


State of Connecticut IBC code update 2005 - 2012



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2012 International Building Code



Chapter 1 Administration



New England Code Consulting



Connecticut Amendment

(NEW) (Amd) **101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the 2003 International Residential Code.
2. Existing buildings undergoing repair, movement, alterations or additions and change of occupancy shall be permitted to comply with the 2003 International Existing Building Code. The choice to comply with this code or the 2003 International Existing Building Code shall be made by the permit applicant at the time of application for the building permit and shall be indicated on the construction documents in writing.



Connecticut Amendment

- (Amd) **101.4.2 Fuel gas.** The 2003 International Fuel Gas Code is not adopted by the State of Connecticut. The installation and operation of gas equipment and piping shall comply with sections 29-329, 29-330 and 29-331 of the Connecticut General Statutes, and the regulations known as the Connecticut Gas Equipment and Piping Code adopted by the Commissioner of Public Safety under authority of section 29-329 of the Connecticut General Statutes, and the regulations known as the Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code adopted by the Commissioner of Public Safety under authority of section 29-331 of the Connecticut General Statutes. References to the International Fuel Gas Code within the body of the model document shall be considered to be references to such statutes and regulations.

Connecticut General Statutes

- Sec. 29-329. (Formerly Sec. 29-70a). *(See end of section for amended version and effective date.) Regulations concerning installation and operation of gas equipment and piping. Variations or exemptions. (a) The State Fire Marshal shall make regulations prescribing reasonable minimum requirements for the installation and operation of gas equipment and gas piping. In the writing of such regulations said fire marshal may adopt by reference standards concerning gas equipment and piping installation as set forth by the National Fire Protection Association for the prevention of injury to life and damage to property and protection from hazards incident to the installation and operation of such gas equipment and piping.
- (b) No regulation made in accordance with this section shall apply to premises used for manufacturing or to public service companies, as defined in section 16-1, nor shall any such regulation impair the rights of municipalities to enact ordinances and make rules and regulations for the installation of gas equipment and gas piping so far as such ordinances, rules and regulations specify requirements equal or additional to or more stringent than the regulations issued under the authority of this section.
- (c) The State Fire Marshal may grant variations or exemptions from, or approve equivalent or alternate compliance with, particular provisions of any regulation issued under the provisions of this section where strict compliance with such provisions would entail practical difficulty or unnecessary hardship or is otherwise adjudged unwarranted, provided any such variation, exemption, approved equivalent or alternate compliance shall, in the opinion of the State Fire Marshal, secure the public safety and shall be made in writing.
- (d) Any person aggrieved by any such regulation or by any act of said Fire Marshal in enforcing the same may apply for relief to the superior court for the judicial district of Hartford or for the judicial district in which such gas equipment or gas piping is located or, if said court is not in session, to any judge thereof, who may grant appropriate relief.
- (e) Any person who, by himself or his employee or agent or as the employee or agent of another, violates or fails to comply with any regulation adopted under this section shall be fined not more than one hundred dollars or imprisoned not more than six months or both.

Connecticut General Statutes

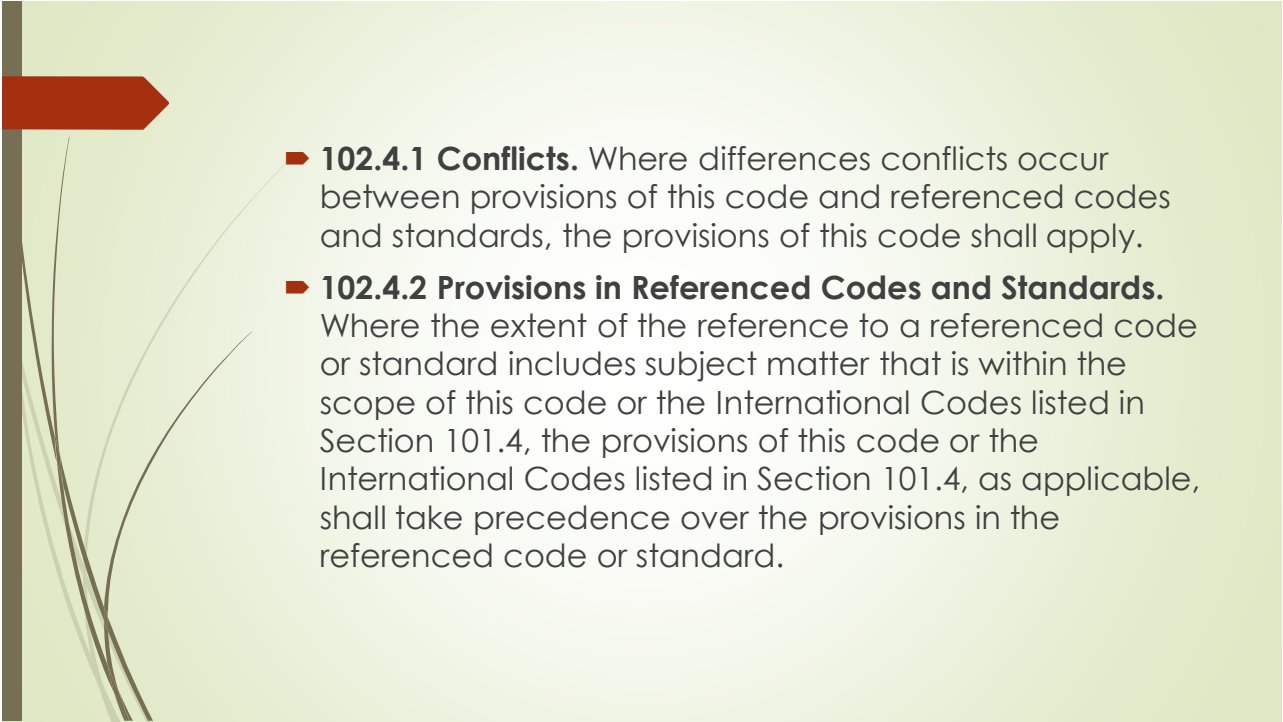
- **Note: On and after January 1, 2015, this section, as amended by section 12 of public act 09-177, section 6 of public act 10-54 and sections 3 and 4 of public act 12-60, is to read as follows:**
- "Sec. 29-329. (Formerly Sec. 29-70a). Regulations concerning installation and operation of gas equipment and piping. Exemption. (a) The State Fire Marshal shall adopt regulations, in accordance with the provisions of chapter 54, prescribing reasonable minimum requirements for the installation and operation of gas equipment and gas piping. Such regulations shall be incorporated into the State Fire Prevention Code and shall include provisions for the prevention of injury to life and damage to property and protection from hazards incident to the installation and operation of such gas equipment and piping.
- (b) No regulation adopted in accordance with this section shall apply to any electric company, gas company or electric distribution company, as such terms are defined in section 16-1."

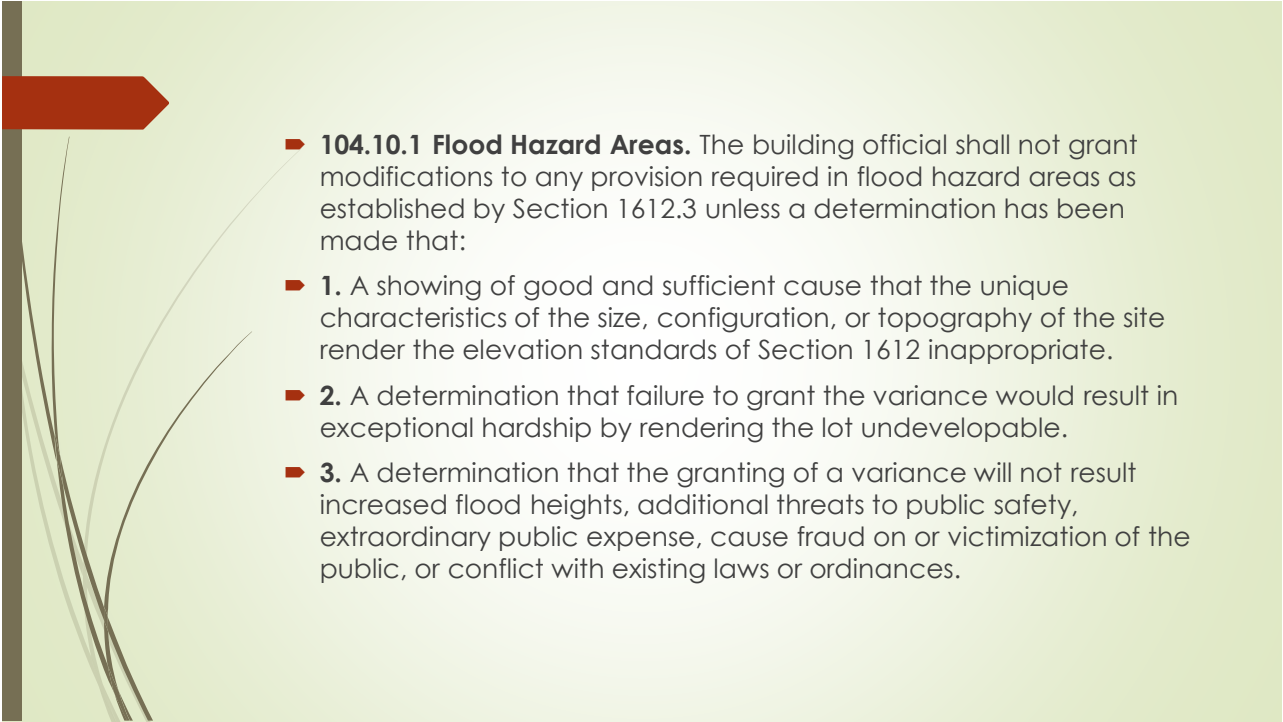
Connecticut General Statutes

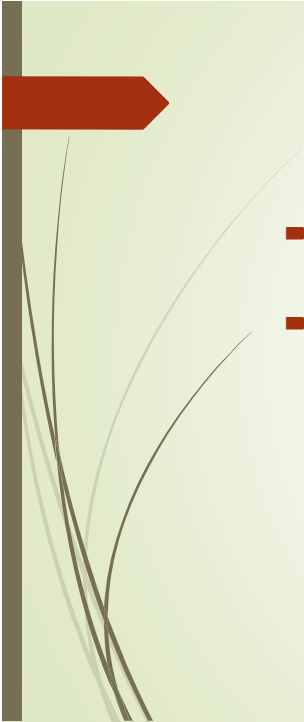
- Sec. 29-331. (Formerly Sec. 29-72). *(See end of section for amended version and effective date.) Regulations concerning liquefied petroleum gas and liquefied natural gas. The Commissioner of Construction Services shall make reasonable regulations concerning the safe storage, use, transportation by any mode and transmission by pipeline of liquefied petroleum gas. Regulations concerning safe storage shall specify standards to ensure maximum security against unauthorized entry into storage areas where liquefied petroleum gas or liquefied natural gas is stored. In adopting such regulations, said commissioner may adopt by reference standards concerning liquefied petroleum gas as set forth by the National Fire Protection Association for the prevention of damage to property and injury to life, and protection from hazards incident to the storage, use, transportation by any mode and transmission by pipeline of such gas, with particular reference to the design, construction, location and operation of liquefied petroleum gas installations. Such regulations shall not apply to electric, electric distribution and gas companies, as defined in section 16-1.

101.3 Intent.

The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

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- ▶ **102.4.1 Conflicts.** Where differences conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.
 - ▶ **102.4.2 Provisions in Referenced Codes and Standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the International Codes listed in Section 101.4, the provisions of this code or the International Codes listed in Section 101.4, as applicable, shall take precedence over the provisions in the referenced code or standard.


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- ▶ **104.10.1 Flood Hazard Areas.** The building official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:
 - ▶ **1.** A showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site render the elevation standards of Section 1612 inappropriate.
 - ▶ **2.** A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
 - ▶ **3.** A determination that the granting of a variance will not result increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.

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- **4.** A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
 - **5.** Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and stating that construction below the design flood elevation increases risks to life and property.



Connecticut Amendment

- (NEW) (Amd) **105.1 Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or **structure**, or to move a lot line that will affect any existing building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.



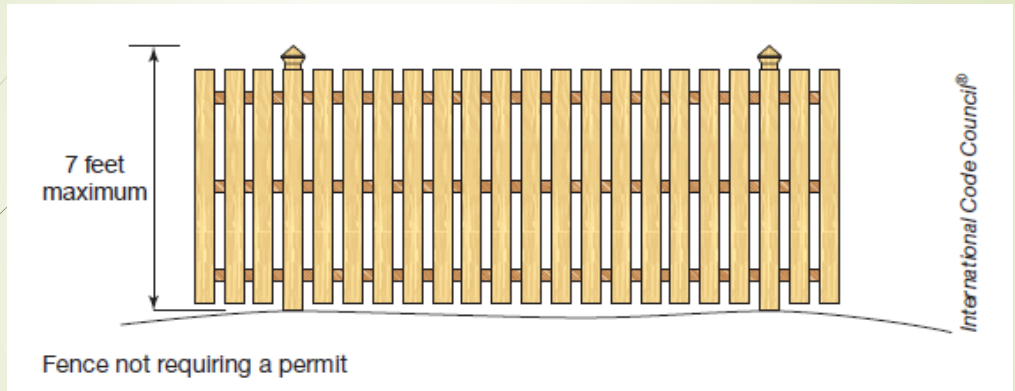
Connecticut Amendment

- ▶ (Amd) **105.2 Work exempt from permit.**
Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws, statutes, regulations or ordinances of the jurisdiction. Permits shall not be required for the following work:



Connecticut Amendment

- ▶ **Building:**
- ▶ 1. Fences not over **7** feet high.
- ▶ 2. Retaining walls that are not over 3 feet in height measured from finished grade at the bottom of the wall to finished grade at the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
- ▶ 3. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.
- ▶ 4. Sidewalks, driveways and on-grade concrete or masonry patios not more than 30 inches above adjacent grade and not over any basement or story below and which **are not part of an accessible route.**



Connecticut Amendment

- 5. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish **work not involving structural changes or alterations.**
- 6. Temporary motion picture, television and theater stage sets and scenery.
- 7. Prefabricated swimming pools accessory to a Use Group R-3 occupancy, as applicable in Section 101.2, which are less than 24 inches deep, do not exceed 5,000 gallon capacity and are installed entirely above ground.
- 8. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.

Connecticut Amendment

- 9. Swings and other playground equipment.
- 10. Window awnings supported by an exterior wall which do not project more than **54 inches** from the exterior wall and do not require additional support of Group R-3, as applicable in Section 101.2 and Group U occupancies.
- 11. Movable cases, counters and partitions not over 5 feet 9 inches in height and not containing any electrical, plumbing or mechanical equipment.
- 12. [Grandstands] Portable grandstands or bleachers providing seating for **fewer than 100 persons** when located outside of a building.

Connecticut Amendment

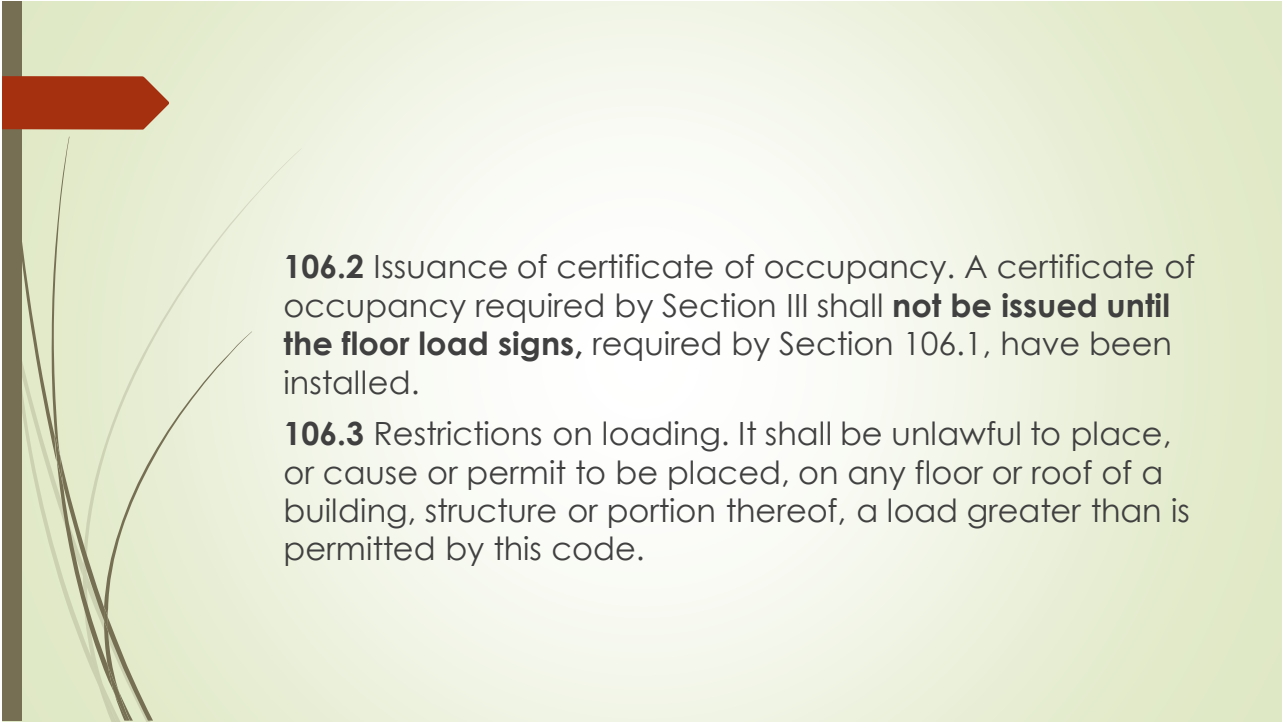
- (NEW) (Add) **105.2.5 Federal agency exemptions**. A federal agency performing construction on federally owned land or on leased land **totally under the control of the federal government** shall not be required to obtain a building permit or a demolition permit from the local building official.



SECTION 106

FLOOR AND ROOF DESIGN LOADS

106.1 Live loads posted. Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m²), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices




106.2 Issuance of certificate of occupancy. A certificate of occupancy required by Section III shall **not be issued until the floor load signs**, required by Section 106.1, have been installed.

106.3 Restrictions on loading. It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

Connecticut Amendment

- (Amd) **107.1 Now 108.? General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant a single 180-day extension for demonstrated cause.
- **[Exceptions:** The following shall be exempt from permit requirements:
 - 1. Tents used exclusively for recreational camping purposes.
 - 2. Tents less than **350** square feet total area. **(20X18)**
 - 3. Tents 900 square feet and smaller in total area when occupied by fewer than **50 persons**, which have no heating appliances, **no installed electrical service**, and are erected for fewer than 72 hours.]
- **Exception:** Tents, canopies and other membrane structures erected for a period of fewer than 180 days shall comply with **Section 3103** of this code.

- **107.1 General.** Submittal documents consisting of *construction documents*, statement of *special inspections*, geotechnical report and other data shall be submitted in **two or more sets** with each *permit* application. The *construction documents* shall be prepared by a *registered design professional* where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the *building official* is authorized to require additional *construction documents* to be prepared by a *registered design professional*.




Connecticut Amendment

- ▶ **(NEW) (Add) SECTION 117 – VACANT BUILDINGS**
- ▶ **(NEW) (Add) 117.1 General.** Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with this section.



Connecticut Amendment

- ▶ **(NEW) (Add) 117.1.1 Abandoned premises.** Buildings, structures and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured; which have been occupied by unauthorized persons or for illegal purposes; or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe and abated or demolished in accordance with this code.




Connecticut Amendment

- (NEW) (Add) **117.2 Safeguarding vacant premises.** Temporarily unoccupied buildings, structures, premises or portions thereof shall be secured and protected in accordance with this section.
- (NEW) (Add) **117.2.1 Security.** Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals.



Connecticut Amendment

- (NEW) (Add) **117.2.2 Fire protection.** Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.
- **Exceptions:**
 - 1. When the premises have been cleared of all combustible materials and debris and, in the opinion of the code official, the type of construction, fire separation distance and security of the premises do not create a fire hazard.
 - 2. Where buildings will not be heated and fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply) provided the building has no contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons.



Connecticut Amendment

- ▶ (NEW) (Add) **117.2.3 Fire separation.** Fire-resistance-rated partitions, fire barriers and fire walls separating vacant tenant spaces from the remainder of the building shall be maintained.
- ▶ (NEW) (Add) **117.3 Removal of combustibles.** Persons owning, or in charge or control of, a vacant building or portion thereof, shall remove all accumulations of combustible materials and flammable or combustible waste or rubbish from such space. The premises shall be maintained clear of waste or hazardous materials.
- ▶ **Exceptions:**
 - ▶ 1. Buildings or portions of buildings undergoing additions, alterations, repairs or change of occupancy under a valid permit in accordance with this code.
 - ▶ 2. Seasonally occupied buildings.



Connecticut Amendment

- ▶ (NEW) (Add) **117.4 Removal of hazardous materials.** Persons owning, or in charge or control of, a vacant building or portion thereof, shall remove all accumulations of hazardous materials as defined by this code.



Chapter 2 Definitions

- ▶ Moved all definitions from other areas of the code to Chapter 2.



Those damn IBC definitions again!

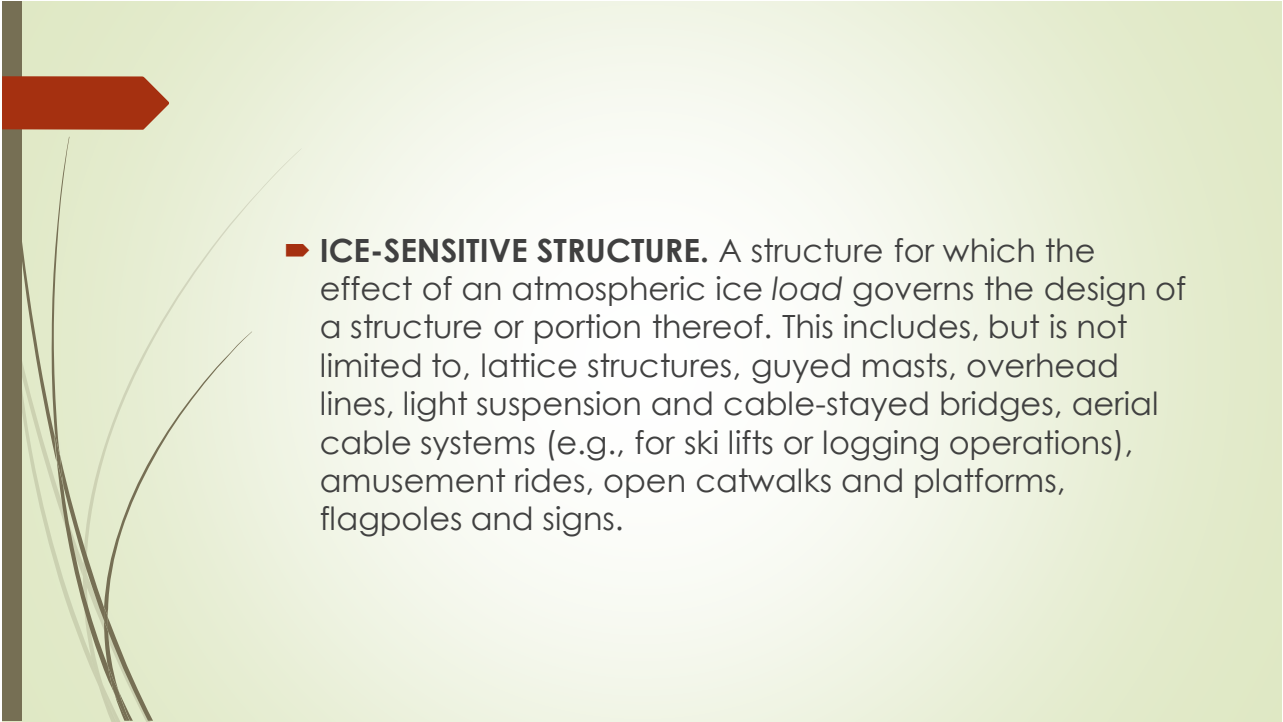
STRUCTURE. That which is built or constructed.



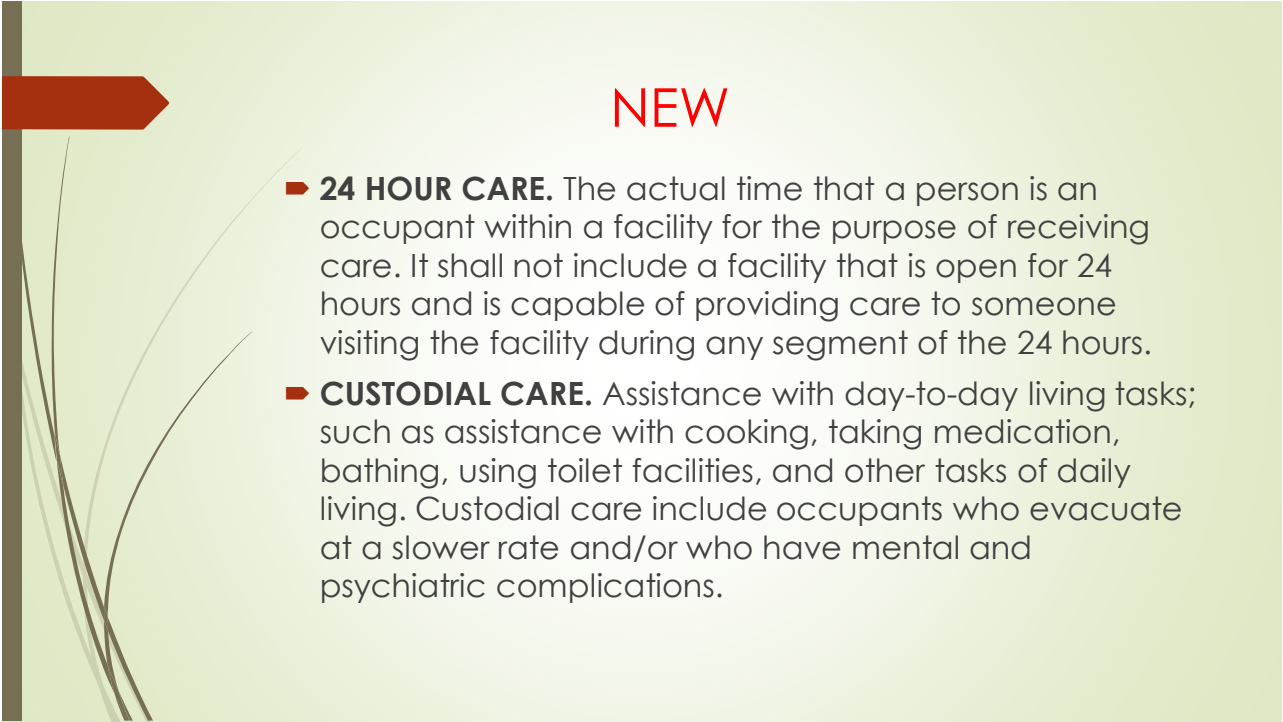
**Corridor, Exit, Exit access doorway,
Exit access ramp, Exit access
stairway, Interior exit ramp, Interior
exit stairway**

- ▶ Revised to reflect changes to the means-of-egress provisions of Chapter 10, which, among other things, clarifies the distinction **between exit access features and exit features.**

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- ▶ **Ice-sensitive structure-** Revised to clarify the application of Section 1614, which addresses atmospheric ice loads.

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- **ICE-SENSITIVE STRUCTURE.** A structure for which the effect of an atmospheric ice *load* governs the design of a structure or portion thereof. This includes, but is not limited to, lattice structures, guyed masts, overhead lines, light suspension and cable-stayed bridges, aerial cable systems (e.g., for ski lifts or logging operations), amusement rides, open catwalks and platforms, flagpoles and signs.

NEW

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- **24 HOUR CARE.** The actual time that a person is an occupant within a facility for the purpose of receiving care. It shall not include a facility that is open for 24 hours and is capable of providing care to someone visiting the facility during any segment of the 24 hours.
 - **CUSTODIAL CARE.** Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities, and other tasks of daily living. Custodial care include occupants who evacuate at a slower rate and/or who have mental and psychiatric complications.

NEW

- **INCAPABLE OF SELF PRESERVATION.** Persons because of age; physical limitations; mental limitations; chemical dependency, or medical treatment cannot respond as an individual to an emergency situation.
- **MEDICAL CARE.** Care involving medical or surgical procedures, nursing, or for psychiatric purposes.


- **DETOXIFICATION FACILITIES.** ~~Facilities that serve patients who are provided treatment for substance abuse on a 24-hour basis and~~ serving care recipients who are incapable of self-preservation or who are harmful to themselves or others.
- **CHILD FOSTER CARE FACILITIES.** ~~Facilities that provide care on a 24-hour basis to more than five children, 2½ years of age or less.~~
- **NURSING HOMES.** ~~Nursing homes are long term care facilities that provide care on a 24-hour basis, including both intermediate care facilities and skilled nursing facilities, serving more than five persons and where~~ any of the persons are incapable of self-preservation.



■ **HOSPITALS AND MENTAL PSYCHIATRIC HOSPITALS.**

~~Facilities buildings, or portions thereof used on a 24-hour basis that provide care or treatment for the medical, psychiatric, obstetrical, or surgical treatment of inpatients who care recipients that are incapable of self-preservation.~~

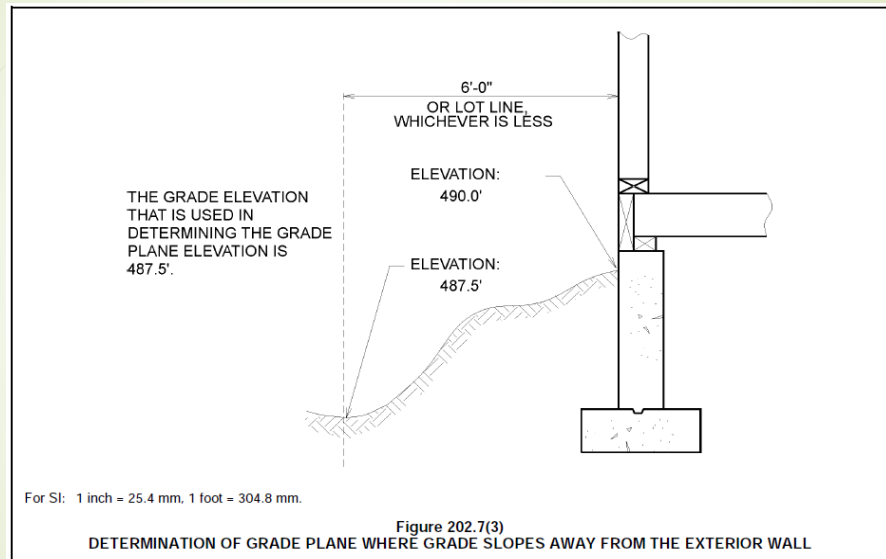
- **INCAPABLE OF SELF PRESERVATION.** Persons because of age; physical limitations; mental limitations; chemical dependency, or medical treatment cannot respond as an individual to an emergency situation.

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- **AMBULATORY CARE FACILITY.** Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a **less than 24-hour** basis to individuals who are rendered ***incapable of self-preservation*** by the services provided.

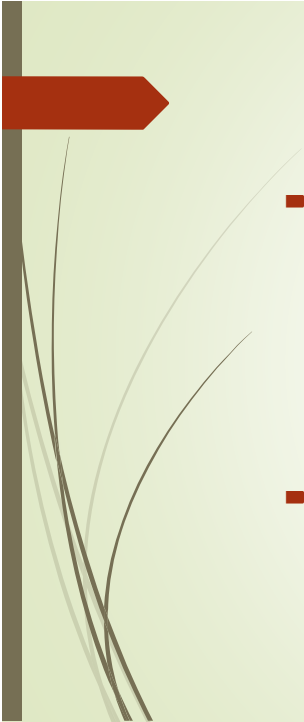


- **CONGREGATE LIVING FACILITIES.** A building or part thereof that contains sleeping units where residents share bathroom and/or kitchen facilities.


- **DECORATIVE GLASS.** A carved, leaded or *Dalle glass* or glazing material whose purpose is decorative or artistic, not functional; whose coloring, texture or other design qualities or components cannot be removed without destroying the glazing material and whose surface, or assembly into which it is incorporated, is divided into segments.



Chapter 3 Use and Occupancy Classifications

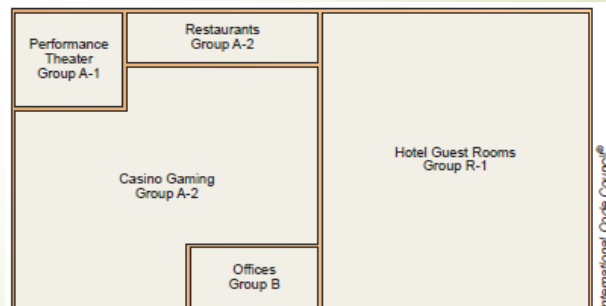
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- **303.1 Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social, or religious functions; recreation; food or drink consumption; or awaiting transportation.

 - **303.1.1 Small Buildings and Tenant Spaces.** A building or tenant space used for assembly purposes with an **occupant load of less than 50** persons shall be classified as a Group B occupancy.

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- **303.1.2 Small Assembly Spaces.** The following rooms and spaces shall not be classified as Assembly occupancies:
 - **1.** A room or space used for assembly purposes with an *occupant load* of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy **or as part of that occupancy.**
 - **3.2.** A room or space used for assembly purposes that is less than 750 square feet (70 m²) in area and accessory to another occupancy shall be classified as a Group B occupancy **or as part of that occupancy.**

- **303.1.3 Associated with Group E Occupancies.** Assembly areas that are accessory to Group E occupancies are not considered separate occupancies except when applying the assembly occupancy requirements of Chapter 11. **A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy.**
- **303.1.4 Accessory to Places of Religious Worship.** Accessory religious educational rooms and religious auditoriums with occupant loads of less than 100 are not considered separate occupancies.

- **303.3 Assembly Group A-2.** Assembly uses intended for food and/or drink consumption including, but not limited to:
 - Banquet halls
 - Casinos (gaming areas)
 - Night clubs
 - Restaurants, cafeterias, and similar dining facilities (including associated commercial kitchens)
 - Taverns and bars



Classification of casino and related uses.

Connecticut Amendment

- (NEW) (Add) **304.1.1 In-home Group B occupancies.** Customary in-home business occupancies located within a single-family dwelling unit, that provide professional services and employ a maximum of one employee within the dwelling in addition to the residents of the dwelling unit, shall be classified as a Group R-3 occupancy or shall be permitted to comply with the requirements of the 2003 International Residential Code portion of the 2005 State Building Code.

- **306.2 Moderate-hazard Factory Industrial, Group F-1.** Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:
 - Food processing and commercial kitchens not associated with restaurants, cafeterias, and similar dining facilities.



■ **308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

- Foster Child care facilities
- Detoxification facilities
- Hospitals
- Nursing homes
- ~~Mental~~ Psychiatric hospitals

■ **308.4.1 Five or Fewer Persons Receiving Care.** A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

NEW



- **310.6 Residential Group R-4.** Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.
- This occupancy shall include buildings, structures, or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self preservation. This group shall include, but not be limited to, the following:
 - Alcohol and drug centers
 - Assisted living facilities
 - Congregate care facilities
 - Convalescent facilities
 - Group homes

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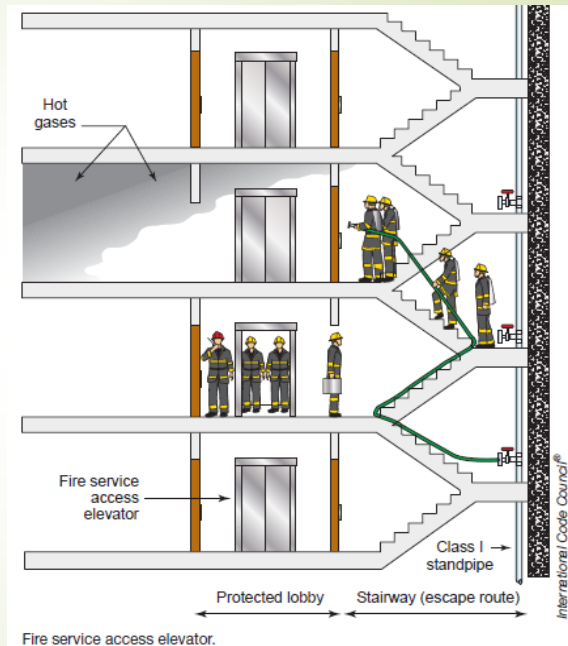
- Halfway houses
- Residential board and custodial care facilities
- Social rehabilitation facilities
- Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code. ~~Or shall comply with the *International Residential Code* provided the building is protected by an *automatic sprinkler system* installed in accordance with Section 903.2.8.~~

Group R-4 halfway house



Chapter 4 Special Detailed Requirements Based on Use and Occupancy

- **403.6.1 Fire Service Access Elevator.** In buildings with an occupied floor more than 120 feet (36 576 mm) above the lowest level of fire department vehicle access, no fewer than **one two** fire service access elevators, **or all elevators, whichever is less**, shall be provided in accordance with Section 3007. **Each fire service access elevator shall have a capacity of not less than 3500 pounds (1588 kg).**



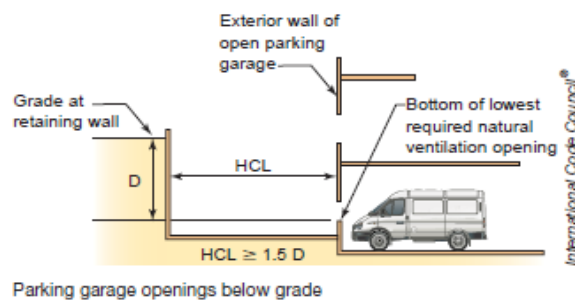
- **406.4 Public Parking Garages.** Parking garages other than private parking garages, shall be classified as public parking garages and shall comply with the provisions of Sections 406.4.2 through 406.4.8 and shall be classified as either an open as defined in Section 406.3, parking garage or an enclosed parking garage and shall meet appropriate criteria of Section 406.4. Open parking garages shall also comply with Section 406.5. Enclosed parking garages shall also comply with Section 406.6. Also See Section 510 for special provisions for parking garages.



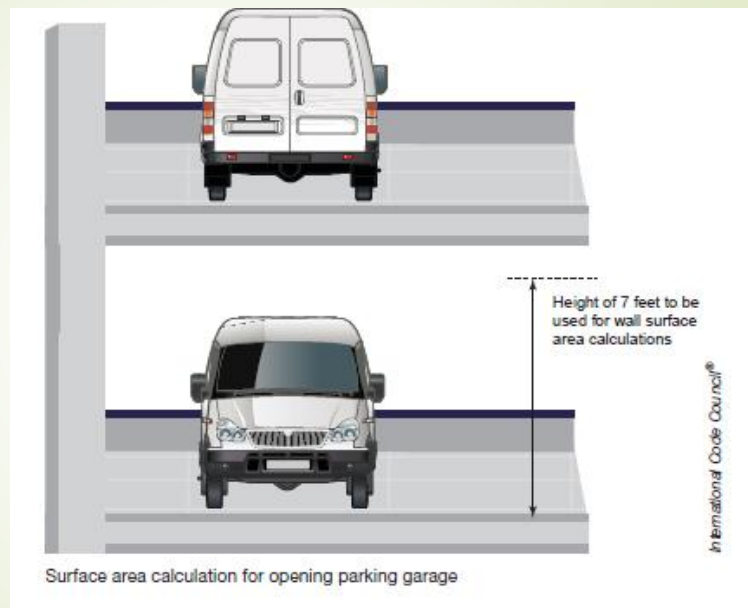
- **406.5.2 Openings.** For natural ventilation purposes, the exterior side of the structure shall have uniformly distributed openings on two or more sides. The area of such openings in exterior walls on a tier shall be not less than 20 percent of the total perimeter wall area of each tier. The aggregate length of the openings considered to be providing natural ventilation shall be not less than 40 percent of the perimeter of the tier. Interior walls shall be not less than 20 percent open with uniformly distributed openings.
- **Exception:** Openings are not required to be distributed over 40 percent of the building perimeter where the required openings are uniformly distributed over two opposing sides of the building.

NEW

- **406.5.2.1 Openings below Grade.** Where openings below grade provide required natural ventilation, the outside horizontal clear space shall be one and one-half times the depth of the opening. The width of the horizontal clear space shall be maintained from grade down to the bottom of the lowest required opening.



- 406.5.5 Area and Height Increases.** The allowable area and height of open parking garages shall be increased in accordance with the provisions of this section. Garages with sides open on three-fourths of the building's perimeter are permitted to be increased by 25 percent in area and one tier in height. Garages with sides open around the entire building's perimeter are permitted to be increased by 50 percent in area and one tier in height. For a side to.....



SECTION 410

STAGES, AND PLATFORMS, AND TECHNICAL PRODUCTION AREAS

- ~~**410.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein are defined in Chapter 2:~~
- ~~**FLY GALLERY.** A raised floor area above a stage from which the movement of scenery and operation of other stage effects are controlled.~~
- ~~**GRIDIRON.** The structural framing over a stage supporting equipment for hanging or flying scenery and other stage effects.~~
- ~~**PINRAIL.** A rail on or above a stage through which belaying pins are inserted and to which lines are fastened.~~

- PLATFORM** (definition moved to Chapter 2 with no change)
- PROCENIUM WALL** (definition moved to Chapter 2 with no change)
- STAGE** (definition moved to Chapter 2 with no change)
- TECHNICAL PRODUCTION AREA.** Open elevated areas or spaces intended for entertainment technicians to walk on and occupy for servicing and operating entertainment technology systems and equipment. Galleries, including fly and lighting galleries, gridirons, catwalks, and similar areas are designed for these purposes.

- ▶ **410.6.3 Technical Production Areas.** Technical production areas shall be provided with means of egress and means of escape in accordance with Sections 410.6.3.1 through 410.6.3.5.
- ▶ **410.6.3.1 Means of Egress.** No fewer than **one** means of egress shall be provided from technical production areas.
- ▶ **410.6.3.2 Travel Distance.** The length of exit access travel shall be not greater than 300 feet (91 440 mm) for buildings without a sprinkler system and 400 feet (121 900 mm) for buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

410.6.3.3 Two Means of Egress. Where two means of egress are required the common path of travel shall be not greater than 100 feet (30 480 mm).


Exception: A means of escape to a roof in place of a second means of egress is permitted.

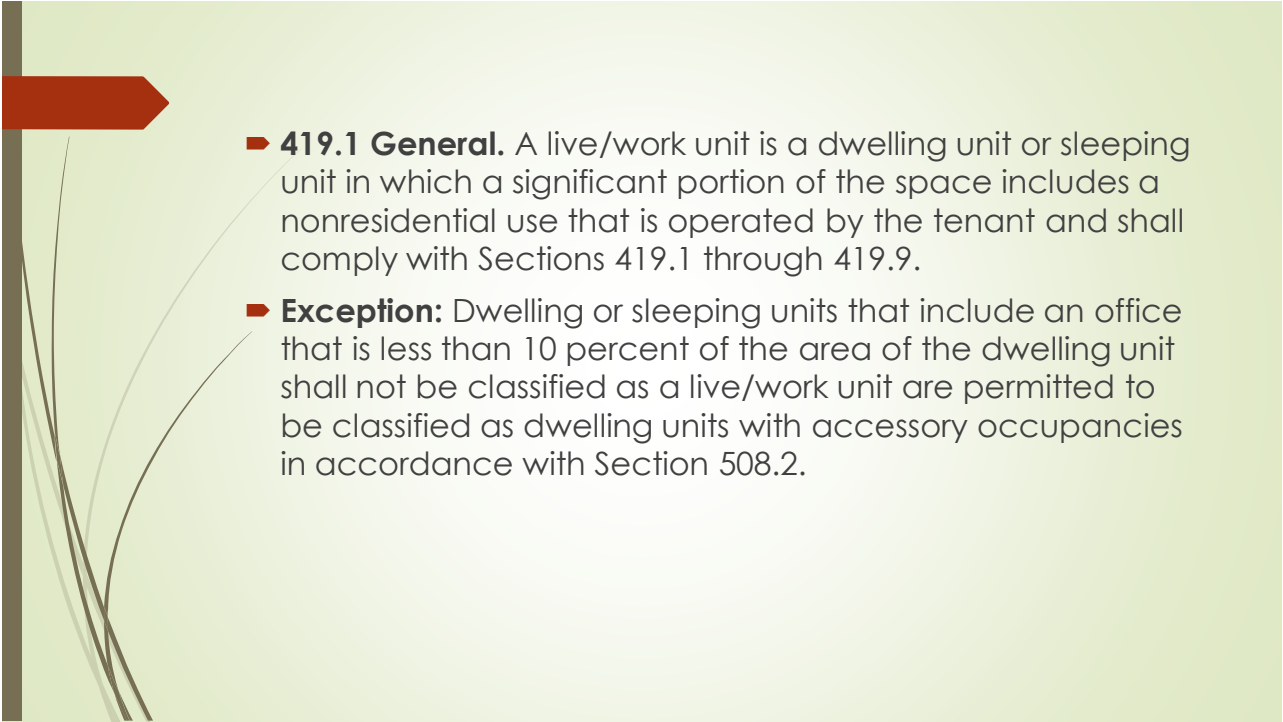
410.6.3.4 Path of Egress Travel. The following exit access components are permitted when serving technical production areas:

- ▶ 1. Stairways
- ▶ 2. Ramps
- ▶ 3. Spiral stairways
- ▶ 4. Catwalks
- ▶ 5. Alternating tread devices
- ▶ 6. Permanent ladders



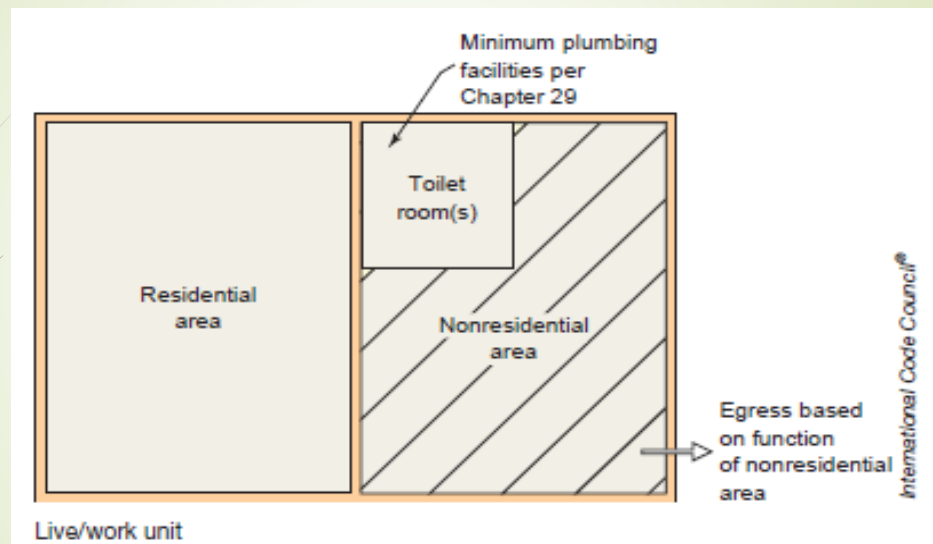
Technical production area.


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- ▶ **LIVE/WORK UNIT.** A dwelling unit or sleeping unit in which a significant portion of the space includes a nonresidential use that is operated by the tenant.


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- ▶ **419.1 General.** A live/work unit is a dwelling unit or sleeping unit in which a significant portion of the space includes a nonresidential use that is operated by the tenant and shall comply with Sections 419.1 through 419.9.
 - ▶ **Exception:** Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit shall not be classified as a live/work unit and are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508.2.


419.1.1 Limitations. The following shall apply to all live/work areas:


- ▶ **1.** The live/work unit is permitted to be a maximum of 3,000 square feet (279 m²);
- ▶ **2.** The nonresidential area is permitted to be a maximum 50 percent of the area of each live/work unit;
- ▶ **3.** The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and
- ▶ **4.** A maximum of five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.



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- **419.2 Occupancies.** Live/work units shall be classified as a Group R-2 occupancy. Separation requirements found in Sections 420 and 508 shall not apply within the live/work unit when the live/work unit is in compliance with Section 419. Nonresidential uses that would otherwise be classified as either a Group H or S occupancy shall not be permitted in a live/work unit.
 - **Exception:** Storage shall be permitted in the live/work unit provided the aggregate area of storage in the nonresidential portion of the live/ work unit shall be limited to 10 percent of the space dedicated to nonresidential activities.

- 
- **419.3 Means of Egress.** Except as modified by this section, the means of egress components for a live/work unit shall be designed in accordance with Chapter 10 for the function served.
 - **419.3.1 Egress Capacity.** The egress capacity for each element of the live/work unit shall be based on the occupant load for the function served in accordance with Table 1004.1.1.


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- ▶ **419.4 Vertical Openings.** Floor openings between floor levels of a live/work unit are permitted without enclosure.
 - ▶ **419.5 Fire Protection.** The live/work unit shall be provided with a monitored fire alarm system where required by Section 907.2.9 and an automatic sprinkler system in accordance with Section 903.2.8.
 - ▶ **419.6 Structural.** Floor loading for the areas within a live/work unit shall be designed to conform to Table 1607.1 based on the function within the space.

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- ▶ **419.7 Accessibility.** Accessibility shall be designed in accordance with Chapter 11 for the function served.
 - ▶ **419.8 Ventilation.** The applicable requirements of the *International Mechanical Code* shall apply to each area within the live/work unit for the function within that space.

- **419.9 Plumbing Facilities.** The nonresidential area of the live/work unit shall be provided with minimum plumbing facilities as specified by Chapter 29, based on the function of the nonresidential area. Where the nonresidential area of the live/work unit is required to be accessible by Section 1103.2.13, the plumbing fixtures specified by Chapter 29 shall be accessible.


SECTION 422 AMBULATORY CARE FACILITIES

- **422.1 General.** Occupancies classified as *ambulatory care facilities* shall comply with the provisions of Sections 422.1 through 422.7 and other applicable provisions of this code.
- The code identifies medical care Group I occupancies as having 24-hour stay. Without a 24-hour stay, these surgery centers are classified as Group B. Strictly regulating such occupancies as a typical Group B occupancy is considered inappropriate.....



These types of facilities contain distinctly different hazards to life and safety than other business occupancies, such as:

- 1. Patients incapable of self-preservation require rescue by other occupants or fire personnel.
- 2. Medical staff must stabilize the patient prior to evacuation; therefore, staff may require evacuation as well.
- 3. Use of oxidizing medical gases, such as oxygen and nitrous oxide.
- 4. Prevalence of surgical fires.

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- **422.2 Separation.** *Ambulatory care facilities* where the potential for **four or more** care recipients are to be **incapable of self-preservation** at any time, whether rendered incapable by staff or staff accepted responsibility for a care recipient already incapable, shall be separated from adjacent spaces, *corridors* or tenants with a *fire partition* installed in accordance with Section 708.


SECTION 423 STORM SHELTERS


- ▶ **423.1 General.** In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with ICC-500.
- ▶ ICC-500 addresses nonstructural issues, as well. Storm shelters for **hurricanes** will be required to **house people for 24 hours**. **Tornado shelters** will be required to house people for **2 hours**. The standard addresses minimum requirements for ventilation air, sanitation facilities, potable water supply, lighting and other minimal power needs. It should be noted that the **entrances and exits** to storm shelters will be **required to be accessible**. In addition, the occupant load requirements are such that some wheelchair space will be required.

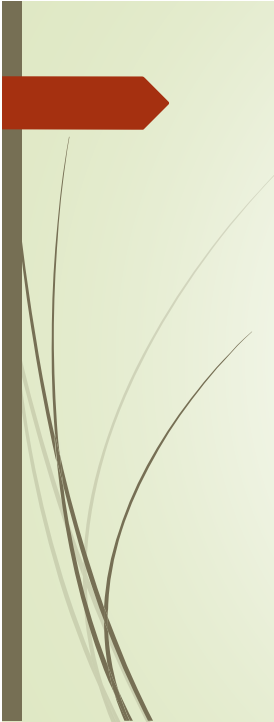
SECTION 424 CHILDREN'S PLAY STRUCTURES

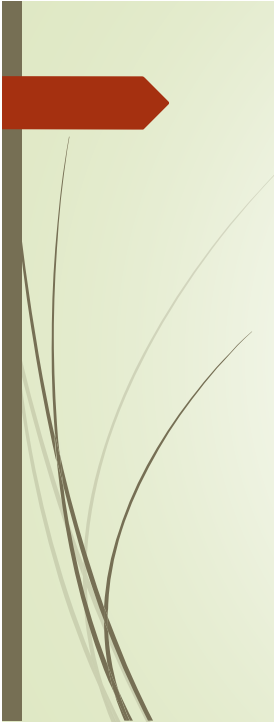
- ▶ **424.1 Children's play structures.** Children's play structures installed inside all occupancies covered by this code that exceed 10 feet (3048 mm) in height and 150 square feet (14 m²) in area shall comply with Sections 424.2 through 424.5.



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- **424.2 Materials.** Children's play structures shall be constructed of noncombustible materials or of combustible materials that comply with the following:
 - 1. *Fire-retardant-treated* wood complying with Section 2303.2.
 - 2. Light-transmitting plastics complying with Section 2606.
 - 3. Foam plastics (including the pipe foam used in soft contained play equipment structures) having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source.

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- 4. Aluminum composite material (ACM) meeting the requirements of Class A *interior finish* in accordance with Chapter 8 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 50 kW/

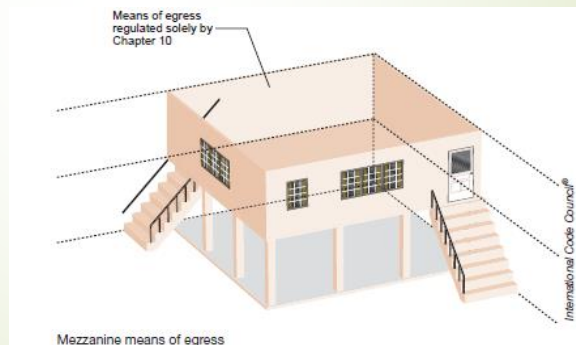
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- 7. Ball pool balls, used in soft-contained play equipment structures, having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with UL 1975 or when tested in accordance with NFPA 289, using the 20 kW ignition source. The minimum specimen test size shall be 36 inches by 36 inches (914 mm by 914 mm) by an average of 21 inches (533 mm) 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 placed under the children's play structure shall exhibit a Class I interior floor finish classification, as described in Section 804, when tested in accordance with NFPA 253.

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- **424.4 Separation.** Children's play structures shall have a horizontal separation from building walls, partitions and from elements of the *means of egress* of not less than 5 feet (1524 mm). Children's playground structures shall have a horizontal separation from other children's play structures of not less than 20 feet (6090 mm).
 - **424.5 Area limits.** Children's play structures shall be not greater than 300 square feet (28 m²) in area, unless a special investigation, acceptable to the building official, has demonstrated adequate fire safety.

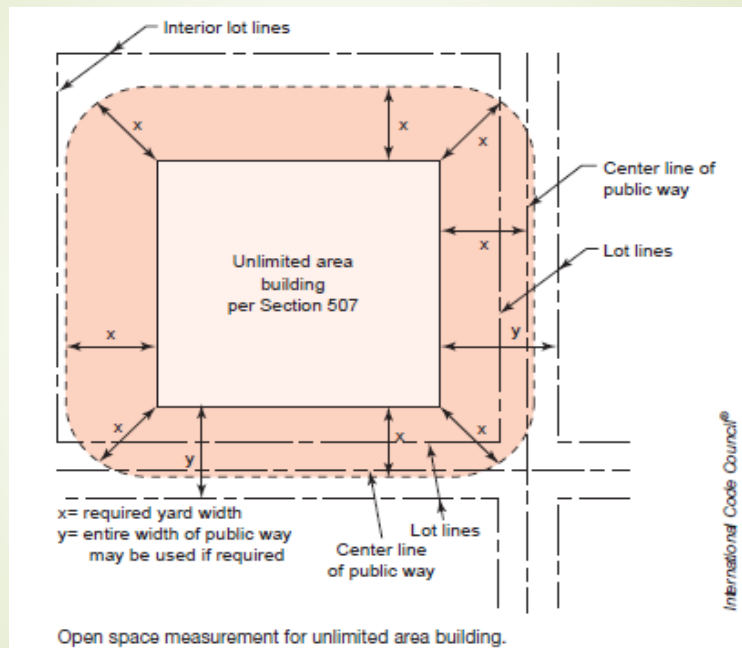
- 501.2 Address Identification.** New and existing buildings shall be provided with approved address numbers or letters. Each character shall be not less than 4 inches (102 mm) in height and not less than 0.5 inch (12.7 mm) in width. They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. **When required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response.** Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. **Address numbers shall be maintained.**



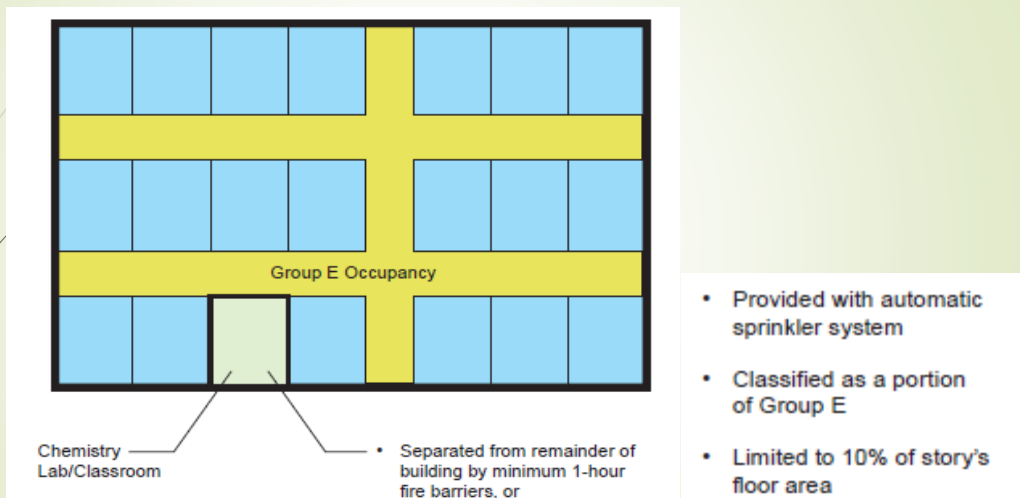
- 2012 CODE: 505.3 505.2.2.** The means of egress for mezzanines shall comply with the applicable provisions of Chapter 10. Each occupant of a mezzanine shall have access to at least two independent means of egress where the common path of egress travel exceeds the limitations of Section 1014.3. Where an unenclosed stairway provides a means of exit access from a mezzanine, the maximum travel distance includes the distance traveled on the stairway measured in the plane of the tread nosing. Accessible means of egress shall be provided in accordance with Section 1007.





- ▶ **507.1 General.** The area of buildings of the occupancies and configurations specified in Sections 507.1 through 507.12 shall not be limited.
- ▶ **Exception:** Other occupancies shall be permitted in unlimited area buildings in accordance with the provisions of Section 508.2. Where Sections 507.2 through 507.12 require buildings to be surrounded and adjoined by public ways and yards, those open spaces shall be determined as follows:
 - ▶ **1.** Yards shall be measured from the building perimeter in all directions to the closest interior lot lines or to the exterior face of an opposing building located on the same lot, as applicable.
 - ▶ **2.** Where the building fronts on a public way, the entire width of the public way shall be used.





- ~~508.2.5~~ **509.1 Separation of Incidental Uses. General.** The incidental accessory occupancies listed in Table 508.2.5 shall be separated from the remainder of the building or equipped with an automatic fire extinguishing system, or both, in accordance with Table 508.2.5. Incidental uses located within single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 509.
- Exception:** Incidental accessory occupancies uses within and serving a dwelling unit are not required to comply with this section.



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- ▶ **509.2 Occupancy Classification.** Incidental uses shall not be individually classified in accordance with Section 302.1. Incidental uses shall be included in the building occupancies within which they are located.
 - ▶ **509.3 Area Limitations.** Incidental uses shall not occupy more than **10 percent** of the building area of the story in which they are located.

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- ▶ **509.4 Separation and Protection.** The incidental uses listed in Table 509 shall be separated from the remainder of the building or equipped with an automatic sprinkler system, or both, in accordance with the provisions of that table.

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- **~~508.2.5.1~~ 509.4.1 Fire-resistance-rated Separation.** Where Table **~~508.2.5~~ 509** specifies a fire-resistance-rated separation, the incidental **~~accessory occupancies uses~~** shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 707 or a horizontal assembly constructed in accordance with Section 711, or both. Construction supporting 1-hour fire-resistance-rated fire barriers or horizontal assemblies used for incidental **~~accessory occupancy use~~** separations in buildings of Type IIB, IIIB, and VB construction is not required to be fire-resistance rated unless required by other sections of this code.

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- **~~508.2.5.2~~ 509.4.2 Nonfire-resistance-rated Separation and Protection.** Where Table **~~508.2.5~~ 509** permits an automatic fire-extinguishing ~~sprinkler~~ system without a fire barrier, the incidental **~~accessory occupancies uses~~** shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The walls shall extend from the top of the foundation or floor assembly below to the underside of the ceiling that is a component of a fire-resistance-rated floor assembly or roof assembly above or to the underside of the floor or roof sheathing, deck or slab above. Doors shall be self- or automatic closing

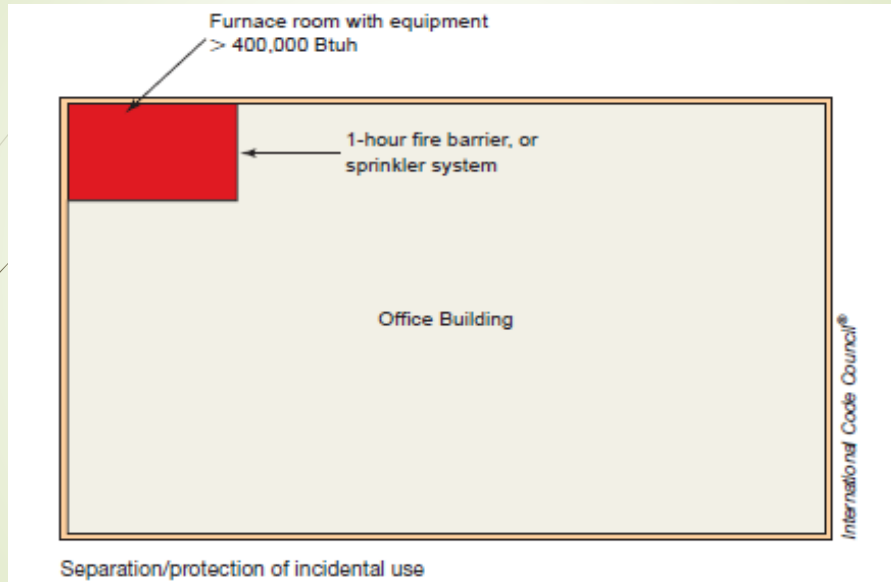


TABLE 508.2.5 509 Incidental Accessory Occupancies Uses

Room or Area	Separation and/or Protection
Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic fire-extinguishing sprinkler system
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	1 hour or provide automatic fire-extinguishing sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system
Hydrogen cutoff rooms, not classified as Group H	1 hour in Group B, F, M, S, and U occupancies; 2 hours in Group A, E, I, and R occupancies.
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours or 1 hour and provide automatic fire-extinguishing sprinkler system
Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy	1 hour or provide automatic fire-extinguishing sprinkler system
Laundry rooms over 100 square feet	1 hour or provide automatic fire-extinguishing sprinkler system
Group I-3 cells equipped with padded surfaces	1 hour
Group I-2 Waste and linen collection rooms located in either Group I-2 occupancies or ambulatory care facilities	1 hour
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic fire-extinguishing sprinkler system
Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons for flooded lead-acid, nickel cadmium or VRLA, or a lithium-ion capacity of more than 1000 pounds for lithium-ion and lithium metal polymer used for facility standby power, emergency power, or uninterrupted uninterruptible power supplies	1 hour in Group B, F, M, S, and U occupancies; 2 hours in Group A, E, I, and R occupancies.
Rooms containing fire pumps in nonhigh-rise buildings	2 hours; or 1 hour and provide automatic sprinkler system throughout the building
Rooms containing fire pumps in high-rise buildings	2 hours

THE END

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