

NFPA 101

Substantiation: The changes proposed to NFPA 101 Chapter 20, New Ambulatory Health Care Occupancies, make the chapter a stand-alone set of requirements that do not reference the use of the provisions of Chapter 38 for new business occupancies. Since their inception in 1981, the provisions for ambulatory health care (AHC) occupancies have required the Code user to follow the requirements for business occupancies as modified by the provisions for AHC. That process is cumbersome and unnecessary, given that it is possible to have all applicable requirements reside in the same chapter.

The changes make no technical change other than the following:

- The provision of 20.2.4.5 has been updated to draw text from the health care occupancies chapters to clarify that the two egress paths must be arranged so that both do not pass through the same adjacent smoke compartment. The existing text uses the words “shall not require return through the compartment of fire origin” and that has confused users.
- The new provision shown as 20.2.5.3.2 was revised from what appears in the business occupancies chapters so as to limit its use to a single tenant space having an occupant load not exceeding 25 persons (business occupancy chapters use 30 persons) because the provision of 20.2.4.3 requires a room or suite with area exceeding 2500 ft² to have not less than two exit access doors. If occupant load is calculated using 100 ft² per person, such requirement would apply at an occupant load of 25, not 30.
- The proposed new 20.7.5.5.2, addressing recycling containers larger than 32 gal capacity, is drawn from text added to the health care occupancy chapters for the 2012 edition. Ambulatory health care occupancies share the same patient privacy needs as health care occupancies that make such recycling containers a necessity for medical records awaiting shredding.

Chapter 20 New Ambulatory Health Care Occupancies

20.1 General Requirements.

20.1.1 Application.

20.1.1.1 General.

20.1.1.1.1 The requirements of this chapter shall apply to new buildings or portions thereof used as ambulatory health care occupancies. (*See 1.3.1.*)

20.1.1.1.2 Administration. The provisions of Chapter 1, Administration, shall apply.

20.1.1.1.3 General. The provisions of Chapter 4, General, shall apply.

~~**20.1.1.1.4** Ambulatory health care facilities shall comply with the provisions of Chapter 38 and this chapter, whichever are more stringent.~~

~~20.1.1.1.5~~ This chapter establishes life safety requirements, in addition to those required in Chapter 38, that shall apply to the design of all ambulatory health care occupancies as defined in 3.3.188.1.

~~20.1.1.1.4~~ ~~20.1.1.1.6~~ Buildings, or sections of buildings, that primarily house patients who, in the opinion of the governing body of the facility and the governmental agency having jurisdiction, are capable of exercising judgment and appropriate physical action for self-preservation under emergency conditions shall be permitted to comply with chapters of this *Code* other than Chapter 20.

~~20.1.1.1.5~~ ~~20.1.1.1.7~~ It shall be recognized that, in buildings providing treatment for certain types of patients or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the authority having jurisdiction shall make appropriate modifications to those sections of this *Code* that would otherwise require means of egress to be kept unlocked.

~~20.1.1.1.6*~~ ~~20.1.1.1.8*~~ The requirements of this chapter shall apply based on the assumption that staff is available in all patient-occupied areas to perform certain fire safety functions as required in other paragraphs of this chapter.

20.1.1.2* Goals and Objectives. The goals and objectives of Sections 4.1 and 4.2 shall be met with due consideration for functional requirements, which are accomplished by limiting the development and spread of a fire emergency to the room of fire origin and reducing the need for occupant evacuation, except from the room of fire origin.

20.1.1.3 Total Concept.

20.1.1.3.1 All ambulatory health care facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

20.1.1.3.2 Because the safety of ambulatory health care occupants cannot be ensured adequately by dependence on evacuation of the building, their protection from fire shall be provided by appropriate arrangement of facilities; adequate, trained staff; and development of operating and maintenance procedures composed of the following:

- (1) Design, construction, and compartmentation
- (2) Provision for detection, alarm, and extinguishment
- (3) Fire prevention and planning, training, and drilling programs for the isolation of fire, transfer of occupants to areas of refuge, or evacuation of the building

20.1.1.4 Additions, Conversions, Modernization, Renovation, and Construction Operations.

20.1.1.4.1 Additions.

20.1.1.4.1.1 Additions shall be separated from any existing structure not conforming to the provisions within Chapter 21 by a fire barrier having not less than a 2-hour fire resistance rating and constructed of materials as required for the addition. (*See 4.6.5 and 4.6.7.*)

20.1.1.4.1.2 Doors in barriers required by 20.1.1.4.1.1 shall normally be kept closed, unless otherwise permitted by 20.1.1.4.1.3.

20.1.1.4.1.3 Doors shall be permitted to be held open if they meet the requirements of ~~20.2.2.2.2~~ 20.2.2.4.

20.1.1.4.2 Changes of Occupancy. A change from a hospital or nursing home to an ambulatory health care occupancy shall not be considered a change in occupancy or occupancy subclassification.

20.1.1.4.3 Renovations, Alterations, and Modernizations. See 4.6.7.

20.1.1.4.4 Construction, Repair, and Improvement Operations. See 4.6.10.

20.1.2 Classification of Occupancy. See 6.1.6 and 20.1.4.2.

20.1.3 Multiple Occupancies.

20.1.3.1 Multiple occupancies shall be in accordance with 6.1.14.

20.1.3.2* Sections of ambulatory health care facilities shall be permitted to be classified as other occupancies, provided that they meet both of the following conditions:

- (1) They are not intended to serve ambulatory health care occupants for purposes of treatment or customary access by patients incapable of self-preservation.
- (2) They are separated from areas of ambulatory health care occupancies by construction having a minimum 1-hour fire resistance rating.

20.1.3.3 All means of egress from ambulatory health care occupancies that traverse nonambulatory health care spaces shall conform to the requirements of this *Code* for ambulatory health care occupancies, unless otherwise permitted by 20.1.3.4.

20.1.3.4 Exit through a horizontal exit into other contiguous occupancies that do not conform to ambulatory health care egress provisions but that do comply with requirements set forth in the appropriate occupancy chapter of this *Code* shall be permitted, provided that the occupancy does not contain high hazard contents.

20.1.3.5 Egress provisions for areas of ambulatory health care facilities that correspond to other occupancies shall meet the corresponding requirements of this *Code* for such occupancies, and, where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use.

20.1.3.6 Any area with a hazard of contents classified higher than that of the ambulatory health care occupancy and located in the same building shall be protected as required in 20.3.2.

20.1.3.7 Non-health care–related occupancies classified as containing high hazard contents shall not be permitted in buildings housing ambulatory health care occupancies.

20.1.4 Definitions.

20.1.4.1 General. For definitions, see Chapter 3, Definitions.

20.1.4.2 Definition — Ambulatory Health Care Occupancy. See 3.3.188.1.

20.1.5 Classification of Hazard of Contents. The classification of hazard of contents shall be as defined in Section 6.2.

20.1.6 Minimum Construction Requirements.

20.1.6.1 Ambulatory health care occupancies shall be limited to the building construction types specified in Table 20.1.6.1, unless otherwise permitted by 20.1.6.6. (See 8.2.1.)

Table 20.1.6.1 Construction Type Limitations

Construction Type	Sprinklered [†]	Stories in Height [‡]	
		1	≥2
I (442)	Yes	X	X
	No	X	X
I (332)	Yes	X	X
	No	X	X
II (222)	Yes	X	X
	No	X	X
II (111)	Yes	X	X
	No	X	X
II (000)	Yes	X	X
	No	X	NP
III (211)	Yes	X	X
	No	X	X
III (200)	Yes	X	X
	No	X	NP
IV (2HH)	Yes	X	X
	No	X	X
V (111)	Yes	X	X
	No	X	X
V (000)	Yes	X	X
	No	X	NP

X: Permitted. NP: Not permitted.

[†]Sprinklered throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7. (See 20.3.5.)

†See 4.6.3.

20.1.6.2 Any level below the level of exit discharge shall be separated from the level of exit discharge by not less than Type II(111), Type III(211), or Type V(111) construction (*see* 8.2.1), unless both of the following criteria are met:

- (1) Such levels are under the control of the ambulatory health care facility.
- (2) Any hazardous spaces are protected in accordance with Section 8.7.

20.1.6.3 Interior nonbearing walls in buildings of Type I or Type II construction shall be constructed of noncombustible or limited-combustible materials, unless otherwise permitted by 20.1.6.4.

20.1.6.4 Interior nonbearing walls required to have a minimum 2-hour fire resistance rating shall be permitted to be fire-retardant-treated wood enclosed within noncombustible or limited-combustible materials, provided that such walls are not used as shaft enclosures.

20.1.6.5 All buildings with more than one level below the level of exit discharge shall have all such lower levels separated from the level of exit discharge by not less than Type II(111) construction.

20.1.6.6 Where new ambulatory health care occupancies are located in existing buildings, the authority having jurisdiction shall be permitted to accept construction systems of lesser fire resistance than those required by 20.1.6.1 through 20.1.6.5, provided that it can be demonstrated to the authority's satisfaction that prompt evacuation of the facility can be achieved in case of fire or that the exposing occupancies and materials of construction present no threat of fire penetration from such occupancy to the ambulatory health care facility or to the collapse of the structure.

20.1.7 Occupant Load. ~~See 38.1.7. The occupant load, in number of persons for whom means of egress and other provisions are required, shall be determined on the basis of the occupant load factors of Table 7.3.1.2 that are characteristic of the use of the space, or shall be determined as the maximum probable population of the space under consideration, whichever is greater.~~

20.2 Means of Egress Requirements.

20.2.1 General. Every aisle, passageway, corridor, exit discharge, exit location, and access shall be in accordance with Chapter 7, unless otherwise modified by 20.2.2 through 20.2.11.

20.2.2 Means of Egress Components.

~~20.2.2.1 Components of means of egress shall be limited to the types described in 38.2.2.~~
Components Permitted. Means of egress components shall be limited to the types described in 20.2.2.2 through 20.2.2.12.

20.2.2.2 Doors.

~~20.2.2.2.1~~ **20.2.2.2.1** Doors complying with 7.2.1 shall be permitted.

~~20.2.2.2.2~~ **20.2.2.2.2** Special locking arrangements complying with 7.2.1.6 shall be permitted.

~~20.2.2.3~~ Elevator lobby exit access door locking in accordance with 7.2.1.6.3 shall be permitted.

20.2.2.2.2 ~~20.2.2.4~~ Any door required to be self-closing shall be permitted to be held open only by an automatic release device that complies with 7.2.1.8.2. The required manual fire alarm system and the systems required by 7.2.1.8.2 shall be arranged to initiate the closing action of all such doors throughout the smoke compartment or throughout the entire facility.

20.2.2.2.3 ~~20.2.2.5~~ Where doors in a stair enclosure are held open by an automatic release device as permitted in 20.2.2.2.2 ~~20.2.2.4~~, initiation of a door-closing action on any level shall cause all doors at all levels in the stair enclosure to close.

20.2.2.2.4* Locks complying with 7.2.1.5.5 shall be permitted only on principal entrance/exit doors.

20.2.2.2.5 **Reserved.**

20.2.2.2.6 Delayed-egress locks complying with 7.2.1.6.1 shall be permitted.

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

20.2.2.2.8 Elevator lobby exit access door-locking arrangements in accordance with 7.2.1.6.3 shall be permitted.

20.2.2.2.9 Horizontal or vertical security grilles or doors complying with 7.2.1.4.1(3) shall be permitted to be used as part of the required means of egress from a tenant space.

20.2.2.2.10 **Reserved.**

20.2.2.2.11 Revolving doors complying with 7.2.1.10 shall be permitted.

20.2.2.3 **Stairs.**

20.2.2.3.1 Stairs complying with 7.2.2 shall be permitted.

20.2.2.3.2 Spiral stairs complying with 7.2.2.2.3 shall be permitted.

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

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

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

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

20.2.2.8 **Reserved.**

20.2.2.9 **Reserved.**

20.2.2.10 **Fire Escape Ladders.** Fire escape ladders complying with 7.2.9 shall be permitted.

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

20.2.2.12 Areas of Refuge.

20.2.2.12.1 Areas of refuge complying with 7.2.12 shall be permitted.

20.2.2.12.2 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge in 3.3.22 shall not be required.

20.2.3 Capacity of Means of Egress.

20.2.3.1 The capacity of any required means of egress shall be determined in accordance with Section 7.3 ~~the provisions of 38.2.3.~~

20.2.3.2 Street floor exits shall be sufficient for the occupant load of the street floor plus the required capacity of open stairs and ramps discharging through the street floor.

20.2.3.3 ~~20.2.3.2~~ The clear width of any corridor or passageway required for exit access shall be not less than 44 in. (1120 mm).

20.2.3.4 ~~20.2.3.3~~ Where minimum corridor width is 6 ft (1830 mm), projections not more than 6 in. (150 mm) from the corridor wall, above the handrail height, shall be permitted for the installation of hand-rub dispensing units in accordance with 20.3.2.8 ~~20.3.2.6~~.

20.2.3.5 ~~20.2.3.4~~ Doors in the means of egress from diagnostic or treatment areas, such as x-ray, surgical, or physical therapy, shall provide a clear width of not less than 32 in. (810 mm).

20.2.4 Number of Means of Egress.

20.2.4.1 The number of means of egress shall be in accordance with Section 7.4.

20.2.4.2 Not less than two exits of the types described in 20.2.2 ~~38.2.2~~ that are remotely located from each other shall be provided for each floor or fire section of the building.

20.2.4.3 Any patient care room and any patient care suite of rooms of more than 2500 ft² (232 m²) shall have not less than two exit access doors remotely located from each other.

20.2.4.4 Not less than two exits of the types described in 20.2.2 ~~38.2.2~~ shall be accessible from each smoke compartment.

20.2.4.5 Egress from smoke compartments addressed in 20.2.4.4 shall be permitted through adjacent compartments provided that the two required egress paths are arranged so that both do not pass through the same adjacent smoke compartment ~~but shall not require return through the compartment of fire origin.~~

20.2.5 Arrangement of Means of Egress. See 38.2.5.

20.2.5.1 Means of egress shall be arranged in accordance with Section 7.5.

20.2.5.2 Dead-end corridors shall be permitted in accordance with 20.2.5.2.1 or 20.2.5.2.2.

20.2.5.2.1 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), dead-end corridors shall not exceed 50 ft (15 m).

20.2.5.2.2 In buildings other than those complying with 20.2.5.2.1, dead-end corridors shall not exceed 20 ft (6100 mm).

20.2.5.3 Limitations on common path of travel shall be in accordance with 20.2.5.3.1, 20.2.5.3.2, and 20.2.5.3.3.

20.2.5.3.1 Common path of travel shall not exceed 100 ft (30 m) in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).

20.2.5.3.2 Common path of travel shall not exceed 100 ft (30 m) within a single tenant space having an occupant load not exceeding 25 persons.

20.2.5.3.3 In buildings other than those complying with 20.2.5.3.1 or 20.2.5.3.2, common path of travel shall not exceed 75 ft (23 m).

20.2.6 Travel Distance to Exits.

20.2.6.1 Travel distance shall be measured in accordance with Section 7.6.

20.2.6.2 Travel distance shall comply with 20.2.6.2.1 and 20.2.6.2.2.

20.2.6.2.1 The travel distance between any point in a room and an exit shall not exceed 150 ft (46 m).

20.2.6.2.2 The maximum travel distance in 20.2.6.2.1 shall be permitted to be increased by 50 ft (15 m) in buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7

20.2.7 Discharge from Exits. See ~~38.2.7~~. Exit discharge shall comply with Section 7.7.

20.2.8 Illumination of Means of Egress. Means of egress shall be illuminated in accordance with Section 7.8.

20.2.9 Emergency Lighting and Essential Electrical Systems.

20.2.9.1 Emergency lighting shall be provided in accordance with Section 7.9.

20.2.9.2 Where general anesthesia or life-support equipment is used, each ambulatory health care facility shall be provided with an essential electrical system in accordance with NFPA 99, *Health Care Facilities Code*, unless otherwise permitted by any of the following:

- (1) Where battery-operated equipment is provided and acceptable to the authority having jurisdiction
- (2) Where a facility uses life-support equipment for emergency purposes only

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

20.2.11 Special Means of Egress Features.

20.2.11.1 Reserved.

20.2.11.2 Lockups. Lockups in ambulatory health care occupancies shall comply with the requirements of 22.4.5.

20.3 Protection.

20.3.1 Protection of Vertical Openings. ~~See 38.3.1.~~

20.3.1.1 Vertical openings shall be enclosed or protected in accordance with Section 8.6, unless otherwise permitted by 20.3.1.2.

20.3.1.2 Unenclosed vertical openings in accordance with 8.6.9.1 shall be permitted.

20.3.1.3 Floors that are below the street floor and are used for storage or other than an ambulatory health care occupancy shall have no unprotected openings to ambulatory health care occupancy floors.

20.3.2 Protection from Hazards. ~~See 38.3.2.~~

20.3.2.1* General. Hazardous areas including, but not limited to, areas used for general storage, boiler or furnace rooms, and maintenance shops that include woodworking and painting areas shall be protected in accordance with Section 8.7.

20.3.2.2 ~~20.3.2.1~~ **Doors.** Doors to hazardous areas shall be self-closing or automatic-closing in accordance with ~~20.2.2.2.2~~ 20.2.2.4.

20.3.2.3* High Hazard Contents Areas. High hazard contents areas, as classified in Section 6.2, shall meet all of the following criteria:

- (1) The area shall be separated from other parts of the building by fire barriers having a minimum 1-hour fire resistance rating, with all openings therein protected by self-closing fire door assemblies having a minimum ¾-hour fire protection rating.
- (2) The area shall be protected by an automatic extinguishing system in accordance with 9.7.1.1(1) or 9.7.1.2.

20.3.2.4 ~~20.3.2.2~~ **Laboratories.** Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered as a severe hazard shall be protected in accordance with NFPA 99, *Health Care Facilities Code*.

20.3.2.5 ~~20.3.2.3~~ **Anesthetizing Locations.** Anesthetizing locations shall be protected in accordance with NFPA 99, *Health Care Facilities Code*.

20.3.2.6 ~~20.3.2.4~~ **Cooking Facilities.** Cooking facilities shall be protected in accordance with 9.2.3, unless otherwise permitted by ~~20.3.2.7~~ 20.3.2.5.

20.3.2.7 ~~20.3.2.5~~ **Domestic Cooking Equipment.** Where domestic cooking equipment is used for food warming or limited cooking, protection or separation of food preparation facilities shall not be required.

20.3.2.8* 20.3.2.6* **Alcohol-Based Hand-Rub Dispensers.** Alcohol-based hand-rub dispensers shall be protected in accordance with 8.7.3.1, unless all of the following conditions are met:

- (1) Where dispensers are installed in a corridor, the corridor shall have a minimum width of 6 ft (1830 mm).
- (2) The maximum individual dispenser fluid capacity shall be as follows:
 - (a) 0.32 gal (1.2 L) for dispensers in rooms, corridors, and areas open to corridors
 - (b) 0.53 gal (2.0 L) for dispensers in suites of rooms
- (3) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.
- (4) Dispensers shall be separated from each other by horizontal spacing of not less than 48 in. (1220 mm).
- (5) Not more than an aggregate 10 gal (37.8 L) of alcohol-based hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg), shall be in use outside of a storage cabinet in a single smoke compartment, except as otherwise provided in 20.3.2.8(6) ~~20.3.2.6(6)~~.
- (6) One dispenser per room complying with 20.3.2.8 (2) or (3) ~~20.3.2.6(2) or (3)~~, and located in the room, shall not be required to be included in the aggregated quantity specified in 20.3.2.8(5) ~~20.3.2.6(5)~~.
- (7) Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment shall meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*.
- (8) Dispensers shall not be installed in the following locations:
 - (a) Above an ignition source within a 1 in. (25 mm) horizontal distance from each side of the ignition source
 - (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source
 - (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source
- (9) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.
- (10) The alcohol-based hand-rub solution shall not exceed 95 percent alcohol content by volume.
- (11) Operation of the dispenser shall comply with the following criteria:
 - (a) The dispenser shall not release its contents except when the dispenser is activated, either manually or automatically by touch-free activation.

- (b) Any activation of the dispenser shall occur only when an object is placed within 4 in. (100 mm) of the sensing device.
- (c) An object placed within the activation zone and left in place shall not cause more than one activation.
- (d) The dispenser shall not dispense more solution than the amount required for hand hygiene consistent with label instructions.
- (e) The dispenser shall be designed, constructed, and operated in a manner that ensures that accidental or malicious activation of the dispensing device is minimized.
- (f) The dispenser shall be tested in accordance with the manufacturer's care and use instructions each time a new refill is installed.

20.3.3 Interior Finish. See ~~38.3.3.~~

20.3.3.1 General. Interior finish shall be in accordance with Section 10.2.

20.3.3.2 Interior Wall and Ceiling Finish.

20.3.3.2.1 Interior wall and ceiling finish material complying with Section 10.2 shall be Class A or Class B in exits and in exit access corridors.

20.3.3.2.2 Interior wall and ceiling finishes shall be Class A, Class B, or Class C in areas other than those specified in 20.3.3.2.1.

20.3.3.3 Interior Floor Finish.

20.3.3.3.1 Interior floor finish shall comply with Section 10.2.

20.3.3.3.2 Interior floor finish in exit enclosures shall be Class I or Class II.

20.3.3.3.3 Interior floor finish shall comply with 10.2.7.1 or 10.2.7.2, as applicable.

20.3.4 Detection, Alarm, and Communications Systems.

20.3.4.1 General. Ambulatory health care facilities shall be provided with fire alarm systems in accordance with Section 9.6, except as modified by 20.3.4.2 through 20.3.4.4.

20.3.4.2 Initiation. Initiation of the required fire alarm systems shall be by manual means in accordance with 9.6.2 and by means of any detection devices or detection systems required.

20.3.4.3 Notification. Positive alarm sequence in accordance with 9.6.3.4 shall be permitted.

20.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically, without delay, in accordance with 9.6.3 upon operation of any fire alarm activating device.

20.3.4.3.2 Emergency Forces Notification.

20.3.4.3.2.1 Fire department notification shall be accomplished in accordance with 9.6.4.

20.3.4.3.2.2 Reserved.

20.3.4.4 Fire Safety Functions. Operation of any activating device in the required fire alarm system shall be arranged to accomplish automatically, without delay, any control functions required to be performed by that device. (See 9.6.5.)

20.3.5 Extinguishment Requirements. See ~~38.3.5.~~

20.3.5.1 Isolated hazardous areas shall be permitted to be protected in accordance with 9.7.1.2.

20.3.5.2 Where more than two sprinklers are installed in a single area for protection in accordance with 9.7.1.2, waterflow detection shall be provided to sound the building fire alarm or to notify, by a signal, any constantly attended location, such as PBX, security, or emergency room, at which the necessary corrective action shall be taken.

20.3.5.3 Portable fire extinguishers shall be provided in ambulatory health care facilities in accordance with 9.7.4.1.

20.3.6 Corridors.

20.3.6.1 General. See ~~38.3.6.~~

20.3.6.2 Openings.

20.3.6.1* Where access to exits is provided by corridors, such corridors shall be separated from use areas by fire barriers in accordance with Section 8.3 having a minimum 1-hour fire resistance rating, unless one of the following conditions exists:

(1)* Where exits are available from an open floor area

(2)* Within a space occupied by a single tenant

(3) Within buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)

20.3.6.2 Openings in corridor walls required by 20.3.6.1 to have a fire resistance rating shall be protected in accordance with Section 8.3, except as otherwise permitted in 20.3.6.2.1 or 20.3.6.2.2.

20.3.6.2.1 Miscellaneous openings, such as mail slots, pharmacy pass-through windows, laboratory pass-through windows, and cashier pass-through windows, shall be permitted to be installed in vision panels or doors without special protection, provided that both of the following criteria are met:

(1) The aggregate area of openings per room does not exceed 20 in.² (0.015 m²).

(2) The openings are installed at or below half the distance from the floor to the room ceiling.

20.3.6.2.2 For rooms protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, the aggregate area of openings per room, as otherwise limited by 20.3.6.2.1, shall not exceed 80 in.² (0.05 m²).

20.3.7 Subdivision of Building Space.

20.3.7.1 Ambulatory health care facilities shall be separated from other tenants and occupancies and shall meet all of the following requirements:

- (1) Walls shall have not less than a 1-hour fire resistance rating and shall extend from the floor slab below to the floor or roof slab above.
- (2) Doors shall be constructed of not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be equipped with positive latches.
- (3) Doors shall be self-closing and shall be kept in the closed position, except when in use.
- (4) Any windows in the barriers shall be of fixed fire window assemblies in accordance with Section 8.3.

20.3.7.2 Every story of an ambulatory health care facility shall be divided into not less than two smoke compartments, unless otherwise permitted by one of the following:

- (1) This requirement shall not apply to facilities of less than 5000 ft² (465 m²) that are protected by an approved automatic smoke detection system.
- (2) This requirement shall not apply to facilities of less than 10,000 ft² (929 m²) that are protected throughout by an approved, supervised automatic sprinkler system installed in accordance with Section 9.7.
- (3) An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for an ambulatory health care facility if all of the following criteria are met:
 - (a) The separating wall and both compartments meet the requirements of 20.3.7.
 - (b) The ambulatory health care facility is less than 22,500 ft² (2100 m²).
 - (c) Access from the ambulatory health care facility to the other occupancy is unrestricted.

20.3.7.3 Smoke compartments shall not exceed an area of 22,500 ft² (2100 m²), and the travel distance from any point to reach a door in a smoke barrier shall not exceed 200 ft (61 m).

20.3.7.4 The area of an atrium separated in accordance with 8.6.7 shall not be limited in size.

20.3.7.5 Required smoke barriers shall be constructed in accordance with Section 8.5 and shall have a minimum 1-hour fire resistance rating, unless otherwise permitted by 20.3.7.6.

20.3.7.6 Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air-conditioning systems for buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.

20.3.7.7 Windows in the smoke barrier shall be of fixed fire window assemblies in accordance with Section 8.3.

20.3.7.8 Not less than 15 net ft² (1.4 net m²) per ambulatory health care facility occupant shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounges, and other low hazard areas on each side of the smoke compartment for the total number of occupants in adjoining compartments.

20.3.7.9* Doors in smoke barriers shall be not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be self-closing or automatic-closing in accordance with 20.2.2.4.

20.3.7.10 Latching hardware shall not be required on smoke barrier cross-corridor doors.

20.3.7.11 A vision panel consisting of fire-rated glazing in approved frames shall be provided in each cross-corridor swinging door and at each cross-corridor horizontal-sliding door in a smoke barrier.

20.3.7.12 Vision panels in doors in smoke barriers, if provided, shall be of fire-rated glazing in approved frames.

20.3.7.13* Rabbits, bevels, or astragals shall be required at the meeting edges, and stops shall be required at the head and sides of door frames in smoke barriers.

20.3.7.14 Center mullions shall be prohibited in smoke barrier door openings.

20.4 Special Provisions. ~~See Section 38.4.~~

20.4.1 Limited Access or Underground Buildings. See Section 11.7.

20.4.2 High-Rise Buildings. High-rise buildings shall comply with Section 11.8.

20.5 Building Services.

20.5.1 Utilities. Utilities shall comply with the provisions of Section 9.1.

20.5.2 Heating, Ventilating, and Air-Conditioning.

20.5.2.1 Heating, ventilating, and air-conditioning shall comply with the provisions of Section 9.2 and shall be installed in accordance with the manufacturer's specifications, unless otherwise modified by 20.5.2.2.

20.5.2.2 If fuel-fired, heating devices shall comply with all of the following:

- (1) They shall be chimney connected or vent connected.
- (2) They shall take air for combustion directly from the outside.
- (3) They shall be designed and installed to provide for complete separation of the combustion system from the atmosphere of the occupied area.

20.5.2.2.1 Any heating device shall have safety features to immediately stop the flow of fuel and shut down the equipment in case of either excessive temperature or ignition failure.

20.5.2.2.2 Approved, suspended unit heaters shall be permitted in locations other than means of egress and patient treatment areas, provided that both of the following criteria are met:

- (1) Such heaters are located high enough to be out of the reach of persons using the area.
- (2) Such heaters are equipped with the safety features required by 20.5.2.2.1.

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

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

20.6 Reserved.

20.7* Operating Features.

20.7.1 Evacuation and Relocation Plan and Fire Drills.

20.7.1.1 The administration of every ambulatory health care facility shall have, in effect and available to all supervisory personnel, written copies of a plan for the protection of all persons in the event of fire, for their evacuation to areas of refuge, and for their evacuation from the building when necessary.

20.7.1.2 All employees shall be periodically instructed and kept informed with respect to their duties under the plan required by 20.7.1.1.

20.7.1.3 A copy of the plan required by 20.7.1.1 shall be readily available at all times in the telephone operator's location or at the security center.

20.7.1.4* Fire drills in ambulatory health care facilities shall include the transmission of a fire alarm signal and simulation of emergency fire conditions.

20.7.1.5 Patients shall not be required to be moved during drills to safe areas or to the exterior of the building.

20.7.1.6 Drills shall be conducted quarterly on each shift to familiarize facility personnel (nurses, interns, maintenance engineers, and administrative staff) with the signals and emergency action required under varied conditions.

20.7.1.7 When drills are conducted between 9:00 p.m. and 6:00 a.m. (2100 hours and 0600 hours), a coded announcement shall be permitted to be used instead of audible alarms.

20.7.1.8 Employees of ambulatory health care facilities shall be instructed in life safety procedures and devices.

20.7.2 Procedure in Case of Fire.

20.7.2.1* Protection of Patients.

20.7.2.1.1 For ambulatory health care facilities, the proper protection of patients shall require the prompt and effective response of ambulatory health care personnel.

20.7.2.1.2 The basic response required of staff shall include the following:

- (1) Removal of all occupants directly involved with the fire emergency
- (2) Transmission of an appropriate fire alarm signal to warn other building occupants and summon staff

- (3) Confinement of the effects of the fire by closing doors to isolate the fire area
- (4) Relocation of patients as detailed in the facility's fire safety plan

20.7.2.2 Fire Safety Plan. A written fire safety plan shall provide for all of the following:

- (1) Use of alarms
- (2) Transmission of alarms to fire department
- (3) Response to alarms
- (4) Isolation of fire
- (5) Evacuation of immediate area
- (6) Evacuation of smoke compartment
- (7) Preparation of floors and building for evacuation
- (8) Extinguishment of fire

20.7.2.3 Staff Response.

20.7.2.3.1 All personnel shall be instructed in the use of and response to fire alarms.

20.7.2.3.2 All health care personnel shall be instructed in the use of the code phrase to ensure transmission of an alarm under any of the following conditions:

- (1) When the individual who discovers a fire must immediately go to the aid of an endangered person
- (2) During a malfunction of the building fire alarm system

20.7.2.3.3 Personnel hearing the code announced shall first activate the building fire alarm using the nearest fire alarm box and then shall execute immediately their duties as outlined in the fire safety plan.

20.7.3 Maintenance of Exits.

20.7.3.1 Proper maintenance shall be provided to ensure the dependability of the method of evacuation selected.

20.7.3.2 Ambulatory health care occupancies that find it necessary to lock exits shall, at all times, maintain an adequate staff qualified to release locks and direct occupants from the immediate danger area to a place of safety in case of fire or other emergency.

20.7.4* Smoking. Smoking regulations shall be adopted and shall include not less than the following provisions:

- (1) Smoking shall be prohibited in any room, ward, or compartment where flammable liquids, combustible gases, or oxygen is used or stored and in any other hazardous location, and such areas shall be posted with signs that read NO SMOKING or shall be posted with the international symbol for no smoking.

- (2) In ambulatory health care facilities where smoking is prohibited and signs are placed at all major entrances, secondary signs with language that prohibits smoking shall not be required.
- (3) Smoking by patients classified as not responsible shall be prohibited.
- (4) The requirement of 20.7.4(3) shall not apply where the patient is under direct supervision.
- (5) Ashtrays of noncombustible material and safe design shall be provided in all areas where smoking is permitted.
- (6) Metal containers with self-closing cover devices into which ashtrays can be emptied shall be readily available to all areas where smoking is permitted.

20.7.5 Furnishings, Mattresses, and Decorations.

20.7.5.1* Draperies, curtains, and other loosely hanging fabrics and films serving as furnishings or decorations in ambulatory health care occupancies shall be in accordance with the provisions of 10.3.1, and the following also shall apply:

- (1) Such curtains shall include cubicle curtains.
- (2) Such curtains shall not include curtains at showers.

20.7.5.2 Newly introduced upholstered furniture shall comply with 10.3.2.1 and one of the following provisions:

- (1) The furniture shall meet the criteria specified in 10.3.3.
- (2) The furniture shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).

20.7.5.3 Newly introduced mattresses shall comply with 10.3.2.2 and one of the following provisions:

- (1) The mattresses shall meet the criteria specified in 10.3.4.
- (2) The mattresses shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).

20.7.5.4 Combustible decorations shall be prohibited, unless one of the following criteria is met:

- (1) They are flame-retardant.
- (2) The decorations meet the requirements of NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.
- (3) The decorations exhibit a heat release rate not exceeding 100 kW when tested in accordance with NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, using the 20 kW ignition source.

- (4) They are decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present.

20.7.5.5 Soiled Linen and Trash Receptacles.

20.7.5.5.1 Soiled linen or trash collection receptacles shall not exceed 32 gal (121 L) in capacity, and all of the following also shall apply:

- (1) The average density of container capacity in a room or space shall not exceed 0.5 gal/ft² (20.4 L/m²).
- (2) A capacity of 32 gal (121 L) shall not be exceeded within any 64 ft² (6 m²) area.
- (3) Mobile soiled linen or trash collection receptacles with capacities greater than 32 gal (121 L) shall be located in a room protected as a hazardous area when not attended.
- (4) Container size and density shall not be limited in hazardous areas.

20.7.5.5.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 20.7.5.5.1 where all the following conditions are met:

(1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 20.7.5.5.2(2) or (3).

(2)* Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.

(3) Container size shall not be limited in hazardous areas.

(4) Containers for combustibles shall be labeled and listed as meeting the requirements of FM Approval Standard 6921, *Containers for Combustible Waste*; however, such testing, listing, and labeling shall not be limited to FM Approvals.

20.7.5.5.3 ~~20.7.5.5.2~~ The provisions of 10.3.9, applicable to containers for rubbish, waste, or linen, shall not apply.

20.7.6 Maintenance and Testing. See 4.6.12.

20.7.7* Engineered Smoke Control Systems.

20.7.7.1 New engineered smoke control systems shall be tested in accordance with established engineering principles and shall meet the performance requirements of such testing prior to acceptance.

20.7.7.2 Following acceptance, all engineered smoke control systems shall be tested periodically in accordance with recognized engineering principles.

20.7.7.3 Test documentation shall be maintained on the premises at all times.

20.7.8 Portable Space-Heating Devices. Portable space-heating devices shall be prohibited in all ambulatory health care occupancies, unless both of the following criteria are met:

- (1) Such devices are used only in nonsleeping staff and employee areas.
- (2) The heating elements of such devices do not exceed 212°F (100°C).

20.7.9 Construction, Repair, and Improvement Operations.

20.7.9.1 Construction, repair, and improvement operations shall comply with 4.6.10.

20.7.9.2 The means of egress in any area undergoing construction, repair, or improvements shall be inspected daily for compliance with 7.1.10.1 and shall also comply with NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*.

A.20.1.1.1.6 ~~A.20.1.1.1.8~~ The *Code* recognizes that certain functions necessary for the life safety of building occupants, such as the closing of corridor doors, the operation of manual fire alarm devices, and the removal of patients from the room of fire origin, require the intervention of facility staff. It is not the intent of 20.1.1.1.6 ~~20.1.1.1.8~~ to specify the levels or locations of staff necessary to meet this requirement.

A.20.1.1.2 This objective is accomplished in the context of the physical facilities, the type of activities undertaken, the provisions for the capabilities of staff, and the needs of all occupants through requirements directed at the following:

- (1) Prevention of ignition
- (2) Detection of fire
- (3) Control of fire development
- (4) Confinement of the effects of fire
- (5) Extinguishment of fire
- (6) Provision of refuge or evacuation facilities, or both
- (7) Staff reaction

A.20.1.3.2 Doctors' offices and treatment and diagnostic facilities that are intended solely for outpatient care and are physically separated from facilities for the treatment or care of inpatients, but are otherwise associated with the management of an institution, might be classified as business occupancies rather than health care occupancies.

A.20.2.2.2.4 The words "principal entrance/exit doors" describe doors that the authority having jurisdiction can reasonably expect to be unlocked in order for the facility to do business.

A.20.3.2.1 It is not the intent of this provision that rooms inside individual tenant spaces that are used to store routine office supplies for that tenant be required to be either separated or sprinklered.

A.20.3.2.3 The requirement for separating high hazard contents areas from other parts of the building is intended to isolate the hazard, and 8.2.3.3 is applicable.

A.20.3.2.8 **A.20.3.2.6** Extensive research, including fire modeling, has indicated that alcohol-based hand-rub solutions can be safely installed in corridors of health care facilities, provided that certain other precautions are taken. The total quantities of flammable liquids in any area should comply with the provisions of other recognized codes, including NFPA 1, *Fire Code*, and NFPA 30, *Flammable and Combustible Liquids Code*. In addition, special consideration should be given to the following:

- (1) Obstructions created by the installation of hand-rub solution dispensers
- (2) Location of dispensers with regard to adjacent combustible materials and potential sources of ignition, especially where dispensers are mounted on walls of combustible construction
- (3) Requirements for other fire protection features, including complete automatic sprinkler protection, to be installed throughout the compartment
- (4) Amount and location of the flammable solutions, both in use and in storage, particularly with respect to potential for leakage or failure of the dispenser

A.20.3.6.1 The intent of 38.3.6(1) through (3) is to permit spaces to be open to the exit access corridor without separation.

A.20.3.6.1(1) Where exits are available from an open floor area, such as open plan buildings, corridors are not required to be separated. An example of an open plan building is a building in which the work spaces and accesses to exits are delineated by the use of tables, desks, bookcases, or counters, or by partitions that are less than floor-to-ceiling height.

A.20.3.6.1(2) It is the intent of this provision that a single tenant be limited to an area occupied under a single management and work the same hours. The concept is that people under the same employ working the same hours would likely be familiar with their entire tenant space. It is not the intent to apply this provision simply because tenants are owned by the same organization. For example, in a government-owned office building, the offices of different federal agencies would be considered multiple tenants, because an employee normally works for one agency. The agencies might work various hours. Another example of multiple tenancy would be a classroom building of a university, because some classrooms might be in use at times when other classrooms are not being used.

A.20.3.7.9 Smoke barriers might include walls having door openings other than cross-corridor doors. There is no restriction in the *Code* regarding which doors or how many doors form part of a smoke barrier. For example, doors from the corridor to individual rooms are permitted to form part of a smoke barrier.

A.20.3.7.13 Split astragals (i.e., astragals installed on both door leaves) are also considered astragals.

A.20.7 Health care occupants have, in large part, varied degrees of physical disability, and their removal to the outside, or even their disturbance caused by moving, is inexpedient or impractical in many cases, except as a last resort. Similarly, recognizing that there might be an operating

necessity for the restraint of the mentally ill, often by use of barred windows and locked doors, fire exit drills are usually extremely disturbing, detrimental, and frequently impracticable.

In most cases, fire exit drills, as ordinarily practiced in other occupancies, cannot be conducted in health care occupancies. Fundamentally, superior construction, early discovery and extinguishment of incipient fires, and prompt notification need to be relied on to reduce the occasion for evacuation of buildings of this class to a minimum.

A.20.7.1.4 Many health care occupancies conduct fire drills without disturbing patients by choosing the location of the simulated emergency in advance and by closing the doors to patients' rooms or wards in the vicinity prior to the initiation of the drill. The purpose of a fire drill is to test and evaluate the efficiency, knowledge, and response of institutional personnel in implementing the facility fire emergency plan. Its purpose is not to disturb or excite patients. Fire drills should be scheduled on a random basis to ensure that personnel in health care facilities are drilled not less than once in each 3-month period.

Drills should consider the ability to move patients to an adjacent smoke compartment. Relocation can be practiced using simulated patients or empty wheelchairs.

A.20.7.2.1 Each facility has specific characteristics that vary sufficiently from other facilities to prevent the specification of a universal emergency procedure. The recommendations that follow, however, contain many of the elements that should be considered and adapted, as appropriate, to the individual facility.

Upon discovery of fire, personnel should immediately take the following action:

- (1) If any person is involved in the fire, the discoverer should go to the aid of that person, calling aloud an established code phrase, which provides for both the immediate aid of any endangered person and the transmission of an alarm.
- (2) Any person in the area, upon hearing the code called aloud, should activate the building fire alarm using the nearest manual fire alarm box.
- (3) If a person is not involved in the fire, the discoverer should activate the building fire alarm using the nearest manual fire alarm box.
- (4) Personnel, upon hearing the alarm signal, should immediately execute their duties as outlined in the facility fire safety plan.
- (5) The telephone operator should determine the location of the fire as indicated by the audible signal.
- (6) In a building equipped with an uncoded alarm system, a person on the floor of fire origin should be responsible for promptly notifying the facility telephone operator of the fire location.
- (7) If the telephone operator receives a telephone alarm reporting a fire from a floor, the operator should regard that alarm in the same fashion as an alarm received over the fire alarm system and should immediately notify the fire department and alert all facility personnel of the place of fire and its origin.

- (8) If the building fire alarm system is out of order, any person discovering a fire should immediately notify the telephone operator by telephone, and the operator should then transmit this information to the fire department and alert the building occupants.

A.20.7.4 The most rigid discipline with regard to prohibition of smoking might not be nearly as effective in reducing incipient fires from surreptitious smoking as the open recognition of smoking, with provision of suitable facilities for smoking. Proper education and training of the staff and attendants in the ordinary fire hazards and their abatement is unquestionably essential. The problem is a broad one, varying with different types and arrangements of buildings; the effectiveness of rules of procedure, which need to be flexible, depends in large part on the management.

A.20.7.5.1 In addition to the provisions of 10.3.1, which deal with ignition resistance, additional requirements with respect to the location of cubicle curtains relative to sprinkler placement are included in NFPA 13, *Standard for the Installation of Sprinkler Systems*.

A.20.7.5.5.2 It is the intent that this provision permits recycling of bottles, cans, paper and similar clean items that do not contain grease, oil, flammable liquids, or significant plastic materials using larger containers or several adjacent containers and not require locating such containers in a room protected as a hazardous area. Containers for medical records awaiting shredding are often larger than 32 gal (121 L). These containers are not to be included in the calculations and limitations of 20.7.5.5.1. There is no limit on the number of these containers, as FM Approval Standard 6921, *Containers for Combustible Waste*, ensures that the fire will not spread outside of the container. FM approval standards are written for use with FM Approvals. The tests can be conducted by any approved laboratory. The portions of the standard referring to FM Approvals are not included in this reference.

A.20.7.5.5.2(2) See 20.7.5.5.1(3).

A.20.7.7 A document that provides recognized engineering principles for the testing of smoke control systems is NFPA 92, *Standard for Smoke Control Systems*.

NFPA 101

Substantiation: The changes proposed to NFPA 101 Chapter 21, Existing Ambulatory Health Care Occupancies, make the chapter a stand-alone set of requirements that do not reference the use of the provisions of Chapter 39 for existing business occupancies. Since their inception in 1981, the provisions for ambulatory health care (AHC) occupancies have required the Code user to follow the requirements for business occupancies as modified by the provisions for AHC. That process is cumbersome and unnecessary, given that it is possible to have all applicable requirements reside in the same chapter.

The changes make no technical change other than the following:

- The provision of 21.2.4.5 has been updated to draw text from the health care occupancies chapters to clarify that the two egress paths must be arranged so that both do not pass through the same adjacent smoke compartment. The existing text uses the words “shall not require return through the compartment of fire origin” and that has confused users.
- The new provision shown as 21.2.5.3.2 was revised from what appears in the business occupancies chapters so as to limit its use to a single tenant space having an occupant load not exceeding 25 persons (business occupancy chapters use 30 persons) because the provision of 21.2.4.3 requires a room or suite with area exceeding 2500 ft² to have not less than two exit access doors. If occupant load is calculated using 100 ft² per person, such requirement would apply at an occupant load of 25, not 30.
- The proposed new 21.7.5.5.2, addressing recycling containers larger than 32 gal capacity, is drawn from text added to the health care occupancy chapters for the 2012 edition. Ambulatory health care occupancies share the same patient privacy needs as health care occupancies that make such recycling containers a necessity for medical records awaiting shredding.

Chapter 21 Existing Ambulatory Health Care Occupancies

21.1 General Requirements.

21.1.1 Application.

21.1.1.1 General.

21.1.1.1.1 The requirements of this chapter shall apply to existing buildings or portions thereof currently occupied as an ambulatory health care occupancy.

21.1.1.1.2 Administration. The provisions of Chapter 1, Administration, shall apply.

21.1.1.1.3 General. The provisions of Chapter 4, General, shall apply.

~~**21.1.1.1.4** Ambulatory health care facilities shall comply with the provisions of Chapter 39 and this chapter, whichever are more stringent.~~

~~21.1.1.1.5~~ This chapter establishes life safety requirements, in addition to those required in Chapter 39, that shall apply to the design of all ambulatory health care occupancies as defined in 3.3.188.1.

21.1.1.1.4 ~~21.1.1.1.6~~ Buildings, or sections of buildings, that primarily house patients who, in the opinion of the governing body of the facility and the governmental agency having jurisdiction, are capable of exercising judgment and appropriate physical action for self-preservation under emergency conditions shall be permitted to comply with chapters of this *Code* other than Chapter 21.

21.1.1.1.5 ~~21.1.1.1.7~~ It shall be recognized that, in buildings providing treatment for certain types of patients or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the authority having jurisdiction shall make appropriate modifications to those sections of this *Code* that would otherwise require means of egress to be kept unlocked.

21.1.1.1.6* ~~21.1.1.1.8*~~ The requirements of this chapter shall apply based on the assumption that staff is available in all patient-occupied areas to perform certain fire safety functions as required in other paragraphs of this chapter.

21.1.1.2* Goals and Objectives. The goals and objectives of Sections 4.1 and 4.2 shall be met with due consideration for functional requirements, which are accomplished by limiting the development and spread of a fire emergency to the room of fire origin and reducing the need for occupant evacuation, except from the room of fire origin.

21.1.1.3 Total Concept.

21.1.1.3.1 All ambulatory health care facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

21.1.1.3.2 Because the safety of ambulatory health care occupants cannot be ensured adequately by dependence on evacuation of the building, their protection from fire shall be provided by appropriate arrangement of facilities; adequate, trained staff; and development of operating and maintenance procedures composed of the following:

- (1) Design, construction, and compartmentation
- (2) Provision for detection, alarm, and extinguishment
- (3) Fire prevention and planning, training, and drilling programs for the isolation of fire, transfer of occupants to areas of refuge, or evacuation of the building

21.1.1.4 Additions, Conversions, Modernization, Renovation, and Construction Operations.

21.1.1.4.1 Additions.

21.1.1.4.1.1 Additions shall be separated from any existing structure not conforming to the provisions within Chapter 21 by a fire barrier having not less than a 2-hour fire resistance rating and constructed of materials as required for the addition. (*See 4.6.5 and 4.6.7.*)

21.1.1.4.1.2 Doors in barriers required by 21.1.1.4.1.1 shall normally be kept closed, unless otherwise permitted by 21.1.1.4.1.3.

21.1.1.4.1.3 Doors shall be permitted to be held open if they meet the requirements of ~~21.2.2.2.2~~ 21.2.2.4.

21.1.1.4.2 Changes of Occupancy. A change from a hospital or nursing home to an ambulatory health care occupancy shall not be considered a change in occupancy or occupancy subclassification.

21.1.1.4.3 Renovations, Alterations, and Modernizations. See 4.6.7.

21.1.1.4.4 Construction, Repair, and Improvement Operations. See 4.6.10.

21.1.2 Classification of Occupancy. See 6.1.6 and 21.1.4.2.

21.1.3 Multiple Occupancies.

21.1.3.1 Multiple occupancies shall be in accordance with 6.1.14.

21.1.3.2* Sections of ambulatory health care facilities shall be permitted to be classified as other occupancies, provided that they meet both of the following conditions:

- (1) They are not intended to serve ambulatory health care occupants for purposes of treatment or customary access by patients incapable of self-preservation.
- (2) They are separated from areas of ambulatory health care occupancies by construction having a minimum 1-hour fire resistance rating.

21.1.3.3 All means of egress from ambulatory health care occupancies that traverse nonambulatory health care spaces shall conform to the requirements of this *Code* for ambulatory health care occupancies, unless otherwise permitted by 21.1.3.4.

21.1.3.4 Exit through a horizontal exit into other contiguous occupancies that do not conform with ambulatory health care egress provisions but that do comply with requirements set forth in the appropriate occupancy chapter of this *Code* shall be permitted, provided that the occupancy does not contain high hazard contents.

21.1.3.5 Egress provisions for areas of ambulatory health care facilities that correspond to other occupancies shall meet the corresponding requirements of this *Code* for such occupancies, and, where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use.

21.1.3.6 Any area with a hazard of contents classified higher than that of the ambulatory health care occupancy and located in the same building shall be protected as required in 21.3.2.

21.1.3.7 Non-health care–related occupancies classified as containing high hazard contents shall not be permitted in buildings housing ambulatory health care occupancies.

21.1.4 Definitions.

21.1.4.1 General. For definitions, see Chapter 3, Definitions.

21.1.4.2 Definition — Ambulatory Health Care Occupancy. See 3.3.188.1.

21.1.5 Classification of Hazard of Contents. The classification of hazard of contents shall be as defined in Section 6.2.

21.1.6 Minimum Construction Requirements.

21.1.6.1 Ambulatory health care occupancies shall be limited to the building construction types specified in Table 21.1.6.1, unless otherwise permitted by 21.1.6.6. (See 8.2.1.)

Table 21.1.6.1 Construction Type Limitations

Construction Type	Sprinklered [†]	Stories in Height [‡]	
		1	≥2
I (442)	Yes	X	X
	No	X	X
I (332)	Yes	X	X
	No	X	X
II (222)	Yes	X	X
	No	X	X
II (111)	Yes	X	X
	No	X	X
II (000)	Yes	X	X
	No	X	NP
III (211)	Yes	X	X
	No	X	X
III (200)	Yes	X	X
	No	X	NP
IV (2HH)	Yes	X	X
	No	X	X
V (111)	Yes	X	X
	No	X	X
V (000)	Yes	X	X
	No	X	NP

X: Permitted. NP: Not permitted.

[†]Sprinklered throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7. (See 21.3.5.)

‡See 4.6.3.

21.1.6.2 Any level below the level of exit discharge shall be separated from the level of exit discharge by not less than Type II(111), Type III(211), or Type V(111) construction (*see* 8.2.1), unless both of the following criteria are met:

- (1) Such levels are under the control of the ambulatory health care facility.
- (2) Any hazardous spaces are protected in accordance with Section 8.7.

21.1.6.3 Interior nonbearing walls in buildings of Type I or Type II construction shall be constructed of noncombustible or limited-combustible materials, unless otherwise permitted by 21.1.6.4.

21.1.6.4 Interior nonbearing walls required to have a minimum 2-hour fire resistance rating shall be permitted to be fire-retardant-treated wood enclosed within noncombustible or limited-combustible materials, provided that such walls are not used as shaft enclosures.

21.1.6.5 All buildings with more than one level below the level of exit discharge shall have all such lower levels separated from the level of exit discharge by not less than Type II(111) construction.

21.1.6.6 In existing buildings, the authority having jurisdiction shall be permitted to accept construction systems of lesser fire resistance than those required by 21.1.6.1 through 21.1.6.5, provided that it can be demonstrated to the authority's satisfaction that prompt evacuation of the facility can be achieved in case of fire or that the exposing occupancies and materials of construction present no threat of fire penetration from such occupancy to the ambulatory health care facility or to the collapse of the structure.

21.1.7 Occupant Load. See 39.1.7. The occupant load, in number of persons for whom means of egress and other provisions are required, shall be determined on the basis of the occupant load factors of Table 7.3.1.2 that are characteristic of the use of the space, or shall be determined as the maximum probable population of the space under consideration, whichever is greater.

21.2 Means of Egress Requirements.

21.2.1 General. Every aisle, passageway, corridor, exit discharge, exit location, and access shall be in accordance with Chapter 7, unless otherwise modified by 21.2.2 through 21.2.11.

21.2.2 Means of Egress Components.

~~21.2.2.1 Components of means of egress shall be limited to the types described in 39.2.2.~~
Components Permitted. Means of egress components shall be limited to the types described in 21.2.2.2 through 21.2.2.12.

21.2.2.2 Doors.

21.2.2.2.1 Doors complying with 7.2.1 shall be permitted.

~~**21.2.2.2** Special locking arrangements complying with 7.2.1.6 shall be permitted.~~

~~21.2.2.3~~ Elevator lobby exit access door locking in accordance with 7.2.1.6.3 shall be permitted.

~~21.2.2.2.2~~ ~~21.2.2.4~~ Any door required to be self-closing shall be permitted to be held open only by an automatic release device that complies with 7.2.1.8.2. The required manual fire alarm system and the systems required by 7.2.1.8.2 shall be arranged to initiate the closing action of all such doors throughout the smoke compartment or throughout the entire facility.

~~21.2.2.2.3~~ ~~21.2.2.5~~ Where doors in a stair enclosure are held open by an automatic release device as permitted in ~~21.2.2.2.2~~ ~~21.2.2.4~~, initiation of a door-closing action on any level shall cause all doors at all levels in the stair enclosure to close.

~~21.2.2.2.4*~~ Locks complying with 7.2.1.5.5 shall be permitted only on principal entrance/exit doors.

~~21.2.2.2.5~~ The re-entry provisions of 7.2.1.5.8 shall not apply to any of the following:

- ~~(1) Existing ambulatory health care occupancies that are not high-rise buildings~~
- ~~(2) Existing high-rise ambulatory health care occupancy buildings that are protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1)~~
- ~~(3) Existing high-rise ambulatory health care occupancy buildings having approved existing means for providing stair re-entry~~

~~21.2.2.2.6~~ Delayed-egress locks complying with 7.2.1.6.1 shall be permitted.

~~21.2.2.2.7~~ Access-controlled egress doors complying with 7.2.1.6.2 shall be permitted.

~~21.2.2.2.8~~ Elevator lobby exit access door-locking arrangements in accordance with 7.2.1.6.3 shall be permitted.

~~21.2.2.2.9~~ Horizontal or vertical security grilles or doors complying with 7.2.1.4(3) shall be permitted to be used as part of the required means of egress from a tenant space.

~~21.2.2.2.10~~ Approved existing horizontal-sliding or vertical-rolling fire doors shall be permitted in the means of egress where they comply with all of the following conditions:

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

~~21.2.2.2.11~~ Revolving doors complying with 7.2.1.10 shall be permitted.

21.2.2.12* **21.2.2.6*** A door in a horizontal exit shall not be required to swing in the direction of egress travel as specified in 7.2.4.3.8.1.

21.2.2.3 Stairs.

21.2.2.3.1 Stairs complying with 7.2.2 shall be permitted.

21.2.2.3.2 Spiral stairs complying with 7.2.2.2.3 shall be permitted.

21.2.2.3.3 Winders complying with 7.2.2.2.4 shall be permitted.

21.2.2.4 Smokeproof Enclosures. Smokeproof enclosures complying with 7.2.3 shall be permitted.

21.2.2.5 Horizontal Exits. Horizontal exits complying with 7.2.4 shall be permitted.

21.2.2.6 Ramps. Ramps complying with 7.2.5 shall be permitted.

21.2.2.7 Exit Passageways. Exit passageways complying with 7.2.6 shall be permitted.

21.2.2.8 Escalators and Moving Walks. Escalators and moving walks complying with 7.2.7 shall be permitted.

21.2.2.9 Fire Escape Stairs. Fire escape stairs complying with 7.2.8 shall be permitted.

21.2.2.10 Fire Escape Ladders. Fire escape ladders complying with 7.2.9 shall be permitted.

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

21.2.2.12 Areas of Refuge.

21.2.2.12.1 Areas of refuge complying with 7.2.12 shall be permitted.

21.2.2.12.2 In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1), two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge in 3.3.22 shall not be required.

21.2.3 Capacity of Means of Egress.

21.2.3.1 The capacity of any required means of egress shall be determined in accordance with the provisions of Section 7.3 ~~39.2.3~~.

21.2.3.2 Street floor exits shall be sufficient for the occupant load of the street floor plus the required capacity of open stairs, ramps, escalators, and moving walks discharging through the street floor.

21.2.3.3 ~~21.2.3.2~~ The clear width of any corridor or passageway required for exit access shall be not less than 44 in. (1120 mm).

21.2.3.4 ~~21.2.3.3~~ Where minimum corridor width is 6 ft (1830 mm), projections not more than 6 in. (150 mm) from the corridor wall, above the handrail height, shall be permitted for the installation of hand-rub dispensing units in accordance with 21.3.2.8 ~~21.3.2.6~~.

21.2.3.5 ~~21.2.3.4~~ Doors in the means of egress from diagnostic or treatment areas, such as x-ray, surgical, or physical therapy, shall provide a clear width of not less than 32 in. (810 mm), unless such doors are existing 34 in. (865 mm) doors.

21.2.4 Number of Means of Egress.

21.2.4.1 The number of means of egress shall be in accordance with 7.4.1.1 and 7.4.1.3 through 7.4.1.6.

21.2.4.2 Not less than two exits of the types described in 21.2.2 ~~39.2.2~~ that are remotely located from each other shall be provided for each floor or fire section of the building.

21.2.4.3 Any patient care room and any patient care suite of rooms of more than 2500 ft² (232 m²) shall have not less than two exit access doors remotely located from each other.

21.2.4.4 Not less than two exits of the types described in 21.2.2 ~~39.2.2~~ shall be accessible from each smoke compartment.

21.2.4.5 Egress from smoke compartments addressed in 21.2.4.4 shall be permitted through adjacent compartments provided that the two required egress paths are arranged so that both do not pass through the same adjacent smoke compartment ~~but shall not require return through the compartment of fire origin.~~

21.2.5 Arrangement of Means of Egress. See ~~39.2.5~~.

21.2.5.1 Means of egress shall be arranged in accordance with Section 7.5.

21.2.5.2 Dead-end corridors shall not exceed 50 ft (15 m).

21.2.5.3 Limitations on common path of travel shall be in accordance with 21.2.5.3.1, 21.2.5.3.2, and 21.2.5.3.3.

21.2.5.3.1 Common path of travel shall not exceed 100 ft (30 m) on a story protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1).

21.2.5.3.2 Common path of travel shall not be limited in a single-tenant space with an occupant load not exceeding 25 people.

21.2.5.3.3 In buildings other than those complying with 21.2.5.3.1 or 21.2.5.3.2, common path of travel shall not exceed 75 ft (23 m).

21.2.6 Travel Distance to Exits.

21.2.6.1 Travel distance shall be measured in accordance with Section 7.6.

21.2.6.2 Travel distance shall comply with 21.2.6.2.1 and 21.2.6.2.2.

21.2.6.2.1 The travel distance between any point in a room and an exit shall not exceed 150 ft (46 m).

21.2.6.2.2 The maximum travel distance in 21.2.6.2.1 shall be permitted to be increased by 50 ft (15 m) in buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.

21.2.7 Discharge from Exits. ~~See 39.2.7.~~ Exit discharge shall comply with Section 7.7.

21.2.8 Illumination of Means of Egress. Means of egress shall be illuminated in accordance with Section 7.8.

21.2.9 Emergency Lighting and Essential Electrical Systems.

21.2.9.1 Emergency lighting shall be provided in accordance with Section 7.9.

21.2.9.2 Where general anesthesia or life-support equipment is used, each ambulatory health care facility shall be provided with an essential electrical system in accordance with NFPA 99, *Health Care Facilities Code*, unless otherwise permitted by one of the following:

- (1) Where battery-operated equipment is provided and acceptable to the authority having jurisdiction
- (2) Where a facility uses life-support equipment for emergency purposes only

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

21.2.11 Special Means of Egress Features.

21.2.11.1 Reserved.

21.2.11.2 Lockups. Lockups in ambulatory health care occupancies, other than approved existing lockups, shall comply with the requirements of 23.4.5.

21.3 Protection.

21.3.1 Protection of Vertical Openings. ~~See 39.3.1.~~

21.3.1.1 Vertical openings shall be enclosed or protected in accordance with Section 8.6, unless otherwise permitted by any of the following:

- (1) Unenclosed vertical openings in accordance with 8.6.9.1 shall be permitted.
- (2) Unprotected vertical openings shall be permitted in buildings complying with all of the following:
 - (a) Where protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1)
 - (b) Where no unprotected vertical opening serves as any part of any required means of egress
 - (c) Where required exits consist of exit doors that discharge directly to the finished ground level in accordance with 7.2.1, outside stairs in accordance with 7.2.2, smokeproof enclosures in accordance with 7.2.3, or horizontal exits in accordance with 7.2.4

21.3.1.2 Floors that are below the street floor and are used for storage or other than an ambulatory health care occupancy shall have no unprotected openings to ambulatory health care occupancy floors.

21.3.2 Protection from Hazards. See 39.3.2.

21.3.2.1* General. Hazardous areas including, but not limited to, areas used for general storage, boiler or furnace rooms, and maintenance shops that include woodworking and painting areas shall be protected in accordance with Section 8.7.

21.3.2.2 ~~21.3.2.1~~ Doors. Doors to hazardous areas shall be self-closing or automatic-closing in accordance with 21.2.2.2.2 ~~21.2.2.4~~.

21.3.2.3* High Hazard Contents Areas. High hazard contents areas, as classified in Section 6.2, shall meet all of the following criteria:

- (1) The area shall be separated from other parts of the building by fire barriers having a minimum 1-hour fire resistance rating, with all openings therein protected by self-closing fire door assemblies having a minimum ¾-hour fire protection rating.
- (2) The area shall be protected by an automatic extinguishing system in accordance with 9.7.1.1(1) or 9.7.1.2.

21.3.2.4 ~~21.3.2.2~~ Laboratories. Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered as a severe hazard shall be protected in accordance with NFPA 99, *Health Care Facilities Code*.

21.3.2.5 ~~21.3.2.3~~ Anesthetizing Locations. Anesthetizing locations shall be protected in accordance with NFPA 99, *Health Care Facilities Code*.

21.3.2.6 ~~21.3.2.4~~ Cooking Facilities. Cooking facilities shall be protected in accordance with 9.2.3, unless otherwise permitted by 21.3.2.7 ~~21.3.2.5~~.

21.3.2.7 ~~21.3.2.5~~ Domestic Cooking Equipment. Where domestic cooking equipment is used for food warming or limited cooking, protection or separation of food preparation facilities shall not be required.

21.3.2.8* ~~21.3.2.6*~~ Alcohol-Based Hand-Rub Dispensers. Alcohol-based hand-rub dispensers shall be protected in accordance with 8.7.3.1, unless all of the following conditions are met:

- (1) Where dispensers are installed in a corridor, the corridor shall have a minimum width of 6 ft (1830 mm).
- (2) The maximum individual dispenser fluid capacity shall be as follows:
 - (a) 0.32 gal (1.2 L) for dispensers in rooms, corridors, and areas open to corridors
 - (b) 0.53 gal (2.0 L) for dispensers in suites of rooms
- (3) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.

- (4) Dispensers shall be separated from each other by horizontal spacing of not less than 48 in. (1220 mm).
- (5) Not more than an aggregate 10 gal (37.8 L) of alcohol-based hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg), shall be in use outside of a storage cabinet in a single smoke compartment, except as otherwise provided in 21.3.2.8(6) ~~21.3.2.6(6)~~.
- (6) One dispenser per room complying with 21.3.2.8 (2) or (3) ~~21.3.2.6(2) or (3)~~, and located in the room, shall not be required to be included in the aggregated quantity specified in 21.3.2.8(5) ~~21.3.2.6(5)~~.
- (7) Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment shall meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*.
- (8) Dispensers shall not be installed in the following locations:
 - (a) Above an ignition source within a 1 in. (25 mm) horizontal distance from each side of the ignition source
 - (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source
 - (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source
- (9) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.
- (10) The alcohol-based hand-rub solution shall not exceed 95 percent alcohol content by volume.
- (11) Operation of the dispenser shall comply with the following criteria:
 - (a) The dispenser shall not release its contents except when the dispenser is activated, either manually or automatically by touch-free activation.
 - (b) Any activation of the dispenser shall occur only when an object is placed within 4 in. (100 mm) of the sensing device.
 - (c) An object placed within the activation zone and left in place shall not cause more than one activation.
 - (d) The dispenser shall not dispense more solution than the amount required for hand hygiene consistent with label instructions.
 - (e) The dispenser shall be designed, constructed, and operated in a manner that ensures that accidental or malicious activation of the dispensing device is minimized.
 - (f) The dispenser shall be tested in accordance with the manufacturer's care and use instructions each time a new refill is installed.

21.3.3 Interior Finish. ~~See 39.3.3.~~

21.3.3.1 General. Interior finish shall be in accordance with Section 10.2.

21.3.3.2 Interior Wall and Ceiling Finish.

21.3.3.2.1 Interior wall and ceiling finish materials complying with Section 10.2 shall be Class A or Class B in exits and in exit access corridors.

21.3.3.2.2 Interior wall and ceiling finishes shall be Class A, Class B, or Class C in areas other than those specified in 21.3.3.2.1.

21.3.3.3 Interior Floor Finish. (No requirements.)

21.3.4 Detection, Alarm, and Communications Systems.

21.3.4.1 General. Ambulatory health care facilities shall be provided with fire alarm systems in accordance with Section 9.6, except as modified by 21.3.4.2 through 21.3.4.4.

21.3.4.2 Initiation. Initiation of the required fire alarm systems shall be by manual means in accordance with 9.6.2 and by means of any detection devices or detection systems required.

21.3.4.3 Notification. Positive alarm sequence in accordance with 9.6.3.4 shall be permitted.

21.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically, without delay, in accordance with 9.6.3 upon operation of any fire alarm activating device.

21.3.4.3.2 Emergency Forces Notification.

21.3.4.3.2.1 Fire department notification shall be accomplished in accordance with 9.6.4.

21.3.4.3.2.2 Smoke detection devices or smoke detection systems equipped with reconfirmation features shall not be required to automatically notify the fire department, unless the alarm condition is reconfirmed after a period not exceeding 120 seconds.

21.3.4.4 Fire Safety Functions. Operation of any activating device in the required fire alarm system shall be arranged to accomplish automatically, without delay, any control functions required to be performed by that device. (*See 9.6.5.*)

21.3.5 Extinguishment Requirements. ~~See 39.3.5.~~

21.3.5.1 Isolated hazardous areas shall be permitted to be protected in accordance with 9.7.1.2.

21.3.5.2 For new installations in existing ambulatory health care facilities, where more than two sprinklers are installed in a single area for protection in accordance with 9.7.1.2, waterflow detection shall be provided to sound the building fire alarm or to notify, by a signal, any constantly attended location, such as PBX, security, or emergency room, at which the necessary corrective action shall be taken.

21.3.5.3 Portable fire extinguishers shall be provided in ambulatory health care facilities in accordance with 9.7.4.1.

21.3.6 Corridors. (No requirements.)

21.3.7 Subdivision of Building Space.

21.3.7.1 Ambulatory health care facilities shall be separated from other tenants and occupancies and shall meet all of the following requirements:

- (1) Walls shall have not less than a 1-hour fire resistance rating and shall extend from the floor slab below to the floor or roof slab above.
- (2) Doors shall be constructed of not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be equipped with positive latches.
- (3) Doors shall be self-closing and shall be kept in the closed position, except when in use.
- (4) Any windows in the barriers shall be of fixed fire window assemblies in accordance with Section 8.3.

21.3.7.2 Every story of an ambulatory health care facility shall be divided into not less than two smoke compartments, unless otherwise permitted by one of the following:

- (1) This requirement shall not apply to facilities of less than 5000 ft² (465 m²) that are protected by an approved automatic smoke detection system.
- (2) This requirement shall not apply to facilities of less than 10,000 ft² (929 m²) that are protected throughout by an approved, supervised automatic sprinkler system installed in accordance with Section 9.7.
- (3) An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for an ambulatory health care facility if all of the following criteria are met:
 - (a) The separating wall and both compartments meet the requirements of 21.3.7.
 - (b) The ambulatory health care facility is less than 22,500 ft² (2100 m²).
 - (c) Access from the ambulatory health care facility to the other occupancy is unrestricted.

21.3.7.3 Reserved.

21.3.7.4 Reserved.

21.3.7.5 Required smoke barriers shall be constructed in accordance with Section 8.5 and shall have a minimum ½-hour fire resistance rating, unless otherwise permitted by 21.3.7.6.

21.3.7.6 Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air-conditioning systems where adjacent smoke compartments are protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.

21.3.7.7 Windows in the smoke barrier shall be of fixed fire window assemblies in accordance with Section 8.3.

21.3.7.8 Reserved.

21.3.7.9* Doors in smoke barriers shall be not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be self-closing or automatic-closing in accordance with 21.2.2.4.

21.3.7.10 Latching hardware shall not be required on smoke barrier cross-corridor doors, and doors shall not be required to swing in the direction of egress travel.

21.4 Special Provisions. See Section 39.4.

21.4.1 Limited Access or Underground Buildings. See Section 11.7.

21.4.2 High-Rise Buildings.

21.4.2.1 All high-rise ambulatory health care occupancy buildings shall be provided with a reasonable degree of safety from fire, and such degree of safety shall be accomplished by one of the following means:

(1) Installation of a complete, approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)

(2) Installation of an engineered life safety system complying with all of the following:

(a) The engineered life safety system shall be developed by a registered professional engineer experienced in fire and life safety systems design.

(b) The life safety system shall be approved by the authority having jurisdiction and shall be permitted to include any or all of the following systems:

i. Partial automatic sprinkler protection

ii. Smoke detection alarms

iii. Smoke control

iv. Compartmentation

v. Other approved systems

21.4.2.2* A limited, but reasonable, time shall be permitted for compliance with any part of 21.4.2.1, commensurate with the magnitude of expenditure and the disruption of services.

21.4.2.3 In addition to the requirements of 21.4.2.1 and 21.4.2.2, all buildings, regardless of height, shall comply with all other applicable provisions of this chapter.

21.5 Building Services.

21.5.1 Utilities.

21.5.1.1 Utilities shall comply with the provisions of Section 9.1.

21.5.1.2 Existing installations shall be permitted to be continued in service, provided that the systems do not present a serious hazard to life.

21.5.2 Heating, Ventilating, and Air-Conditioning.

21.5.2.1 Heating, ventilating, and air-conditioning shall comply with the provisions of Section 9.2 and shall be in accordance with the manufacturer's specifications, unless otherwise modified by 21.5.2.2.

21.5.2.2 If fuel-fired, heating devices shall comply with all of the following:

- (1) They shall be chimney connected or vent connected.
- (2) They shall take air for combustion directly from the outside.
- (3) They shall be designed and installed to provide for complete separation of the combustion system from the atmosphere of the occupied area.

21.5.2.2.1 Any heating device shall have safety features to immediately stop the flow of fuel and shut down the equipment in case of either excessive temperature or ignition failure.

21.5.2.2.2 Approved, suspended unit heaters shall be permitted in locations other than means of egress and patient treatment areas, provided that both of the following criteria are met:

- (1) Such heaters are located high enough to be out of the reach of persons using the area.
- (2) Such heaters are equipped with the safety features required by 21.5.2.2.1.

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

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

21.6 Reserved.

21.7* Operating Features.

21.7.1 Evacuation and Relocation Plan and Fire Drills.

21.7.1.1 The administration of every ambulatory health care facility shall have, in effect and available to all supervisory personnel, written copies of a plan for the protection of all persons in the event of fire, for their evacuation to areas of refuge, and for their evacuation from the building when necessary.

21.7.1.2 All employees shall be periodically instructed and kept informed with respect to their duties under the plan required by 21.7.1.1.

21.7.1.3 A copy of the plan required by 21.7.1.1 shall be readily available at all times in the telephone operator's location or at the security center.

21.7.1.4* Fire drills in ambulatory health care facilities shall include the transmission of a fire alarm signal and simulation of emergency fire conditions.

21.7.1.5 Patients shall not be required to be moved during drills to safe areas or to the exterior of the building.

21.7.1.6 Drills shall be conducted quarterly on each shift to familiarize facility personnel (nurses, interns, maintenance engineers, and administrative staff) with the signals and emergency action required under varied conditions.

21.7.1.7 When drills are conducted between 9:00 p.m. and 6:00 a.m. (2100 hours and 0600 hours), a coded announcement shall be permitted to be used instead of audible alarms.

21.7.1.8 Employees of ambulatory health care facilities shall be instructed in life safety procedures and devices.

21.7.2 Procedure in Case of Fire.

21.7.2.1* Protection of Patients.

21.7.2.1.1 For ambulatory health care facilities, the proper protection of patients shall require the prompt and effective response of ambulatory health care personnel.

21.7.2.1.2 The basic response required of staff shall include the following:

- (1) Removal of all occupants directly involved with the fire emergency
- (2) Transmission of an appropriate fire alarm signal to warn other building occupants and summon staff
- (3) Confinement of the effects of the fire by closing doors to isolate the fire area
- (4) Relocation of patients as detailed in the facility's fire safety plan

21.7.2.2 Fire Safety Plan. A written fire safety plan shall provide for all of the following:

- (1) Use of alarms
- (2) Transmission of alarms to fire department
- (3) Response to alarms
- (4) Isolation of fire
- (5) Evacuation of immediate area
- (6) Evacuation of smoke compartment
- (7) Preparation of floors and building for evacuation
- (8) Extinguishment of fire

21.7.2.3 Staff Response.

21.7.2.3.1 All personnel shall be instructed in the use of and response to fire alarms.

21.7.2.3.2 All health care personnel shall be instructed in the use of the code phrase to ensure transmission of an alarm under any of the following conditions:

- (1) When the individual who discovers a fire must immediately go to the aid of an endangered person
- (2) During a malfunction of the building fire alarm system

21.7.2.3.3 Personnel hearing the code announced shall first activate the building fire alarm using the nearest fire alarm box and then shall execute immediately their duties as outlined in the fire safety plan.

21.7.3 Maintenance of Exits.

21.7.3.1 Proper maintenance shall be provided to ensure the dependability of the method of evacuation selected.

21.7.3.2 Ambulatory health care occupancies that find it necessary to lock exits shall, at all times, maintain an adequate staff qualified to release locks and direct occupants from the immediate danger area to a place of safety in case of fire or other emergency.

21.7.4* Smoking. Smoking regulations shall be adopted and shall include not less than the following provisions:

- (1) Smoking shall be prohibited in any room, ward, or compartment where flammable liquids, combustible gases, or oxygen is used or stored and in any other hazardous location, and such areas shall be posted with signs that read NO SMOKING or shall be posted with the international symbol for no smoking.
- (2) In ambulatory health care facilities where smoking is prohibited and signs are placed at all major entrances, secondary signs with language that prohibits smoking shall not be required.
- (3) Smoking by patients classified as not responsible shall be prohibited.
- (4) The requirement of 21.7.4(3) shall not apply where the patient is under direct supervision.
- (5) Ashtrays of noncombustible material and safe design shall be provided in all areas where smoking is permitted.
- (6) Metal containers with self-closing cover devices into which ashtrays can be emptied shall be readily available to all areas where smoking is permitted.

21.7.5 Furnishings, Mattresses, and Decorations.

21.7.5.1* Draperies, curtains and other loosely hanging fabrics and films serving as furnishings or decorations in ambulatory health care occupancies shall be in accordance with the provisions of 10.3.1, and the following also shall apply:

- (1) Such curtains shall include cubicle curtains.
- (2) Such curtains shall not include curtains at showers.

21.7.5.2 Newly introduced upholstered furniture shall comply with 10.3.2.1 and one of the following provisions:

- (1) The furniture shall meet the criteria specified in 10.3.3.
- (2) The furniture shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).

21.7.5.3 Newly introduced mattresses shall comply with 10.3.2.2 and one of the following provisions:

- (1) The mattresses shall meet the criteria specified in 10.3.4.
- (2) The mattresses shall be in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1).

21.7.5.4 Combustible decorations shall be prohibited, unless one of the following criteria is met:

- (1) They are flame-retardant.
- (2) The decorations meet the requirements of NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.
- (3) The decorations exhibit a heat release rate not exceeding 100 kW when tested in accordance with NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, using the 20 kW ignition source.
- (4) They are decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present.

21.7.5.5 Soiled Linen and Trash Receptacles.

21.7.5.5.1 Soiled linen or trash collection receptacles shall not exceed 32 gal (121 L) in capacity, and all of the following also shall apply:

- (1) The average density of container capacity in a room or space shall not exceed 0.5 gal/ft² (20.4 L/m²).
- (2) A capacity of 32 gal (121 L) shall not be exceeded within any 64 ft² (6 m²) area.
- (3) Mobile soiled linen or trash collection receptacles with capacities greater than 32 gal (121 L) shall be located in a room protected as a hazardous area when not attended.
- (4) Container size and density shall not be limited in hazardous areas.

21.7.5.5.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 21.7.5.5.1 where all the following conditions are met:

(1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 21.7.5.5.2(2) or (3).

(2)* Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.

(3) Container size shall not be limited in hazardous areas.

(4) Containers for combustibles shall be labeled and listed as meeting the requirements of FM Approval Standard 6921, *Containers for Combustible Waste*; however, such testing, listing, and labeling shall not be limited to FM Approvals.

21.7.5.5.3 ~~21.7.5.5.2~~ The provisions of 10.3.9, applicable to containers for rubbish, waste, or linen, shall not apply.

21.7.6 Maintenance and Testing. See 4.6.12.

21.7.7* Engineered Smoke Control Systems.

21.7.7.1 New engineered smoke control systems shall be tested in accordance with established engineering principles and shall meet the performance requirements of such testing prior to acceptance.

21.7.7.2 Following acceptance, all engineered smoke control systems shall be tested periodically in accordance with recognized engineering principles.

21.7.7.3 Test documentation shall be maintained on the premises at all times.

21.7.8 Portable Space-Heating Devices. Portable space-heating devices shall be prohibited in all ambulatory health care occupancies, unless both of the following criteria are met:

- (1) Such devices are used only in nonsleeping staff and employee areas.
- (2) The heating elements of such devices do not exceed 212°F (100°C).

21.7.9 Construction, Repair, and Improvement Operations.

21.7.9.1 Construction, repair, and improvement operations shall comply with 4.6.10.

21.7.9.2 The means of egress in any area undergoing construction, repair, or improvements shall be inspected daily for compliance with 7.1.10.1 and shall also comply with NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*.

A.21.1.1.1.6 ~~**A.21.1.1.1.8**~~ The *Code* recognizes that certain functions necessary for the life safety of building occupants, such as the closing of corridor doors, the operation of manual fire alarm devices, and the removal of patients from the room of fire origin, require the intervention of facility staff. It is not the intent of 21.1.1.1.6 ~~21.1.1.1.8~~ to specify the levels or locations of staff necessary to meet this requirement.

A.21.1.1.2 This objective is accomplished in the context of the physical facilities, the type of activities undertaken, the provisions for the capabilities of staff, and the needs of all occupants through requirements directed at the following:

- (1) Prevention of ignition

- (2) Detection of fire
- (3) Control of fire development
- (4) Confinement of the effects of fire
- (5) Extinguishment of fire
- (6) Provision of refuge or evacuation facilities, or both
- (7) Staff reaction

A.21.1.3.2 Doctors' offices and treatment and diagnostic facilities that are intended solely for outpatient care and are physically separated from facilities for the treatment or care of inpatients, but that are otherwise associated with the management of an institution, might be classified as business occupancies rather than health care occupancies.

A.21.2.2.2.4 The words "principal entrance/exit doors" describe doors that the authority having jurisdiction can reasonably expect to be unlocked in order for the facility to do business.

A.21.2.2.12 ~~**A.21.2.2.6**~~ The waiver of the requirement for doors to swing in the direction of egress travel is based on the assumption that, in this occupancy, there is little possibility of a panic rush that might prevent the opening of doors that swing against egress travel.

A desirable arrangement, which is possible with corridors 6 ft (1830 mm) or more in width, is to have two 32 in. (810 mm) doors, normally closed, each swinging with the egress travel (in opposite directions).

A.21.3.2.1 It is not the intent of this provision that rooms inside individual tenant spaces that are used to store routine office supplies for that tenant be required to be either separated or sprinklered.

A.21.3.2.3 The requirement for separating high hazard contents areas from other parts of the building is intended to isolate the hazard, and 8.2.3.3 is applicable.

A.21.3.2.8 ~~**A.21.3.2.6**~~ Extensive research, including fire modeling, has indicated that alcohol-based hand-rub solutions can be safely installed in corridors of health care facilities, provided that certain other precautions are taken. The total quantities of flammable liquids in any area should comply with the provisions of other recognized codes, including NFPA 1, *Fire Code*, and NFPA 30, *Flammable and Combustible Liquids Code*. In addition, special consideration should be given to the following:

- (1) Obstructions created by the installation of hand-rub solution dispensers
- (2) Location of dispensers with regard to adjacent combustible materials and potential sources of ignition, especially where dispensers are mounted on walls of combustible construction
- (3) Requirements for other fire protection features, including complete automatic sprinkler protection, to be installed throughout the compartment
- (4) Amount and location of the flammable solutions, both in use and in storage, particularly with respect to potential for leakage or failure of the dispenser

A.21.3.7.9 Smoke barriers might include walls having door openings other than cross-corridor doors. There is no restriction in the *Code* regarding which doors or how many doors form part of a smoke barrier. For example, doors from the corridor to individual rooms are permitted to form part of a smoke barrier.

A.21.4.2.2 In some cases, appreciable cost might be involved in bringing an existing occupancy into compliance. Where this is true, it would be appropriate for the authority having jurisdiction to prescribe a schedule determined jointly with the facility, allowing suitable periods of time for the correction of the various deficiencies and giving due weight to the ability of the owner to secure the necessary funds.

A.21.7 Health care occupants have, in large part, varied degrees of physical disability, and their removal to the outside, or even their disturbance caused by moving, is inexpedient or impractical in many cases, except as a last resort. Similarly, recognizing that there might be an operating necessity for the restraint of the mentally ill, often by use of barred windows and locked doors, fire exit drills are usually extremely disturbing, detrimental, and frequently impracticable.

In most cases, fire exit drills, as ordinarily practiced in other occupancies, cannot be conducted in health care occupancies. Fundamentally, superior construction, early discovery and extinguishment of incipient fires, and prompt notification need to be relied on to reduce the occasion for evacuation of buildings of this class to a minimum.

A.21.7.1.4 Many health care occupancies conduct fire drills without disturbing patients by choosing the location of the simulated emergency in advance and by closing the doors to patients' rooms or wards in the vicinity prior to initiation of the drill. The purpose of a fire drill is to test and evaluate the efficiency, knowledge, and response of institutional personnel in implementing the facility fire emergency plan. Its purpose is not to disturb or excite patients. Fire drills should be scheduled on a random basis to ensure that personnel in health care facilities are drilled not less than once in each 3-month period.

Drills should consider the ability to move patients to an adjacent smoke compartment. Relocation can be practiced using simulated patients or empty wheelchairs.

A.21.7.2.1 Each facility has specific characteristics that vary sufficiently from other facilities to prevent the specification of a universal emergency procedure. The recommendations that follow, however, contain many of the elements that should be considered and adapted, as appropriate, to the individual facility.

Upon discovery of fire, personnel should immediately take the following action:

- (1) If any person is involved in the fire, the discoverer should go to the aid of that person, calling aloud an established code phrase, which provides for both the immediate aid of any endangered person and the transmission of an alarm.
- (2) Any person in the area, upon hearing the code called aloud, should activate the building fire alarm using the nearest manual fire alarm box.
- (3) If a person is not involved in the fire, the discoverer should activate the building fire alarm using the nearest manual fire alarm box.

- (4) Personnel, upon hearing the alarm signal, should immediately execute their duties as outlined in the facility fire safety plan.
- (5) The telephone operator should determine the location of the fire as indicated by the audible signal.
- (6) In a building equipped with an uncoded alarm system, a person on the floor of fire origin should be responsible for promptly notifying the facility telephone operator of the fire location.
- (7) If the telephone operator receives a telephone alarm reporting a fire from a floor, the operator should regard that alarm in the same fashion as an alarm received over the fire alarm system and should immediately notify the fire department and alert all facility personnel of the place of fire and its origin.
- (8) If the building fire alarm system is out of order, any person discovering a fire should immediately notify the telephone operator by telephone, and the operator should then transmit this information to the fire department and alert the building occupants.

A.21.7.4 The most rigid discipline with regard to prohibition of smoking might not be nearly as effective in reducing incipient fires from surreptitious smoking as the open recognition of smoking, with provision of suitable facilities for smoking. Proper education and training of the staff and attendants in the ordinary fire hazards and their abatement is unquestionably essential. The problem is a broad one, varying with different types and arrangements of buildings; the effectiveness of rules of procedure, which need to be flexible, depends in large part on the management.

A.21.7.5.1 In addition to the provisions of 10.3.1, which deal with ignition resistance, additional requirements with respect to the location of cubicle curtains relative to sprinkler placement are included in NFPA 13, *Standard for the Installation of Sprinkler Systems*.

A.21.7.5.5.2 It is the intent that this provision permits recycling of bottles, cans, paper and similar clean items that do not contain grease, oil, flammable liquids, or significant plastic materials using larger containers or several adjacent containers and not require locating such containers in a room protected as a hazardous area. Containers for medical records awaiting shredding are often larger than 32 gal (121 L). These containers are not to be included in the calculations and limitations of 21.7.5.5.1. There is no limit on the number of these containers, as FM Approval Standard 6921, *Containers for Combustible Waste*, ensures that the fire will not spread outside of the container. FM approval standards are written for use with FM Approvals. The tests can be conducted by any approved laboratory. The portions of the standard referring to FM Approvals are not included in this reference.

A.21.7.5.5.2(2) See 21.7.5.5.1(3).

A.21.7.7 A document that provides recognized engineering principles for the testing of smoke control systems is NFPA 92, *Standard for Smoke Control Systems*.

NFPA 5000

The following draft replaces current Chapter 20 Ambulatory Health Care Occupancies

Substantiation: The changes proposed to NFPA 5000 Chapter 20, Ambulatory Health Care Occupancies, are driven by two main goals:

1. Update the chapter to capture changes made to the companion chapter in NFPA 101 over recent revision cycles, but missed in NFPA 5000.
2. Make the chapter a stand-alone set of requirements that do not reference the use of the provisions of Chapter 28 for business occupancies. Since their inception in the 1981 edition of NFPA 101 (and 2000 edition of NFPA 5000), the provisions for ambulatory health care (AHC) occupancies have required the Code user to follow the requirements for business occupancies as modified by the provisions for AHC. That process is cumbersome and unnecessary, given that it is possible to have all applicable requirements reside in the same chapter.

Chapter 20 Ambulatory Health Care Occupancies

20.1 General Requirements.

20.1.1 Application.

20.1.1.1* General.

20.1.1.1.1 The requirements of this chapter shall apply to new buildings or portions thereof used as an ambulatory health care occupancy.

20.1.1.1.2 Administration. The provisions of Chapter 1, Administration, shall apply.

20.1.1.1.3 General. The provisions of Chapter 4, General, shall apply.

20.1.1.1.54 Buildings, or sections of buildings, that primarily house patients who, in the opinion of the governing body of the facility and the governmental agency having jurisdiction, are capable of judgment and appropriate physical action for self-preservation under emergency conditions shall be permitted to comply with chapters of this Code other than Chapter 20.

20.1.1.1.65 It shall be recognized that the requirements of this chapter are based on the assumption that staff is available in all patient-occupied areas to perform certain fire safety functions.

20.1.1.2* Goals and Objectives. The goals and objectives of Sections 4.1 and 4.2 shall be met with due consideration for functional requirements, which are accomplished by limiting the

development and spread of a fire emergency to the room of fire origin and reducing the need for occupant evacuation, except from the room of fire origin.

20.1.1.3 Total Concept.

20.1.1.3.1 All ambulatory health care facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

20.1.1.3.2 Because the safety of ambulatory health care occupants cannot be ensured adequately by dependence on evacuation of the building, their protection from fire shall be provided by appropriate arrangement of facilities; adequate, trained staff; and development of operating and maintenance procedures composed of the following:

- (1) Design, construction, and compartmentation
- (2) Provision for detection, alarm, and extinguishment
- (3) Fire prevention and planning, training, and drilling programs for the isolation of fire, transfer of occupants to areas of refuge, or evacuation of the building

20.1.1.4-24 Additions, Conversions, Modernization, Renovation, and Construction Operations.

20.1.1.4.1 Repairs, renovations, modifications, additions, and reconstruction of an ambulatory health care occupancy, and changes of use, including change of occupancy classification to an ambulatory health care occupancy, or correction of a damaged or unsafe portion of the building containing the ambulatory health care occupancy, shall comply with one of the following:

- (1) Provisions of this chapter
- (2) Provisions of Chapter 15

~~**20.1.1.1.3**~~**20.1.1.4.2** The requirements of Chapter 20, where referenced by Chapter 15, shall not apply to additions classified as occupancies other than ambulatory health care that are separated from the ambulatory health care occupancy in accordance with 20.1.3.2 ~~20.1.2.2~~ and conform to the requirements for the specific occupancy in accordance with Chapters 16 through 19 and Chapters 21 through 30, as appropriate.

~~**20.1.1.1.4**~~ Ambulatory health care facilities shall comply with the provisions of Chapter 28 or this chapter, whichever are more stringent.

~~**20.1.1.1.5**~~ Buildings, or sections of buildings, that primarily house patients who, in the opinion of the governing body of the facility and the governmental agency having jurisdiction, are capable of judgment and appropriate physical action for self preservation under emergency conditions shall be permitted to comply with chapters of this *Code* other than Chapter 20.

~~**20.1.1.1.6**~~ It shall be recognized that the requirements of this chapter are based on the assumption that staff is available in all patient occupied areas to perform certain fire safety functions.

20.1.2 Classification of Occupancy. See 6.1.6 and 20.1.4.2.

~~20.1.1.2–2.1~~ Changes of Occupancy. A change from a hospital or nursing home to an ambulatory health care occupancy shall not be considered a change in occupancy or occupancy subclassification.

20.1.23 Multiple Occupancies.

~~20.1.2.13.1~~ Multiple occupancies shall be in accordance with Section 6.2 and 20.1.23. Where there are differences in the specific requirements in this chapter and provisions for mixed occupancies or separated occupancies as specified in 6.2.3 and 6.2.4, the requirements of this chapter shall apply. (*See 4.3.2.3.*)

~~20.1.2.23.2~~* Sections of ambulatory health care facilities shall be permitted to be classified as other occupancies, provided that they meet both of the following conditions:

- (1) They are not intended to serve ambulatory health care occupants for purposes of treatment or customary access by patients incapable of self-preservation.
- (2) They are separated from areas of ambulatory health care occupancies by construction having a fire resistance rating of not less than 1 hour.

~~20.1.2.33.3~~ All means of egress from ambulatory health care occupancies that traverse nonambulatory health care spaces shall conform to requirements of this *Code* for ambulatory health care occupancies, unless otherwise permitted by 20.1.3.4.

~~20.1.2.43.4~~ Egress through a horizontal exit into other contiguous occupancies that do not conform with ambulatory health care egress provisions, but that do comply with requirements set forth in the appropriate occupancy chapter of this *Code*, shall be permitted, provided that the occupancy does not contain high hazard contents exceeding the maximum allowable quantities (MAQ) per control area as set forth in 34.1.3, other than Level 4 hazardous areas.

~~20.1.2.53.5~~ Egress provisions for areas of ambulatory health care facilities that correspond to other occupancies shall meet the corresponding requirements of this *Code* for such occupancies. Where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use.

~~20.1.2.6–3.6~~ Any area with a hazard of contents classified higher than that of the ambulatory health care occupancy and located in the same building shall be protected as required in 20.3.2.

~~20.1.2.73.7~~ Non-health care–related occupancies classified as containing high hazard contents exceeding the MAQ per control area as set forth in 34.1.3 shall not be permitted in buildings housing ambulatory health care occupancies.

~~20.1.3~~ Classification of Occupancy. Classification of occupancy shall be in accordance with ~~6.1.6~~.

20.1.4 Definitions.

20.1.4.1 General. For definitions, see Chapter 3, Definitions.

20.1.4.2 Definition — Ambulatory Health Care Occupancy. See 3.3.444.1.

20.1.45 Classification of Hazard of Contents.

20.1.45.1 Hazard of contents shall be classified in accordance with 6.3.2.

20.1.45.2 Buildings or areas in which high hazard contents are stored, used, or handled shall comply with Chapter 34.

~~20.1.5 Reserved.~~

20.1.6 Minimum Construction Requirements.

20.1.6.1 Construction shall be in accordance with all of the following, except as modified by 20.1.6.2 and 20.1.6.36:

- (1) Chapter 7, Construction Types and Height and Area Requirements
- (2) Chapter 8, Fire-Resistive Materials and Construction
- (3) Chapter 13, Encroachments into the Public Right-of-Way
- (4) Chapter 14, Safeguards During Construction
- (5) Chapter 31, Occupancies in Special Structures
- (6) Chapter 35, Structural Design
- (7) Chapter 36, Soils, Foundations, and Retaining Walls
- (8) Chapter 37, Exterior Wall Construction
- (9) Chapter 38, Roof Assemblies and Roof Structures
- (10) Chapter 39, Flood-Resistant Design and Construction
- (11) Chapter 40, Quality Assurance During Construction

20.1.6.2 Any level below the level of exit discharge shall be separated from the level of exit discharge by not less than Type II(111), Type III(211), or Type V(111) construction, unless both of the following criteria are met:

- (1) Such levels are under the control of the ambulatory health care facility.
- (2) Any hazardous spaces are protected in accordance with Section 8.15.

20.1.6.3 Interior nonbearing walls in buildings of Type I or Type II construction shall be constructed of noncombustible or limited-combustible materials, unless otherwise permitted by 20.1.6.4.

20.1.6.4 Interior nonbearing walls required to have a minimum 2-hour fire resistance rating shall be permitted to be fire-retardant-treated wood enclosed within noncombustible or limited-combustible materials, provided that such walls are not used as shaft enclosures.

20.1.6.5 All buildings with more than one level below the level of exit discharge shall have all such lower levels separated from the level of exit discharge by not less than Type II(111) construction.

20.1.6.6 Where new ambulatory health care occupancies are located in existing buildings, the authority having jurisdiction shall be permitted to accept construction systems of lesser fire resistance than those required by 20.1.6.1 through 20.1.6.5, provided that it can be demonstrated to the authority's satisfaction that prompt evacuation of the facility can be achieved in case of fire or that the exposing occupancies and materials of construction present no threat of fire penetration from such occupancy to the ambulatory health care facility or to the collapse of the structure.

~~**20.1.6.2**— A single level below the level of exit discharge shall be permitted, provided that it complies with one of the following:~~

- ~~(1) The level is separated from the level of exit discharge by not less than Type II(111), Type III(211), or Type V(111) construction.~~
- ~~(2) The level is under the control of the ambulatory health care facility, and any hazardous areas on the level are protected in accordance with Chapter 34.~~

~~**20.1.6.3**— Buildings with more than one level below the level of exit discharge shall have all such lower levels separated from the level of exit discharge by not less than Type II(111) construction.~~

20.1.7 Occupant Load. ~~The occupant load shall be in accordance with 28.1.6. The occupant load, in number of persons for whom means of egress and other provisions are required, shall be determined on the basis of the occupant load factors of Table 11.3.1.2 that are characteristic of the use of the space, or shall be determined as the maximum probable population of the space under consideration, whichever is greater.~~

20.1.8 Accessibility. Accessibility shall be in accordance with Chapter 12.

20.2 Means of Egress Requirements.

20.2.1 General. Every aisle, passageway, corridor, exit discharge, exit location, and access shall be in accordance with Chapter 11, unless otherwise modified by 20.2.2 through 20.2.11.

20.2.2 Means of Egress Components.

~~**20.2.2.1 General.** Components of means of egress shall be limited to the types described in 28.2.2.~~ **Components Permitted.** Means of egress components shall be limited to the types described in 20.2.2.2 through 20.2.2.12.

20.2.2.2 Doors.

20.2.2.2.1 Doors complying with 11.2.1 shall be permitted.

~~**20.2.2.2.2**~~ **20.2.2.2.5** Any door required to be self-closing shall be permitted to be held open only by an automatic release device that complies with 11.2.1.8.2. The required manual fire alarm system and the systems required by 11.2.1.8.2 shall be arranged to initiate the closing action of all such doors throughout the smoke compartment or throughout the entire facility.

~~20.2.2.2.3~~ ~~20.2.2.2.6~~ Where doors in a stair enclosure are held open by an automatic release device as permitted in ~~20.2.2.2.2~~ ~~20.2.2.2.5~~, initiation of a door-closing action on any level shall cause all doors at all levels in the stair enclosure to close.

20.2.2.2.4* Locks complying with 11.2.1.5.6 shall be permitted only on principal entrance/exit doors.

20.2.2.2.5 ~~20.2.2.2.1~~ Delayed-egress locks complying with 11.2.1.6.1 shall be permitted, provided that not more than one device is located in any egress paths.

20.2.2.2.6 ~~20.2.2.2.2~~ Access-controlled egress doors complying with 11.2.1.6.2 shall be permitted.

20.2.2.2.7 ~~20.2.2.2.3~~ Elevator lobby exit access door locking in accordance with 11.2.1.6.3 shall be permitted.

20.2.2.2.8 Horizontal or vertical security grilles or doors complying with 11.2.1.4.1(3) shall be permitted to be used as part of the required means of egress from a tenant space.

20.2.2.2.9 Revolving doors complying with 11.2.1.10 shall be permitted.

~~20.2.2.2.4~~ Door locking arrangements shall be permitted where the clinical needs of the patients require specialized security measures for their safety, provided that keys are carried by staff at all times.

~~20.2.2.2.5~~ Any door required to be self-closing shall be permitted to be held open only by an automatic release device that complies with 11.2.1.8.2. The required manual fire alarm system and the systems required by 11.2.1.8.2 shall be arranged to initiate the closing action of all such doors throughout the smoke compartment or throughout the entire facility.

~~20.2.2.2.6~~ Where doors in a stair enclosure are held open by an automatic release device as permitted in ~~20.2.2.2.5~~, initiation of a door-closing action on any level shall cause all doors at all levels in the stair enclosure to close.

20.2.2.3 Stairs.

20.2.2.3.1 Stairs complying with 11.2.2 shall be permitted.

20.2.2.3.2 Spiral stairs complying with 11.2.2.2.3 shall be permitted.

20.2.2.4 Smokeproof Enclosures. Smokeproof enclosures complying with 11.2.3 shall be permitted.

20.2.2.5 Horizontal Exits. Horizontal exits complying with 11.2.4 shall be permitted.

20.2.2.6 Ramps. Ramps complying with 11.2.5 shall be permitted.

20.2.2.7 Exit Passageways. Exit passageways complying with 11.2.6 shall be permitted.

20.2.2.8 Reserved.

20.2.2.9 Reserved.

20.2.2.10 Fire Escape Ladders. Fire escape ladders complying with 11.2.9 shall be permitted.

20.2.2.11 Alternating Tread Devices. Alternating tread devices complying with 11.2.11 shall be permitted.

20.2.2.12 Areas of Refuge.

20.2.2.12.1 Areas of refuge complying with 11.2.12 shall be permitted.

20.2.2.12.2 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, and 55.3.2, two rooms or spaces separated from each other by smoke-resistant partitions in accordance with the definition of area of refuge shall not be required. (See 3.3.36, *Area of Refuge*.)

20.2.3 Capacity of Means of Egress.

20.2.3.1 The capacity of any required means of egress shall be determined in accordance with the provisions of ~~28.2.3~~ and Section 11.3.

20.2.3.2 Street floor exits shall be sufficient for the occupant load of the street floor plus the required capacity of open stairs and ramps discharging through the street floor.

20.2.3.3 ~~20.2.3.2~~ The clear width of any corridor or passageway required for exit access shall be not less than 44 in. (1120 mm).

20.2.3.4 ~~20.2.3.3~~ Where minimum corridor width is 6 ft (1830 mm), projections of maximum 6 in. (150 mm) from the corridor wall, above the handrail height, shall be permitted for the installation of hand-rub dispensing units in accordance with 20.3.2.7 ~~20.3.2.4~~.

20.2.3.4 Doors in the means of egress from diagnostic or treatment areas, such as x-ray, surgical, or physical therapy, shall provide a clear width of not less than 32 in. (810 mm).

20.2.4 Number of Means of Egress.

20.2.4.1 The number of means of egress shall be in accordance with Section 11.4 ~~7.4~~.

20.2.4.2 Not less than two exits of the types described in 20.2.2 ~~28.2.2~~ that are remotely located from each other shall be provided for each floor or fire section of the building.

20.2.4.3 Any patient care room, and any patient care suite of rooms, of more than 2500 ft² (232 m²) shall have not less than two exit access doors remotely located from each other.

20.2.4.4 Not less than two exits of the types described in 20.2.2 ~~28.2.2~~ shall be accessible from each smoke compartment.

20.2.4.5 Egress shall be permitted through adjacent compartments provided that the two required egress paths are arranged so that both do not pass through the same adjacent smoke compartment ~~but shall not require return through the compartment of fire origin.~~

20.2.5 Arrangement of Means of Egress. Arrangement of means of egress shall be in accordance with ~~28.2.5~~.

20.2.5.1 General. Means of egress shall be arranged in accordance with Section 11.5.

20.2.5.2 Dead Ends. Dead ends shall be permitted in accordance with 20.2.5.2.1 or 20.2.5.2.2.

20.2.5.2.1 In buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with NFPA 13 and 55.3.2, dead-end corridors shall not exceed 50 ft (15 m).

20.2.5.2.2 In buildings other than those specified in 20.2.5.2.1, dead-end corridors shall not exceed 20 ft (6100 mm).

20.2.5.3 Common Paths of Travel.

20.2.5.3.1 A common path of travel shall be permitted for the first 100 ft (30 m) in a building protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with NFPA 13 and 55.3.2.

20.2.5.3.2 A common path of travel shall be permitted for the first 100 ft (30 m) within a single tenant space having an occupant load not exceeding 25 persons.

20.2.5.3.3 In buildings other than those specified in 20.2.5.3.2, the common paths of travel shall not exceed 75 ft (23 m).

20.2.6 Travel Distance to Exits.

20.2.6.1 Travel distance shall be measured in accordance with Section 11.6.

20.2.6.2 Travel distance shall be as follows:

- (1) ~~The travel distance between any room door required as an exit access and an exit shall not exceed 100 ft (30 m).~~
- ~~(2) The travel distance between any point in a room and an exit shall not exceed 150 ft (46 m).~~
- (3) The maximum travel distance in 20.2.6.2(1) ~~or (2)~~ shall be permitted to be increased by 50 ft (15 m) in buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.

20.2.7 Discharge from Exits. Exit discharge shall comply with Section 11.7. ~~Discharge from exits shall be in accordance with 28.2.7.~~

20.2.8 Illumination of Means of Egress. Means of egress shall be illuminated in accordance with Section 11.8.

20.2.9 Emergency Lighting and Essential Electrical Systems.

20.2.9.1 Emergency lighting shall be provided in accordance with Section 11.9.

20.2.9.2 Where general anesthesia or life-support equipment is used, each ambulatory health care facility shall be provided with an essential electrical system in accordance with NFPA 99, *Health Care Facilities Code*, unless one of the following conditions exists:

- (1) Where battery-operated equipment is provided and is acceptable to the authority having jurisdiction
- (2) Where the facility uses life-support equipment for emergency purposes only

20.2.10 Marking of Means of Egress. Means of egress shall have signs in accordance with Section 11.10.

20.2.11 Special Means of Egress Features.

20.2.11.1 Reserved.

20.2.11.2 Lockups. Lockups in ambulatory health care occupancies shall comply with the requirements of 21.4.5.

20.3 Protection.

20.3.1 Protection of Vertical Openings. ~~Protection of vertical openings shall be in accordance with 28.3.1.~~

20.3.1.1 Vertical openings shall be enclosed or protected in accordance with Section 8.12, unless otherwise permitted by 20.3.1.2.

20.3.1.2 Unenclosed vertical openings in accordance with 8.12.5.1 shall be permitted.

20.3.1.3 Floors that are below the street floor and are used for storage or other than an ambulatory health care occupancy shall have no unprotected openings to ambulatory health care occupancy floors.

20.3.2 Hazardous Area Protection. ~~Hazardous area protection shall be in accordance with 28.3.2.~~

20.3.2.1* General. Hazardous areas including, but not limited to, areas used for general storage, boiler or furnace rooms, and maintenance shops that include woodworking and painting areas shall be protected in accordance with Section 8.15.

20.3.2.2 Doors. Doors to hazardous areas shall be self-closing or automatic-closing in accordance with 20.2.2.2.2.

20.3.2.3* High Hazard Contents Areas. High hazard contents areas, as classified in Section 6.3, shall meet all of the following criteria:

- (1) The area shall be separated from other parts of the building by fire barriers having a minimum 1-hour fire resistance rating, with all openings therein protected by self-closing fire door assemblies having a minimum ¾-hour fire protection rating.
- (2) The area shall be protected by an automatic extinguishing system in accordance with 55.3.1.1(1) or 55.3.1.2.

20.3.2.4 20.3.2.1 Laboratories. Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered as a severe hazard shall be protected in accordance with NFPA 99.

20.3.2.5 ~~20.3.2.2~~ Anesthetizing Locations. Anesthetizing locations shall be protected in accordance with NFPA 99.

20.3.2.6 ~~20.3.2.3~~ Commercial Cooking Facilities.

20.3.2.6.1 ~~20.3.2.3.1~~ Commercial cooking ~~Commercial cooking~~ **Cooking** facilities shall be protected in accordance with Section 55.10, unless otherwise permitted by 20.3.2.3.2.

20.3.2.6.2* ~~20.3.2.3.2~~* Where domestic cooking equipment is used for food warming or limited cooking, protection or separation of food preparation facilities shall not be required.

20.3.2.7* ~~20.3.2.4~~* Alcohol-Based Hand-Rub Dispensers. Alcohol-based hand-rub dispensers shall be protected in accordance with Section 8.15 and Chapter 34, unless all of the following conditions are met:

- (1) Where dispensers are installed in a corridor, the corridor shall have a minimum width of 6 ft (1830 mm).
- (2) The maximum individual dispenser fluid capacity shall be as follows:
 - (a) 0.32 gal (1.2 L) for dispensers in rooms, corridors, and areas open to corridors
 - (b) 0.53 gal (2.0 L) for dispensers in suites of rooms
- (3) Where aerosol containers are used, the maximum capacity of the aerosol dispenser shall be 18 oz. (0.51 kg) and shall be limited to Level 1 aerosols as defined in NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.
- (4) Dispensers shall be separated from one another by horizontal spacing of not less than 48 in. (1220 mm).
- (5) Not more than an aggregate 10 gal (37.8 L) of alcohol-based hand-rub solution or 1135 oz (32.2 kg) of Level 1 aerosols, or a combination of liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gal (37.8 L) or 1135 oz (32.2 kg), shall be in use outside of a storage cabinet in a single smoke compartment, except as otherwise provided in 20.3.2.7(6).
- ~~(6)~~ One dispenser per room complying with 20.3.2.7 (2) or (3), and located in the room, shall not be required to be included in the aggregated quantity specified in 20.3.2.7(5).
- ~~(67)~~ Storage of quantities greater than 5 gal (18.9 L) in a single smoke compartment shall meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*.
- ~~(78)~~ Dispensers shall not be installed in the following locations:
 - (a) Above an ignition source within a 1 in. (25 mm) horizontal distance from each side of the ignition source
 - (b) To the side of an ignition source within a 1 in. (25 mm) horizontal distance from the ignition source

- (c) Beneath an ignition source within a 1 in. (25 mm) vertical distance from the ignition source
- (89) Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.
- (910) The alcohol-based hand-rub solution shall not exceed 95 percent alcohol content by volume.
- (1011) Operation of the dispenser shall comply with the following criteria:
 - (a) The dispenser shall not release its contents except when the dispenser is activated, either manually or automatically, by touch-free activation.
 - (b) Any activation of the dispenser shall occur only when an object is placed within 4 in. (100 mm) of the sensing device.
 - (c) An object placed within the activation zone and left in place shall not cause more than one activation.
 - (d) The dispenser shall not dispense more solution than the amount required for hand hygiene consistent with label instructions.
 - (e) The dispenser shall be designed, constructed, and operated in a manner that ensures accidental or malicious activation of the dispensing device is minimized.
 - (f) The dispenser shall be tested in accordance with the manufacturer's care and use instructions each time a new refill is installed.

20.3.3 Interior Finish. See 28.3.3.

20.3.3.1 General. Interior finish shall be in accordance with Chapter 10.

20.3.3.2 Interior Wall and Ceiling Finish.

20.3.3.2.1 Interior wall and ceiling finish materials in accordance with Chapter 10 shall be Class A or Class B in exits and in ~~enclosed exit access~~ corridors, ~~furnishing access to exits; and~~

20.3.3.2.2 Interior wall and ceiling finishes shall be Class A, Class B, or Class C in ~~office~~ areas other than those specified in 20.3.3.2.1.

20.3.3.3 Interior Floor Finish.

20.3.3.3.1 Interior floor finish shall comply with Section 10.6.

20.3.3.3.2 Interior floor finish in exit enclosures ~~and corridors~~ shall be Class I or Class II.

20.3.3.3.3 Interior floor finish shall comply with 10.6.1 or 10.6.2, as applicable.

20.3.4 Detection, Alarm, and Communications Systems.

20.3.4.1 General. Ambulatory health care facilities shall be provided with fire alarm systems in accordance with Section 55.2, except as modified by 20.3.4.2 through 20.3.4.4.

20.3.4.2 Initiation. Initiation of the required fire alarm systems shall be by manual means in accordance with 55.2.2 and by means of any detection devices or detection systems required.

20.3.4.3 Notification. Positive alarm sequence in accordance with 55.2.3.4 shall be permitted.

20.3.4.3.1 Occupant Notification. Occupant notification shall be accomplished automatically, without delay, in accordance with 55.2.3 upon operation of any fire alarm initiating device.

20.3.4.3.2 Emergency Forces Notification. Fire department notification shall be accomplished in accordance with 55.2.4.

20.3.4.4 Emergency Control Fire Safety Functions. Operation of any activating device in the required fire alarm system shall be arranged to accomplish automatically any control functions required to be performed by that device. (*See 55.2.5.*)

20.3.5 Extinguishment Requirements. Extinguishment requirements shall be in accordance with 20.3.5.1; and 20.3.5.2, ~~and 28.3.5.~~

20.3.5.1 Automatic Sprinklers. Buildings two or more stories in height of Type II (000), Type III(200), or Type V(000) construction shall be protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.

20.3.5.2 Where another provision of this chapter requires an automatic sprinkler system to be electrically supervised, the sprinkler system shall be electrically supervised in accordance with 55.3.2.

20.3.5.3 Isolated hazardous areas shall be permitted to be protected in accordance with 55.3.1.2. Where more than two sprinklers are installed in a single area, waterflow detection shall be provided to sound the building fire alarm, or to notify by a signal, any constantly attended location, such as PBX, security, or emergency room, at which the necessary corrective action shall be taken.

20.3.5.4 Class I standpipe systems shall be provided where required by 55.4.1.

20.3.5.5 Portable fire extinguishers shall be provided in ambulatory health care facilities in accordance with Section 55.6.

20.3.6 Exit Access Corridors.

20.3.6.1* General. Corridors used for exit access within the ambulatory health care occupancy shall comply with both of the following:

- (1) They shall be smoke partitions in accordance with Section 8.10.
- (2) They shall have not less than a 1-hour fire resistance rating in accordance with Section 8.4 in other than smoke compartments protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.

20.3.6.2 Doors. In smoke compartments protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3, corridor doors, other than fire protection-rated doors serving hazardous areas; exit enclosures; or vertical openings, shall meet all of the following:

- (1) They shall be self-latching.
- (2) They shall comply with 8.10.3.1 through 8.10.3.4.
- (3) They shall be self-closing or automatic-closing in accordance with 8.10.3.5 where the non-rated door serves a sprinklered hazardous area.

20.3.6.3 Openings.

20.3.6.3.1 Miscellaneous openings, such as mail slots, pharmacy pass-through windows, laboratory pass-through windows, and cashier pass-through windows, shall be permitted to be installed in vision panels or doors without special protection, provided that the aggregate area of openings per room does not exceed 20 in.² (0.015 m²) and the openings are installed at or below one-half the distance from the floor to the room ceiling.

20.3.6.3.2 For rooms protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3, the aggregate area of openings per room specified in 20.3.6.3.1 shall not exceed 80 in.² (0.05 m²).

20.3.7 Subdivision of Building Spaces.

20.3.7.1 Ambulatory health care facilities shall be separated from other tenants and occupancies and shall meet all of the following requirements:

- (1) Walls shall have not less than a 1-hour fire resistance rating and shall extend from the floor slab below to the floor or roof slab above.
- (2) Doors shall be constructed of not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be equipped with positive latches.
- (3) Doors shall be self-closing and shall be kept in the closed position, except when in use.
- (4) Any windows in the barriers shall be of fixed fire window assemblies in accordance with Section 8.7.

~~**20.3.7.1** Ambulatory health care facilities shall be separated from other tenants and occupancies by walls having not less than a 1 hour fire resistance rating. Such walls shall extend from the floor slab below to the floor or roof slab above. Doors shall have a 20 minute fire protection rating. Any windows in these barriers shall be of fixed fire window assemblies in accordance with 8.7.6.~~

20.3.7.2 Every story of an ambulatory health care facility shall be divided into not less than two smoke compartments, unless otherwise permitted by one of the following:

- (1) This requirement shall not apply to facilities of less than 5000 ft² (465 m²) that are protected by an approved automatic smoke detection system.
- (2) This requirement shall not apply to facilities of less than 10,000 ft² (929 m²) that are protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with Section 55.3.

(3) An area in an adjoining occupancy shall be permitted to serve as a smoke compartment for an ambulatory health care facility if all of the following criteria are met:

(a) The separating wall and both compartments meet the requirements of 20.3.7.

(b) The ambulatory health care facility is less than 22,500 ft² (2100 m²).

(c) Access from the ambulatory health care facility to the other occupancy is unrestricted.

~~20.3.7.2 Every story of the ambulatory health care facility shall be divided into not less than two smoke compartments, unless one of the following conditions exists:~~

~~(1) Facilities are less than 5000 ft² (465 m²) and are protected by an approved automatic smoke detection system.~~

~~(2) Facilities are less than 10,000 ft² (929 m²) and are protected throughout by an approved, electrically supervised automatic sprinkler system installed in accordance with Section 55.3.~~

~~(3) An area in an adjoining occupancy is permitted to serve as a smoke compartment for the ambulatory health care facility, and all of the following criteria also are met:~~

~~(a) The separating wall and both compartments meet the requirements of 20.3.7.~~

~~(b) The ambulatory health care facility is less than 22,500 ft² (2100 m²).~~

~~(c) Access from the ambulatory health care facility to the other occupancy is unrestricted.~~

20.3.7.3 Smoke compartments, other than the area of an atrium separated in accordance with 8.12.3, shall not exceed an area of 22,500 ft² (2100 m²), and the travel distance from any point to reach a door in a smoke barrier shall not exceed 200 ft (61 m).

20.3.7.4 Any required smoke barrier shall be constructed in accordance with Section 8.11.

20.3.7.4.1 Any required smoke barrier shall have a fire resistance rating of not less than 1 hour, unless otherwise permitted by 20.3.7.4.2.

20.3.7.4.2 Smoke dampers shall not be required in duct penetrations of smoke barriers in fully ducted heating, ventilating, and air-conditioning systems for buildings protected throughout by an approved, electrically supervised automatic sprinkler system in accordance with Section 55.3.

20.3.7.5 Windows in the smoke barrier shall be of fixed fire window assemblies in accordance with 8.7.6.

20.3.7.6 Not less than 15 net ft² (1.4 net m²) per ambulatory health care facility occupant shall be provided within the aggregate area of corridors, patient rooms, treatment rooms, lounges, and other common areas on each side of the smoke compartment for the total number of occupants in adjoining compartments.

20.3.7.7* Doors in smoke barriers shall be not less than 1¾ in. (44 mm) thick, solid-bonded wood core or the equivalent and shall be self-closing or automatic-closing in accordance with 20.2.2.2.2.

20.3.7.8 Latching hardware shall not be required on smoke barrier cross-corridor doors.

20.3.7.9 A vision panel consisting of fire-rated glazing in approved frames shall be provided in each cross-corridor swinging door and at each cross-corridor horizontal-sliding door in a smoke barrier.

20.3.7.10 Vision panels in doors in smoke barriers, if provided, shall be of fire-rated glazing in approved frames.

20.3.7.11* Rabbits, bevels, or astragals shall be required at the meeting edges, and stops shall be required at the head and sides of door frames in smoke barriers.

20.3.7.12 Center mullions shall be prohibited in smoke barrier door openings.

~~20.3.7.7*~~ Doors in smoke barriers shall comply with all of the following:

- ~~(1) The doors shall be not less than 1¾ in. (44 mm) thick, solid bonded wood core or the equivalent.~~
- ~~(2) The doors shall be self closing or automatic closing in accordance with 20.2.2.2.5.~~
- ~~(3) The doors shall be provided with positive latching hardware on other than cross corridor doors.~~
- ~~(4) Latching hardware shall not be required on cross corridor doors.~~
- ~~(5) Stops shall be required at the head and sides of door frames.~~
- ~~(6) Rabbits, bevels, or astragals shall be required at the meeting edges of pairs of doors.~~
- ~~(7) The doors shall be provided with a vision panel if the door is a cross corridor door.~~
- ~~(8) Vision panels in doors in smoke barriers, if provided, shall be of fire rated glazing or wired glass in approved frames.~~

20.4 Special Provisions.

~~20.4.1~~ The provisions of Section 28.4 shall apply.

20.4.1 ~~20.4.2~~ **Limited Access or Underground Buildings.** Limited access or underground buildings structures shall comply with Chapter 31.

20.4.2 **High-Rise Buildings.** High-rise buildings shall comply with Chapter 33.

20.5 Building Services.

20.5.1 Utilities. Utilities shall comply with the provisions of Chapters 49, 52, and 53.

20.5.2 Heating, Ventilating, and Air-Conditioning.

20.5.2.1 Heating, ventilating, and air-conditioning shall comply with the provisions of Chapters 50 and 51 and shall be in accordance with the manufacturer's specifications, unless otherwise modified by 20.5.2.2.

20.5.2.2 If fuel-fired, heating devices shall comply with all of the following:

- (1) They shall be chimney connected or vent connected.
- (2) They shall take air for combustion directly from the outside.
- (3) They shall be designed and installed to provide for complete separation of the combustion system from the atmosphere of the occupied area.

~~**20.5.2.2** Any heating device, other than a central heating plant, shall be designed and installed so that combustible material will not be ignited by the device or its appurtenances and shall comply with 20.5.2.2.1 and 20.5.2.2.2.~~

~~**20.5.2.2.1** If fuel fired, heating devices shall be chimney connected or vent connected, shall take air for combustion directly from the outside, and shall be designed and installed to provide for complete separation of the combustion system from the atmosphere of the occupied area.~~

20.5.2.2.21 Any heating device shall have safety features to immediately stop the flow of fuel and shut down the equipment in case of either excessive temperature or ignition failure.

20.5.2.2.2 Approved, suspended unit heaters shall be permitted in locations other than means of egress and patient treatment areas, provided that both of the following criteria are met:

- (1) Such heaters are located high enough to be out of the reach of persons using the area.
- (2) Such heaters are equipped with the safety features required by 20.5.2.2.1.

~~**20.5.2.2.3** Approved, suspended unit heaters shall be permitted in locations other than means of egress and patient treatment areas, provided that such heaters are located high enough to be out of the reach of persons using the area and are equipped with the safety features required by 20.5.2.2.1 and 20.5.2.2.2.~~

20.5.3 Elevators, Escalators, and Conveyors. Elevators, escalators, and conveyors shall comply with the provisions of Chapter 54.

20.5.4 Rubbish Chutes, Incinerators, and Laundry Chutes. Rubbish chutes, incinerators, and laundry chutes shall comply with the provisions of Section 8.17.

A.20.1.1.1 The *Code* recognizes that certain functions necessary for the life safety of building occupants, such as the closing of corridor doors, the operation of manual fire alarm devices, and the removal of patients from the room of fire origin, require the intervention of facility staff. It is not the intent of 20.1.1.1.6 this chapter to specify the levels or locations of staff necessary to meet this requirement.

A.20.1.1.2 This objective is accomplished in the context of the physical facilities, the type of activities undertaken, the provisions for the capabilities of staff, and the needs of all occupants through requirements directed at the following:

- (1) Prevention of ignition

- (2) Detection of fire
- (3) Control of fire development
- (4) Confinement of the effects of fire
- (5) Extinguishment of fire
- (6) Provision of refuge or evacuation facilities, or both
- (7) Staff reaction

A.20.1.23.2 Doctors' offices and treatment and diagnostic facilities intended solely for outpatient care that are physically separated from facilities for the treatment or care of inpatients, but that are otherwise associated with the management of an institution, might be classified as business occupancies rather than health care occupancies.

A.20.2.2.2.4 The words "principal entrance/exit doors" describe doors that the authority having jurisdiction can reasonably expect to be unlocked in order for the facility to do business.

A.20.3.2.1 It is not the intent of this provision that rooms inside individual tenant spaces that are used to store routine office supplies for that tenant be required to be either separated or sprinklered.

A.20.3.2.3 The requirement for separating high hazard contents areas from other parts of the building is intended to isolate the hazard.

A.20.3.2.6.2 A.20.3.2.3.2 The requirement of 20.3.2.6.2 20.3.2.3.2 is intended to permit small appliances used for reheating, such as microwave ovens, hot plates, toasters, and nourishment centers, to be exempt from the requirements for commercial cooking equipment.

A.20.3.2.7 A.20.3.2.4 Extensive research, including fire modeling, has indicated that alcohol-based hand-rub solution dispensers can be safely installed in corridors of health care facilities, provided that certain other precautions are taken. The total quantities of flammable liquids in any area should comply with the provisions of other recognized codes, including NFPA 1, *Fire Code*, and NFPA 30, *Flammable and Combustible Liquids Code*. In addition, special consideration should be given to the following:

- (1) Obstructions created by the installation of such dispensers
- (2) Location of such dispensers with regard to adjacent combustible materials and potential sources of ignition, especially where containers are mounted on walls of combustible construction
- (3) Requirements for other fire protection features, including complete automatic sprinkler protection, to be installed throughout the compartment
- (4) Amount of solution and location of such flammable solution dispensers, both in use and in storage, particularly with respect to potential for leakage or failure of the container

A.20.3.6.1 The provisions of 20.3.6.1 are not intended to prohibit occupant use areas within the corridor.

A.20.3.7.7 Smoke barriers might include walls having door openings other than those for cross-corridor doors. There is no restriction in the *Code* regarding which doors or how many doors form part of a smoke barrier. For example, doors from the corridor to individual rooms are permitted to form part of a smoke barrier. Split astragals (i.e., astragals installed on both door leaves) are also considered astragals.

A.20.3.7.11 Split astragals (i.e., astragals installed on both door leaves) are also considered astragals.