

Chapter 10 General Safety Requirements

10.1 Fundamental Requirements.

10.1.1 Every new and existing building or structure shall be constructed, arranged, equipped, maintained, and operated in accordance with this *Code* so as to provide a reasonable level of life safety, property protection, and public welfare from the actual and potential hazards created by fire, explosion, and other hazardous conditions.

10.1.2* Life Safety Code. Every new and existing building shall comply with this *Code* and NFPA 101, *Life Safety Code*.

10.1.3 Building Code. Where a building code has been adopted, all new construction shall comply with this *Code* and the building code.

10.1.4 Structural Hazards.

10.1.4.1 Where structural elements have visible damage, the AHJ shall be permitted to require a technical analysis prepared in accordance with Section 1.15 to determine if repairs are necessary to restore structural integrity.

10.1.4.2 Where the technical analysis recommends repairs to the structure, such repairs shall be made.

10.1.5 Any person who deliberately, or through negligence, sets fire to or causes the burning of any combustible material in such a manner as to endanger the safety of any person or property shall be deemed to be in violation of this *Code*.

10.1.6 The AHJ shall have the authority to prohibit any or all open flames or other sources of ignition where circumstances make such conditions hazardous.

10.1.7 Listed and Labeled. Listed and labeled equipment, devices, and materials shall be installed and used in accordance with the listing limitations and the manufacturers' instructions.

10.2 Owner/Occupant Responsibilities.

10.2.1 The owner, operator, or occupant shall be responsible for compliance with this *Code*.

10.2.2 The owner, operator, or occupant of a building shall notify the AHJ prior to a change of occupancy as specified in 4.5.7 and 10.3.4.

10.2.3 The AHJ shall be permitted to require the owner, operator, or occupant to provide tests or test reports, without expense to the AHJ, as proof of compliance with the intent of this *Code*.

10.2.4 The owner, operator, or occupant of a building that is deemed unsafe by the AHJ shall abate, through corrective action approved by the AHJ, the condition causing the building to be unsafe either by repair, rehabilitation, demolition, or other corrective action approved by the AHJ.

10.2.5 The owner, operator, or occupant, or any person in control of a building or premises shall keep records of all maintenance, inspections, and testing of fire protection systems, fire alarm systems, smoke control systems, emergency evacuation and relocation drills, emergency plans, emergency power, elevators, and other equipment as required by the AHJ.

10.2.6 All records required to be kept shall be maintained until their useful life has been served, as required by law, or as required by the AHJ.

10.3 Occupancy.

10.3.1 No new construction or existing building shall be occupied in whole or in part in violation of the provisions of this *Code*.

10.3.2 Existing buildings that are occupied at the time of adoption of this *Code* shall remain in use provided that the following conditions are met:

- (1) The occupancy classification remains the same.
- (2) No condition deemed hazardous to life or property exists that would constitute an imminent danger.

10.3.3* Buildings or portions of buildings, except for routine maintenance or repair, shall not be occupied during construction, repair, or alteration without the approval of the AHJ if required means of egress are impaired or required fire protection systems are out of service.

10.3.4 Change of Use or Occupancy Classification.

10.3.4.1 In any building or structure, whether or not a physical alteration is needed, a change from one use or occupancy classification to another shall comply with 4.6.7 of NFPA 101. [101:4.6.11]

10.3.4.2 Occupancy classifications and subclassifications, as defined, shall be in accordance with Chapter 6.

10.4 Maintenance, Inspection, and Testing. Also see 4.5.8.

10.4.1 Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or other feature shall thereafter be continuously maintained. Maintenance shall be provided in accordance with applicable NFPA requirements or requirements developed as part of a performance-based design, or as directed by the AHJ. [101:4.6.12.1]

10.4.2 No existing life safety feature shall be removed or reduced where such feature is a requirement for new construction. [101:4.6.12.2]

10.4.3* Existing life safety features obvious to the public, if not required by the *Code*, shall be either maintained or removed. [101:4.6.12.3]

10.4.4 Any device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or any other feature requiring periodic testing, inspection, or operation to ensure its maintenance shall be tested, inspected, or operated as specified elsewhere in this *Code* or as directed by the AHJ. [101:4.6.12.4]

10.4.5 Maintenance, inspection, and testing shall be performed under the supervision of a responsible person who shall ensure that testing, inspection, and maintenance are made at specified intervals in accordance with applicable NFPA standards or as directed by the AHJ. [101:4.6.12.5]

10.5 Building Evacuation.

10.5.1 Persons shall not fail to leave a building when notified to do so or when directed by the AHJ as a result of a known or perceived emergency.

10.5.2* Persons shall not fail to leave any overcrowded premises when ordered to do so by the AHJ.

10.5.3* Persons shall not fail to leave a building when a fire alarm system is activated, unless otherwise provided for in an approved building fire evacuation plan or during routine testing or maintenance.

10.6* Fire Drills.

10.6.1 Where Required. Emergency egress and relocation drills conforming to the provisions of this *Code* shall be conducted as specified by the provisions of Chapter 20 of this *Code* or Chapters 11 through 42 of NFPA 101, or by appropriate action of the AHJ. Drills shall be designed in cooperation with the local authorities. [101:4.7.1]

10.6.2* Drill Frequency. Emergency egress and relocation drills, where required by Chapter 20 of this *Code* or Chapters 11 through 42 of NFPA 101, or the AHJ, shall be held with sufficient frequency to familiarize occupants with the drill procedure and to establish conduct of the drill as a matter of routine. Drills shall include suitable procedures to ensure that all persons subject to the drill participate. [101:4.7.2]

10.6.3 Competency. Responsibility for the planning and conducting of drills shall be assigned only to competent persons qualified to exercise leadership.

10.6.4 Orderly Evacuation. When conducting drills, emphasis shall be placed on orderly evacuation rather than on speed. [101:4.7.3]

10.6.5* Simulated Conditions. Drills shall be held at expected and unexpected times and under varying conditions to simulate the unusual conditions that can occur in an actual emergency. [101:4.7.4]

10.6.6 Relocation Area. Drill participants shall relocate to a predetermined location and remain at such location until a recall or dismissal signal is given. [101:4.7.5]

10.6.7* A written record of each drill shall be completed by the person responsible for conducting the drill and maintained in an approved manner. [101:4.7.6]

10.7 Reporting of Fires and Other Emergencies.

10.7.1 Fire Reporting.

10.7.1.1 The person discovering any unwanted fire, regardless of magnitude, shall immediately notify the fire department.

10.7.1.2 Facilities that have established on-premises fire-fighting organizations and have coordinated and arranged procedures approved by the AHJ shall not need to notify the fire department.

10.7.1.3* The owner, manager, occupant, or any person in control of such building or premises, upon discovery of an unwanted fire or evidence of a previous unwanted fire that had apparently been extinguished, shall immediately notify the fire department.

10.7.1.4 Persons shall not make, issue, post, or maintain any regulation or order, written or verbal, that would require any person to take any unnecessary delaying action prior to reporting a fire to the fire department.

10.7.2 Persons shall not deliberately or maliciously turn in an alarm of fire when in fact that person knows that no fire exists.

10.7.3 Notification of unauthorized discharge of hazardous materials shall be in accordance with Chapter 60.

10.7.4 Any person who willfully makes any false, fraudulent, misleading, or unfounded report or statement or willfully misrepresents any fact with the intention of misleading any fire department personnel or who interferes with the operation of the fire department shall be in violation of this *Code*.

10.8 Tampering with Fire Safety Equipment.

10.8.1 Persons shall not render any portable or fixed fire-extinguishing system or device or any fire-warning system or device inoperative or inaccessible.

10.8.1.1 As necessary during emergencies, maintenance, drills, prescribed testing, alterations, or renovations, portable or fixed fire-extinguishing systems or devices or any fire-warning system or device shall be permitted to be made inoperative or inaccessible.

10.8.2 Persons shall not render a fire protection system or device inoperative during an emergency unless by direction of the incident commander.

10.8.3 Persons, except a person authorized by the AHJ, shall not remove, unlock, destroy, or tamper with in any manner any locked gate, door, or barricade; chain; enclosure; sign; tag; or seal that has been required by the AHJ pursuant to this *Code*.

10.9 Emergency Plans.

10.9.1 Where Required. Emergency plans shall be provided for high-rise, health care, ambulatory health care, residential board and care, assembly, day-care centers, special amusement buildings, hotels and dormitories, detention and correctional occupancies, educational, underground and windowless structures, facilities storing or handling materials covered by Chapter 60, or where required by the AHJ.

10.9.2 Plan Requirements.

10.9.2.1* Emergency plans shall include the following:

- (1) Procedures for reporting of emergencies
- (2) Occupant and staff response to emergencies
- (3)* Evacuation procedures appropriate to the building, its occupancy, and emergencies (*see Section 4.3 of NFPA 101*)
- (4) Appropriateness of the use of elevators
- (5) Design and conduct of fire drills
- (6) Type and coverage of building fire protection systems
- (7) Other items required by the AHJ

[101:4.8.2.1]

10.9.2.2 Emergency plans shall be submitted to the AHJ for review when required by the AHJ.

10.9.2.3 Emergency plans shall be reviewed and updated as required by the AHJ. [101:4.8.2.3]

10.9.3* Training and Education.

10.9.3.1* The entity shall develop and implement a training and education curriculum to support the program. [1600:6.11.1]

10.9.3.2 The goal of the curriculum shall be to create awareness and enhance the knowledge, skills, and abilities required to implement, support, and maintain the program. [1600:6.11.2]

10.9.3.3 The scope of the curriculum and frequency of instruction shall be identified. [1600:6.11.3]

10.9.3.4 Personnel shall be trained in the entity's incident management system (IMS) and other components of the program to the level of their involvement. [1600:6.11.4]

10.9.3.5 Records of training and education shall be maintained as specified in Section 4.8 of NFPA 1600. [1600:6.11.5]

10.9.3.6 The curriculum shall comply with applicable regulatory and program requirements. [1600:6.11.6]

10.9.3.7* A public education program shall be implemented to communicate the following:

- (1) Potential hazard impacts
- (2) Preparedness information
- (3) Information needed to develop a preparedness plan

[1600:6.11.7]

10.10 Smoking.

10.10.1 Where smoking is considered a fire hazard, the AHJ shall be authorized to order the owner in writing to post "No Smoking" signs in conspicuous, designated locations where smoking is prohibited.

10.10.2 In areas where smoking is permitted, noncombustible ashtrays shall be provided.

10.10.3 Removal or destruction of any required "No Smoking" sign shall be prohibited.

10.10.4 Smoking or depositing any lighted or smoldering substance in a place where required "No Smoking" signs are posted shall be prohibited.

10.11 Open Flame, Candles, Open Fires, and Incinerators.

10.11.1 Permits. Permits, where required, shall comply with Section 1.12.

10.11.1.1 Permits shall not be required for cooking and recreational fires.

10.11.1.2 Where burning is conducted on public property or the property of someone other than the permit applicant, the permit applicant shall demonstrate that permission has been obtained by the appropriate government agency, the owner, or the owner's authorized agent.

10.11.1.3 When limits for atmospheric conditions or hours restrict burning, such limits shall be designated in the permit restrictions.

10.11.1.4 Instructions or stipulations of permit shall be followed.

10.11.2 The AHJ shall have the authority to prohibit any or all open flames, candles, and open, recreational, and cooking fires or other sources of ignition, or establish special regulations on the use of any form of fire or smoking material where circumstances make such conditions hazardous.

10.11.3 Outdoor Fires.

10.11.3.1* Outdoor fires shall not be built, ignited, or maintained in or upon hazardous fire areas, except by permit from the AHJ.

10.11.3.2 Permanent barbecues, portable barbecues, outdoor fireplaces, or grills shall not be used for the disposal of rubbish, trash, or combustible waste material.

10.11.4 Open Fires.

10.11.4.1 Permitted open fires shall be located not less than 50 ft (15 m) from any structure.

10.11.4.2 Burning hours shall be prescribed by the AHJ.

10.11.4.3 Recreational fires shall not be located within 25 ft (7.6 m) of a structure or combustible material unless contained in an approved manner.

10.11.4.4 Conditions that could cause a fire to spread to within 25 ft (7.6 m) of a structure shall be eliminated prior to ignition.

10.11.5 Fire Attendant.

10.11.5.1 Open, recreational, and cooking fires shall be constantly attended by a competent person until such fire is extinguished.

10.11.5.2 This person shall have a garden hose connected to the water supply or other fire-extinguishing equipment readily available for use.

10.11.6 Cooking Equipment.

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

10.11.6.2 For other than one- and two-family dwellings, no hibachi, grill, or other similar devices used for cooking shall be stored on a balcony.

10.11.6.3* Listed equipment permanently installed in accordance with its listing, applicable codes, and manufacturer's instructions shall be permitted.

10.11.7 Installation of Patio Heaters.

10.11.7.1 Patio heaters utilizing an integral LP-Gas container greater than 1.08 lb (0.49 kg) propane capacity shall comply with 10.11.7.2 and 10.11.7.3. [58:6.20.2.1]

10.11.7.2 Patio heaters shall be listed and used in accordance with their listing and the manufacturer's instructions. [58:6.20.2.2]

10.11.7.3 Patio heaters shall not be located within 5 ft (1.5 m) of exits from an assembly occupancy. [58:6.20.2.3]

10.11.8 Incinerators and Fireplaces.

10.11.8.1 Incinerators, outdoor fireplaces, permanent barbecues, and grills shall not be built, installed, or maintained without prior approval of the AHJ.

10.11.8.2 Incinerators, outdoor fireplaces, permanent barbecues, and grills shall be maintained in good repair and in a safe condition at all times.

10.11.8.3 Openings in incinerators, outdoor fireplaces, permanent barbecues, and grills shall be provided with an approved spark arrester, screen, or door.

10.11.9 Open-Flame Devices.

10.11.9.1* Welding torches, tar pots, decorative torches, and other devices, machines, or processes liable to start or cause fire shall not be operated or used in or upon any areas, except by permit from the AHJ.

10.11.9.2 Flame-employing devices, such as lanterns or kerosene road flares, and fuses shall not be operated or used as a signal or marker in or upon any areas unless at the scene of emergencies or railroad operations. (See Chapter 16 and Chapter 65 for additional guidance.)

10.11.10 Discontinuance. The AHJ shall be authorized to require any fire to be immediately discontinued if the fire is determined to constitute a hazardous condition.

10.12 Fire Protection Markings.

10.12.1 Premises Identification.

10.12.1.1* New and existing buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property.

10.12.1.2 Address numbers shall contrast with their background.

10.12.1.3 Address numbers shall be arabic numerals or alphabet letters.

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

10.12.1.5 Where address identification is required by the AHJ on other elevations of buildings, structures, or portions thereof, such numbers shall be not less than three inches in height for residential and at least six inches in height for all other buildings, structures, or portions thereof.

10.12.2 Shaftways to Be Marked for Fire Fighter Safety.

10.12.2.1 Every outside opening accessible to the fire department that opens directly on any hoistway or shaftway communicating between two or more floors in a building shall be plainly marked with a sign in accordance with 10.12.2.2 and 10.12.2.3.

10.12.2.2 Shaftway signs shall be in red letters at least 6 in. (152 mm) high on a white background stating "SHAFTWAY."

10.12.2.3 Such warning signs shall be placed so as to be readily discernible from the outside of the building.

10.12.3* Stairway Identification.

10.12.3.1 New enclosed stairs serving three or more stories and existing enclosed stairs serving five or more stories shall comply with 10.12.3.1.1 through 10.12.3.1.13.

10.12.3.1.1 The stairs shall be provided with special signage within the enclosure at each floor landing. [101:7.2.2.5.4.1(A)]

10.12.3.1.2 The signage shall indicate the floor level. [101:7.2.2.5.4.1(B)]

10.12.3.1.3 The signage shall indicate the terminus of the top and bottom of the stair enclosure. [101:7.2.2.5.4.1(C)]

10.12.3.1.4 The signage shall indicate the identification of the stair enclosure. [101:7.2.2.5.4.1(D)]

10.12.3.1.5 The signage shall indicate the floor level of, and the direction to, exit discharge. [101:7.2.2.5.4.1(E)]

10.12.3.1.6 The signage shall be located inside the enclosure approximately 60 in. (1525 mm) above the floor landing in a position that is visible when the door is in the open or closed position. [101:7.2.2.5.4.1(F)]

10.12.3.1.7 The signage shall comply with 14.14.8.1 and 14.14.8.2. [101:7.2.2.5.4.1(G)]

10.12.3.1.8 The floor level designation shall also be tactile in accordance with ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*. [101:7.2.2.5.4.1(H)]

10.12.3.1.9 The signage shall be painted or stenciled on the wall or on a separate sign securely attached to the wall. [101:7.2.2.5.4.1(I)]

10.12.3.1.10 The stairway identification letter shall be located at the top of the sign in minimum 1 in. (25 mm) high lettering and shall be in accordance with 14.14.8.2. [101:7.2.2.5.4.1(J)]

10.12.3.1.11* Signage that reads NO ROOF ACCESS and is located under the stairway identification letter shall designate stairways that do not provide roof access. Lettering shall be a minimum of 1 in. (25 mm) high and shall be in accordance with 14.14.8.2. [101:7.2.2.5.4.1(K)]

10.12.3.1.12 The floor level number shall be located in the middle of the sign in minimum 5 in. (125 mm) high numbers and shall be in accordance with 14.14.8.2. Mezzanine levels shall have the letter "M" or other appropriate identification letter preceding the floor number, while basement levels shall have the letter "B" or other appropriate identification letter preceding the floor level number. [101:7.2.2.5.4.1(L)]

10.12.3.1.13 Identification of the lower and upper terminus of the stairway shall be located at the bottom of the sign in minimum 1 in. (25 mm) high letters or numbers and shall be in accordance with 14.14.8.2. [101:7.2.2.5.4.1(M)]

10.12.3.2 Wherever an enclosed stair requires travel in an upward direction to reach the level of exit discharge, special signs with directional indicators showing the direction to the level of exit discharge shall be provided at each floor level landing from which upward direction of travel is required, unless otherwise provided in 10.12.3.2.1 and 10.12.3.2.2, and the following also shall apply:

- (1) Such signage shall comply with 14.14.8.1 and 14.14.8.2.
- (2) Such signage shall be visible when the door is in the open or closed position. [101:7.2.2.5.4.2]

10.12.3.2.1 The requirement of 10.12.3.2 shall not apply where signs required by 10.12.3.1.1 are provided. [101:7.2.2.5.4.2(A)]

10.12.3.2.2 The requirement of 10.12.3.2 shall not apply to stairs extending not more than one story below the level of exit discharge where the exit discharge is clearly obvious. [101:7.2.2.5.4.2(B)]

10.12.3.3* Stairway Tread Marking. Where new contrasting marking is applied to stairs, such marking shall comply with all of the following:

- (1) The marking shall include a continuous strip as a coating on, or as a material integral with, the full width of the leading edge of each tread.
- (2) The marking shall include a continuous strip as a coating on, or as a material integral with, the full width of the leading edge of each landing nosing.
- (3) The marking strip width, measured horizontally from the leading vertical edge of the nosing, shall be consistent at all nosings.
- (4) The marking strip width shall be 1 in. to 2 in. (25 mm to 51 mm).

[101:7.2.2.5.4.3]

10.12.3.4* Where new contrast marking is provided for stairway handrails, it shall be applied to, or be part of, at least the upper surface of the handrail; have a minimum width of ½ in. (13 mm); and extend the full length of each handrail. After marking, the handrail shall comply with 7.2.2.4.4 of NFPA 101. Where handrails or handrail extensions bend or turn corners, the stripe shall be permitted to have a gap of not more than 4 in. (100 mm). [101:7.2.2.5.4.4]

10.12.3.5 These signs shall be maintained in an approved manner.

10.12.3.6 Existing approved signs shall be permitted.

10.13 Seasonal and Vacant Buildings and Premises.

10.13.1 Every person owning or having charge or control of any vacant building, premises, or portion thereof shall remove all combustible storage, waste, refuse, and vegetation and shall lock, barricade, or otherwise secure the building or premises to prohibit entry by unauthorized persons.

10.13.1.1 The requirement of 10.13.1 shall not apply to buildings used on a seasonal basis, or the temporary vacancy of a building for tenant change or remodeling purposes.

10.13.2 All fire protection systems shall be maintained in service in seasonal and vacant buildings, unless otherwise approved by the AHJ.

10.13.2.1* With the approval of the AHJ, fire protection and fire alarm systems in seasonal and vacant buildings shall be permitted to be removed from service.

10.13.2.2 When required by the AHJ, other systems or components pertaining to fire protection shall be maintained.

10.13.3 The AHJ shall have the authority to require an inspection and test of any fire protection system or fire alarm system that has been out of service for 30 days or more before restored back into service.

10.14 Combustible Vegetation.

10.14.1 Combustible vegetation, including natural cut Christmas trees, shall be in accordance with Section 10.14.

10.14.1.1 Christmas tree placement within buildings shall comply with Table 10.14.1.1.

10.14.2 In any occupancy, limited quantities of combustible vegetation shall be permitted where the AHJ determines that adequate safeguards are provided based on the quantity and nature of the combustible vegetation.

10.14.3* Provisions for Fire Retardance for Artificial Vegetation.

10.14.3.1 Artificial vegetation and artificial Christmas trees shall be labeled or otherwise identified or certified by the manufacturer as being fire retardant.

10.14.3.2 Such fire retardance shall be demonstrated by each individual decorative vegetation item, including any decorative lighting, in an approved manner.

10.14.4 Vegetation and Christmas trees shall not obstruct corridors, exit ways, or other means of egress.

10.14.5 Only listed electrical lights and wiring shall be used on natural or artificial combustible vegetation, natural or artificial Christmas trees, and other similar decorations.

10.14.6 Electrical lights shall be prohibited on metal artificial trees.

10.14.7 Open flames such as from candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near combustible vegetation, Christmas trees, or other similar combustible materials.

10.14.8 Combustible vegetation and natural cut Christmas trees shall not be located near heating vents or other fixed or portable heating devices that could cause it to dry out prematurely or to be ignited.

10.14.9 Provisions for Natural Cut Trees.

10.14.9.1 Where a natural cut tree is permitted, the bottom end of the trunk shall be cut off with a straight fresh cut at least ½ in. (13 mm) above the end prior to placing the tree in a stand to allow the tree to absorb water.

10.14.9.2 The tree shall be placed in a suitable stand with water.

10.14.9.3 The water level shall be maintained above the fresh cut and checked at least once daily.

Table 10.14.1.1 Provisions for Christmas Trees by Occupancy

Occupancy	No Trees Permitted	Cut Tree Permitted With Automatic Sprinkler Systems	Cut Tree Permitted Without Automatic Sprinkler Systems	Balled Tree Permitted
Ambulatory health care				X
Apartment buildings		Within unit	Within unit	X
Assembly	X			
Board and care	X			
Business		X		X
Day-care		X		X
Detention and correctional	X			
Dormitories	X			
Educational	X			
Health care				X
Hotels	X			
Industrial		X	X	X
Lodging and rooming				X
Mercantile		X		X
One and two family		X	X	X
Storage		X	X	X

10.14.9.4* The tree shall be removed from the building immediately upon evidence of dryness.

10.14.10 Exterior Vegetation.

10.14.10.1 Cut or uncut weeds, grass, vines, and other vegetation shall be removed when determined by the AHJ to be a fire hazard.

10.14.10.2 When the AHJ determines that total removal of growth is impractical due to size or environmental factors, approved fuel breaks shall be established.

10.14.10.3 Designated areas shall be cleared of combustible vegetation to establish the fuel breaks.

10.15 Special Outdoor Events, Carnivals, and Fairs.

10.15.1 Permits. Permits, where required, shall comply with Section 1.12.

10.15.2 The AHJ shall be permitted to regulate all outdoor events such as carnivals and fairs as it pertains to access for emergency vehicles; access to fire protection equipment; placement of stands, concession booths, and exhibits; and the control of hazardous conditions dangerous to life and property.

10.15.3 Life Safety Evaluation. The AHJ shall be permitted to order a life safety evaluation in accordance with this subsection.

10.15.3.1* Where a life safety evaluation is required by other provisions of the *Code*, it shall comply with all of the following:

- (1) The life safety evaluation shall be performed by persons acceptable to the AHJ.
- (2) The life safety evaluation shall include a written assessment of safety measures for conditions listed in 10.15.3.2.
- (3) The life safety evaluation shall be approved annually by the AHJ and shall be updated for special or unusual conditions. [101:12.4.1.1]

10.15.3.2 Life safety evaluations shall include an assessment of all of the following conditions and related appropriate safety measures:

- (1) Nature of the events and the participants and attendees
- (2) Access and egress movement, including crowd density problems
- (3) Medical emergencies
- (4) Fire hazards
- (5) Permanent and temporary structural systems
- (6) Severe weather conditions
- (7) Earthquakes
- (8) Civil or other disturbances
- (9) Hazardous materials incidents within and near the facility
- (10) Relationships among facility management, event participants, emergency response agencies, and others having a role in the events accommodated in the facility [101:12.4.1.2]

10.15.3.3* Life safety evaluations shall include assessments of both building systems and management features upon which reliance is placed for the safety of facility occupants, and such assessments shall consider scenarios appropriate to the facility. [101:12.4.1.3]

10.15.4 Standby Fire Personnel. Where required by the AHJ, standby fire personnel shall be provided and comply with 1.7.16.

10.15.5 Portable Fire Extinguishers. A minimum of one portable fire extinguisher shall be provided for each concession stand where required by the AHJ in accordance with Section 13.6.

10.15.6 Smoke Alarms. A minimum of one single station smoke alarm shall be located in all stock or equipment trailers when they are used for sleeping purposes.

10.15.7 Electrical Equipment. Electrical equipment and installations shall comply with Section 11.1.

10.15.8 Cooking. Concession stands utilized for cooking shall have a minimum of 10 ft (3 m) of clearance on two sides and shall not be located within 10 ft (3 m) of amusement rides or devices.

10.15.9 Communications. Where required by the AHJ, a method of notifying the fire department in the event of an emergency shall be provided.

10.15.9.1 Methods of notifying the fire department shall consist of a telephone, an alarm system connected to the fire department or other approved agency, or other approved means.

10.15.9.2 Methods of notifying the fire department shall be readily available to the public.

10.15.10 Internal Combustion Power Sources.

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

10.15.10.2 Refueling. Refueling shall be conducted only when not in use.

10.15.10.3 Protection. Internal combustion power sources shall be isolated from contact with the public by either physical guards, fencing, or an enclosure.

10.15.10.4 Fire Extinguishers. A minimum of one portable fire extinguisher with a rating of not less than 2-A:10-B:C shall be provided.

10.15.11 Crop Maze.

10.15.11.1 Permits. Permits, where required, shall comply with Section 1.12.

10.15.11.2 General.

10.15.11.2.1 The owner or operator of a crop maze amusement attraction shall advise all employees of the fire and life safety regulations established in this subsection prior to the employees assuming their respective duties.

10.15.11.2.2 The owner or operator of a crop maze or their employees shall provide safety instructions to the visitors and patrons of a crop maze prior to their entrance to the maze.

10.15.11.2.3 Employee Monitor.

10.15.11.2.3.1 A minimum of two employees shall be on duty to monitor a crop maze during hours of operation.

10.15.11.2.3.2 A minimum of one of the employees shall be located on an elevated platform a minimum of 10 ft (3 m) above the maze.

10.15.11.2.4 The owner or operator of a crop maze shall contact the local fire department and provide the fire department with the opportunity to prepare a pre-plan of the crop maze amusement attraction prior to the start of seasonal operations.

10.15.11.2.5 Motorized vehicles shall not be parked within 75 ft (23 m) of a crop maze.

10.15.11.2.6 A fuel break of a minimum of 20 ft (6 m) wide shall be cleared between a crop maze and any vehicles or vegetation outside the maze.

10.15.11.2.7 Public Address System.

10.15.11.2.7.1 A public address system shall be readily available to employees at a crop maze to assist them in making announcements to the visitors or patrons of a crop maze in the event of an emergency.

10.15.11.2.7.2 A bull horn or loud speaker shall suffice as a public address system.

10.15.11.2.8 The entrance and exit from a crop maze shall not be blocked or obstructed at any time the maze is open for business and occupied by the public.

10.15.11.2.9 No more than 200 persons per acre, including adults and children, shall occupy the crop maze at any one time.

10.15.11.3 Prohibited.

10.15.11.3.1* No open flame-producing devices or equipment shall be permitted within the confines of the crop maze.

10.15.11.3.2 No smoking shall be permitted within the confines of the crop maze.

10.15.11.4 Fireworks.

10.15.11.4.1 Fireworks shall not be discharged within a minimum of 300 ft (91 m) of any crop maze at any time.

10.15.11.4.2 The use of display fireworks shall comply with Chapter 65 in addition to the requirements of 10.15.11.4.

10.16* Outside Storage.

10.16.1 Outside storage of combustible materials shall not be located within 10 ft (3 m) of a property line.

10.16.2 The separation distance shall be allowed to be reduced to 3 ft (0.9 m) for storage not exceeding 6 ft (1.8 m) in height.

10.16.3 The separation distance shall be allowed to be reduced where the AHJ determines that no hazard to the adjoining property exists.

10.16.4 Combustible material shall not be stored beneath a building or structure unless specifically constructed or protected for this purpose.

10.16.5 Combustible storage in the open shall not exceed 20 ft (6.1 m) in height.

10.17 Parade Floats.

10.17.1 Permits. Permits, where required, shall comply with Section 1.12.

10.17.2 Fire Protection. Motorized parade floats and towing apparatus shall be provided with a minimum 2-A:10-B:C-rated portable fire extinguisher readily accessible to the operator.

10.18 Powered Industrial Trucks. Powered industrial trucks shall be operated and maintained in accordance with NFPA 505, *Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations*.

10.19* Storage of Combustible Materials.

10.19.1 General. Storage of combustible materials shall be orderly.

10.19.2 Permits. Permits, where required, shall comply with Section 1.12.

10.19.3 Ceiling Clearance.

10.19.3.1 Storage shall be maintained 2 ft (0.61 m) or more from the ceiling in nonsprinklered areas of buildings.

10.19.3.2* The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater. [13:8.6.6.1]

10.19.3.2.1 The clearance between the deflector and the top of storage shall be permitted to be less than 18 in. (457 mm) where permitted by NFPA 13.

10.19.3.3 Where other standards specify greater clearance to storage minimums, they shall be followed. [13:8.6.6.2]

10.19.4 Means of Egress. Combustible material shall not be stored in exits.

10.19.5 Equipment Rooms.

10.19.5.1 Combustible material shall not be stored in boiler rooms, mechanical rooms, or electrical equipment rooms.

10.19.5.2 Materials and supplies for the operation and maintenance of the equipment in the room shall be permitted.

10.19.6 Attic, Under-Floor, and Concealed Spaces. Attic, under-floor, and concealed spaces used for storage of combustible materials shall comply with the protection from hazards requirements for storage rooms in NFPA 101.

10.19.7 Fueled Equipment. Fueled equipment, including but not limited to motorcycles, mopeds, lawn-care equipment, and portable cooking equipment, shall not be stored, operated, or repaired within a building except under one of the following conditions:

- (1) The building or room has been constructed for such use in accordance with the building code.
- (2) The use is allowed by other provisions of this Code.

10.20 Indoor Children's Playground Structures.

10.20.1 Structures intended as children's playgrounds, installed indoors and that which exceed 10 ft (3.1 m) in height and 160 ft² (14.9 m²) in area, shall comply with the specifications in 10.20.1.1.

10.20.1.1 Indoor children's playground structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:

- (1) Fire retardant-treated wood.
- (2) Light-transmitting plastics complying with the requirements in 10.20.1.2.
- (3) Foam plastics (including the pipe foam used in soft-contained play equipment structures) having a maximum heat-release rate not greater than 100 kW when tested in accordance with UL 1975 or NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, using the 20 kW ignition source.
- (4) Aluminum composite material (ACM) meeting the requirements of Class A interior finish in accordance with Chapter 10 of NFPA 101, *Life Safety Code*, when tested as an assembly in the maximum thickness intended for use.
- (5) Textiles and films complying with the flame propagation performance criteria contained in NFPA 701.
- (6) Plastic materials used to construct rigid components of soft-contained play equipment structures (such as tubes, windows, panels, junction boxes, pipes, slides, and decks) exhibiting a peak rate of heat release not exceeding 400 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 0.24 in. (50 kW/m²) in the horizontal orientation at a thickness of 0.24 in. (6 mm).
- (7) Balls used in ball pools, in soft-contained play equipment structures, shall have a maximum heat release rate not greater than 100 kW when tested in accordance with UL 1975 or NFPA 289 using the 20 kW ignition source. The minimum specimen test size shall be 36 in. × 36 in. (0.91 m × 0.91 m) by an average of 21 in. (0.56 m) deep, and the balls shall be held in a box constructed of galvanized steel poultry netting wire mesh.
- (8) Foam plastics shall be covered by a fabric, coating, or film meeting the flame propagation performance criteria of NFPA 701.

- (9) The floor covering within the children's playground structure shall exhibit a Class I interior floor finish classification, as described in Chapter 10 of NFPA 101 when tested in accordance with NFPA 253.

10.20.1.2* Light-transmitting plastics used for children's playgrounds shall meet all of the following criteria:

- (1) They shall have a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929.
- (2) They shall have a smoke developed index not greater than 450 when tested in the manner intended for use in accordance with ASTM E 84, *Standard Test Method of Surface Burning Characteristics of Building Materials*, or ANSI/UL 723, *Standard for Test for Surface Burning Characteristics of Building Materials*, or not greater than 75 when tested in the thickness intended for use in accordance with ASTM D 2843, *Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics*.
- (3) They shall meet the criteria of one of the following classifications:
 - (a) CC1 — Plastic materials that have a burn length of 1 in. (25 mm) or less and flame extinguishment when tested at a nominal thickness of 0.060 in. (1.5 mm), or in the thickness intended for use, in accordance with ASTM D 635, *Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position*
 - (b) CC2 — Plastic materials that have a burning rate of 2½ in./min (64 mm/min) or less when tested at a nominal thickness of 0.060 in. (1.5 mm), or at a thickness intended for use, in accordance with ASTM D 635

10.20.1.3 Indoor children's playground structures shall have a minimum horizontal separation from other structures of 20 ft (6.1 m).

10.20.1.4 Indoor children's playground structures shall not exceed 300 ft² (28 m²) in area, unless approved by the AHJ.

Chapter 11 Building Services

11.1 Electrical Fire Safety.

11.1.1 Section 11.1 shall apply to new, existing, permanent, or temporary electrical appliances, equipment, fixtures, or wiring.

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

11.1.2 All electrical appliances, fixtures, equipment, or wiring shall be installed and maintained in accordance with NFPA 70, *National Electrical Code*.

11.1.3 Permanent wiring shall be installed and maintained in accordance with NFPA 70.

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

11.1.5 Multiplug Adapters.

11.1.5.1 Multiplug adapters, such as multiplug extension cords, cube adapters, strip plugs, and other devices, shall be listed and used in accordance with their listing.

11.1.5.2 Multiplug adapters shall not be used as a substitute for permanent wiring or receptacles.

11.1.6 Relocatable Power Taps.

11.1.6.1 Relocatable power taps shall be of the polarized or grounded type with overcurrent protection and shall be listed.

11.1.6.2 The relocatable power taps shall be directly connected to a permanently installed receptacle.

11.1.6.3 Relocatable power tap cords shall not extend through walls, ceilings, or floors; under doors or floor coverings; or be subject to environmental or physical damage.

11.1.7 Extension Cords.

11.1.7.1 Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplug adapter and shall, except for approved multiplug extension cords, serve only one portable appliance.

11.1.7.2* The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

11.1.7.3 The extension cords shall be maintained in good condition without splices, deterioration, or damage.

11.1.7.4 Extension cords shall be grounded when servicing grounded portable appliances.

11.1.7.5 Extension cords and flexible cords shall not be affixed to structures; extend through walls, ceilings, or floors, or under doors or floor coverings; or be subject to environmental or physical damage.

11.1.7.6 Extension cords shall not be used as a substitute for permanent wiring.

11.1.8 Temporary Installations.

11.1.8.1 Other Articles. Except as specifically modified in Article 590 of NFPA 70, all other requirements of NFPA 70 for permanent wiring shall apply to temporary wiring installations. [70:590.2(A)]

11.1.8.2 Approval. Temporary wiring methods shall be acceptable only if approved based on the conditions of use and any special requirements of the temporary installation. [70:590.2(B)]

11.1.8.3 During the Period of Construction. Temporary electrical power and lighting installations shall be permitted during the period of construction, remodeling, maintenance, repair, or demolition of buildings, structures, equipment, or similar activities. [70:590.3(A)]

11.1.8.4 90 Days. Temporary electrical power and lighting installations shall be permitted for a period not to exceed 90 days for holiday decorative lighting and similar purposes. [70:590.3(B)]

11.1.8.5 Emergencies and Tests. Temporary electrical power and lighting installations shall be permitted during emergencies and for tests, experiments, and developmental work. [70:590.3(C)]

11.1.8.6 Removal. Temporary wiring shall be removed immediately upon completion of construction or purpose for which the wiring was installed. [70:590.3(D)]