located is protected throughout by quick-response sprinklers. (c) The open space is protected by an electrically supervised automatic smoke detection system in accordance with 19.3.4, or the entire space is arranged and located to allow direct supervision by the facility staff from*

a nurses' station or similar space. (d) The space does not obstruct access to required exits. Exception No. 2: In smoke compartments protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.3, waiting areas shall be permitted to be open to the corridor, provided that the following criteria are met: (a) The aggregate waiting area in each smoke compartment does not exceed 600 ft² (55.7 m²). (b) Each area is protected by an electrically supervised automatic smoke detection system in accordance with 19.3.4, or each area is arranged and located to allow direct supervision by the facility staff from a nursing station or similar space. (c) The area does not obstruct access to required exits. Exception No. 3:* Spaces for nurses' stations. Exception No. 4: Gift shops open to the corridor where protected in accordance with 19.3.2.5. Exception No. 5: Limited care facilities in smoke compartments protected throughout by an approved, supervised automatic sprinkler system in accordance with 19.3.5.3 shall be permitted to have group meeting or multipurpose therapeutic spaces open to the corridor, provided that the following criteria are met: (a) The space is not a hazardous area. (b) The space is protected by an electrically supervised automatic smoke detection system in accordance with 19.3.4, or the space is arranged and located to allow direct supervision by the facility staff from the nurses' station or similar location. (c) The area does not obstruct access to required exits. Exception No. 6: Spaces other than patient sleeping rooms, treatment rooms, and hazardous areas shall be permitted to be open to the corridor and unlimited in area, provided that the following criteria are met: (a) The space and the corridors onto which it opens, where located in the same smoke compartment, are protected by an electrically supervised automatic smoke detection system in accordance with 19.3.4. (b)* Each space is protected by automatic sprinklers, or the furnishings and furniture, in combination with all other combustibles within the area, are of such minimum quantity and arrangement that a fully developed fire is unlikely to occur. (c) The space does not obstruct access to required exits. Exception No. 7:* Waiting areas shall be permitted to be open to the corridor, provided that the following criteria are met: (a) Each area does not exceed 600 ft² (55.7 m²). (b) The area is equipped with an electrically supervised automatic smoke detection system in accordance with 19.3.4. (c) The area does not obstruct any access to required exits. Exception No. 8: In a limited care facility, group meeting or multipurpose therapeutic spaces, other than hazardous areas, that are under continuous supervision by facility staff shall be permitted to be open to the corridor, provided that the following criteria are met: (a) Each area does not exceed 1500 ft² (140 m²). (b) Not more than one such space is permitted per smoke compartment. (c) The area is equipped with an electrically supervised automatic smoke detection system in accordance with 19.3.4. (d) The area does not obstruct access to required exits.

A.19.3.6.1 Exception No. 3 A typical nurses' station would normally contain one or more of the following with associated furniture and furnishings: (1) Charting area (2) Clerical area (3) Nourishment station (4) Storage of small amounts of medications, medical equipment and supplies, clerical supplies, and linens (5) Patient monitoring and communication equipment

A.19.3.6.1 Exception No. 6(b) A fully developed fire (flashover) occurs if the rate of heat release of the burning materials exceeds the capability of the space to absorb or vent that heat. The ability of common lining (wall, ceiling, and floor) materials to absorb heat is approximately 0.75 Btu (0.79 kJ) per ft² of lining. The venting capability of open doors or windows is in excess of 20 Btu (21 kJ) per ft² of opening. In a fire that has not reached flashover conditions, fire will spread from one furniture item to another only if the burning item is close to another furniture item. For example, if individual furniture items have heat release rates of 500 Btu per second (525 kW) and are separated by 12 in. (30.5 cm) or more, the fire is not expected to spread from item to item, and flashover is unlikely to occur. (See also the NFPA Fire Protection Handbook.)

A.19.3.6.1 Exception No. 7 This exception permits waiting areas to be located across the corridor from each other, provided that neither area exceeds the 600-ft² (55.7-m²) limitation.

19.2.3.4 (Reserved.)

19.2.3.5 The minimum clear width for doors in the means of egress from hospitals; nursing homes; limited care facilities; psychiatric hospital sleeping rooms; and diagnostic and treatment areas, such as x-ray, surgery, or physical therapy, shall be not less than 32 in. (81 cm) wide. *Exception No. 1: Existing 34-in. (86-cm) doors* *Exception No. 2: Existing 28-in. (71-cm) corridor doors in facilities where the fire plans do not require evacuation by bed, gurney, or wheelchair*

Chapter 18 NEW HEALTH CARE OCCUPANCIES

SECTION 18.1 GENERAL REQUIREMENTS

18.2.3 Capacity of Means of Egress.

18.2.3.1 The capacity of any required means of egress shall be based on its width, as defined in Section 7.3.

18.2.3.2 The capacity of means of egress providing travel by means of stairs shall be 0.3 in. (0.8 cm) per person, and the capacity of means of egress providing horizontal travel (without stairs) by means such as doors, ramps, or horizontal exits shall be 0.2 in. (0.5 cm) per person.

18.2.3.3* Aisles, corridors, and ramps required for exit access in a hospital or nursing home shall be not less than 8 ft (2.4 m) in clear and unobstructed width. Where ramps are used as exits, see 18.2.2.6. *Exception No. 1: * Aisles, corridors, and ramps in adjunct areas not intended for the housing, treatment, or use of inpatients shall be not less than 44 in. (112 cm) in clear and unobstructed width. Exception No. 2: * Exit access within a room or suite of rooms complying with the requirements of 18.2.5.*

A.18.2.3.3 It is not the intent that the required corridor width be maintained clear and unobstructed at all times. Projections into the required width are permitted by the exception to 7.3.2. It is not the intent that 18.2.3.3 supersede 7.3.2. Also, it is recognized that wheeled items in use (such as food service carts, housekeeping carts, gurneys, beds, and similar items) and wheeled crash carts not in use (because they need to be immediately accessible during a clinical emergency) are encountered in health care occupancy corridors. The health care occupancy's fire plan and training program should address the relocation of these items during a fire. Note that "not in use" is not the same as "in storage." Storage is not permitted to be open to the corridor unless it meets one of the exceptions to 18.3.6.1 and is not a hazardous area.

A.18.2.3.3 Exception No. 1 Occupant characteristics are an important factor to be evaluated in setting egress criteria. Egress components in nonpatient use areas, such as administrative office spaces, should be evaluated based on actual use. A clear corridor width of not less than 44 in. (112 cm) is specified, assuming occupants in nonpatient areas will be mobile and capable of evacuation without assistance.

A.18.2.3.3 Exception No. 2 Exit access should be arranged to avoid any obstructions to the convenient removal of nonambulatory persons carried on stretchers or on mattresses serving as stretchers.

18.2.3.4 Aisles, corridors, and ramps required for exit access in a limited care facility or hospital for psychiatric care shall be not less than 6 ft (1.8 m) in clear and unobstructed width. Where ramps are used as exits, see 18.2.2.6. *Exception No. 1: * Aisles, corridors, and ramps in adjunct areas not intended for the housing, treatment, or use of inpatients shall be not less than 44 in. (112 cm) in clear and unobstructed width. Exception No. 2: * Exit access within a room or suite of rooms complying with the requirements of 18.2.5.*

18.2.3.5 The minimum clear width for doors in the means of egress from sleeping rooms; diagnostic and treatment areas, such as x-ray, surgery, or physical therapy; and nursery rooms shall be as follows: (1) Hospitals and nursing homes — 41.5 in. (105 cm) (2) Psychiatric hospitals and limited care facilities — 32 in. (81 cm) *Exception No. 1: Doors that are located so as not to be subject to use by any health care occupant shall be not less than 32 in. (81 cm) in clear width. Exception No. 2: Doors in exit stair enclosures shall be not less than 32 in. (81 cm) in clear width. Exception No. 3: Doors serving newborn nurseries shall be not less than 32 in. (81 cm) in clear width. Exception No. 4: Where a pair of doors is provided, not less than one of the doors shall provide not less than a 32-in. (81-cm) clear width opening and a rabbet, bevel, or astragal shall be provided at the meeting edge. The inactive leaf shall have an automatic flush bolt to provide positive latching.*

Chapter 4 GENERAL

4.5.3 Means of Egress.

4.5.3.1 Number of Means of Egress. Two means of egress, as a minimum, shall be provided in every building or structure, section, and area where size, occupancy, and arrangement endanger occupants attempting to use a single means of egress that is blocked by fire or smoke. The two means of egress shall be arranged to minimize the possibility that both might be rendered impassable by the same emergency condition.

4.5.3.2 Unobstructed Egress. In every occupied building or structure, means of egress from all parts of the building shall be maintained free and unobstructed. No lock or fastening shall be permitted that prevents free escape from the inside of any building other than in health care occupancies and detention and correctional occupancies where staff are continually on duty and effective provisions are made to remove occupants in case of fire or other emergency. Means of egress shall be accessible to the extent necessary to ensure reasonable safety for occupants having impaired mobility.

4.6.7* Modernization or Renovation. Any alteration or any installation of new equipment shall meet, as nearly as practicable, the requirements for new construction. Only the altered, renovated, or modernized portion of an existing building, system, or individual component shall be required to meet the provisions of this *Code* that are applicable to new construction. If the alteration, renovation, or modernization adversely impacts required life safety features, additional upgrading shall be required. Existing life safety features that do not meet the requirements for new buildings, but that exceed the requirements for existing buildings, shall not be further diminished. In no case shall the resulting life safety features be less than those required for existing buildings.

A.4.6.7 The following is an example of what is intended by 4.6.7. In a hospital that has 6-ft (1.8-m) wide corridors, such corridors cannot be reduced in width, even though the provisions for existing hospitals do not require 6-ft (1.8-m) wide corridors. However, if a hospital has 10-ft (3-m) wide corridors, they are permitted to be reduced to 8 ft (2.4 m) in width, which is the requirement for new construction. If the hospital corridor is 3 ft (0.9 m) wide, it would have to be increased to 4 ft (1.2 m). If alterations require replacement of a portion of a hospital corridor wall, such portion of the corridor would not be required to be increased to 8 ft (2.4 m) in width, unless it was practical to do so.