

## ORDINANCE #725

### **AN ORDINANCE PROVIDING FOR THE ADOPTION OF THE 2021 INTERNATIONAL BUILDING CODE AND AMENDMENTS AND ADDITIONS THERETO; AND FOR THE REPEAL OF ALL ORDINANCES AND RESOLUTIONS IN CONFLICT THEREWITH.**

BE IT ORDAINED BY THE CITY OF HARTFORD, SOUTH DAKOTA:

#### **SECTION 1. Adoption International Building Code 2021.**

The International Building Code, 2021 edition, including Appendix C, Appendix I and Appendix O as published by the International Code Council Inc., and amendments and additions thereto as provided in this ordinance are hereby adopted by the City of Hartford as provided by South Dakota Codified Laws Chapter 7-8-20(17) for regulating the erection, construction, enlargement, alteration, repair, moving, removal, conversion, occupancy, equipment, use, height, area and maintenance of all buildings or structures within city limits of the City of Hartford and providing for issuance of permits and collection of fees therefore.

In the event of any conflict between the provisions of the code adopted by this subchapter and applicable provisions of this Code of Ordinances, state law or city ordinance, rule or regulation, the provisions of this Code of Ordinances, state law or city ordinance, rule or regulation shall prevail and be controlling.

The minimum building standards in the 2021 editions of the International Building Code and amendments thereto shall be applied to any building permit issued after March 31, 2022. The adoption of the International Building Code, 2021 edition will become effective March 31, 2022.

A printed copy of such code and additions and amendments thereto is on file with the City of Hartford.

#### **SECTION 2. Amendments, additions, and deletions to the 2021 International Building Code.**

The following sections and subsections of building code adopted in this subchapter shall be amended, added, or deleted as follows. All other sections or subsections of the 2021 International Building Code shall remain the same.

**101.1 Title.** These regulations shall be known as the Building Code of the City of Hartford, South Dakota and shall hereinafter be referred to as “this code.”

**101.2 Scope.** The provisions of this code shall apply to the construction, alteration, relocation, 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 (town houses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.
2. Existing buildings undergoing repair, alterations, or additions and change of occupancy shall be permitted to comply with the International Existing Building Code as an alternate to Chapter 34, Existing Structures.

**101.4.1 Gas.** The provisions of the International Fuel Gas Code or the plumbing code shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

**101.4.2 Mechanical.** The term International Mechanical Code shall mean the International Mechanical Code as adopted by the City of Hartford and shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

**101.4.3 Plumbing.** The Plumbing Code shall be mean the 2018 Uniform Plumbing Code as adopted by the City of Hartford shall apply to the installation, alteration, repair, and replacement of plumbing systems, including equipment, appliances, fixtures, fittings, and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The Plumbing Code shall be administered by the State of South Dakota.

**101.4.4 Property maintenance.** The term International Property Maintenance Code shall mean the International Property Maintenance Code as adopted by the City of Hartford and shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures. The International Property Maintenance Code shall be administered by the City of Hartford.

**101.4.5 Fire prevention.** The term International Fire Code shall mean the International Fire Code as adopted by the State of South Dakota and shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy

of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation. The International Fire Code shall be administered by the State of South Dakota.

**101.4.6 Energy.** The term International Energy Conservation Code shall mean the International Energy Conservation Code as adopted by the State of South Dakota and shall apply to all matters governing the design and construction of buildings for energy efficiency. The International Energy Conservation Code shall be administered by the State of South Dakota.

**101.4.7 Electrical.** The National Electrical Code shall be mean the 2020 Electrical Code as adopted by the State of South Dakota and shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto. The Electrical Code shall be administered by the State of South Dakota.

**103.1 Enforcement agency.** The City of Hartford shall be the enforcement agency and the official in charge thereof shall be known as the Building Official. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code.

**103.2 Appointment.** This section is not adopted by the City of Hartford.

**104.8 Liability.** The building official, member of the board of adjustment, or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Any suit brought against the building official, officer or employee because of such act or omission performed by the building official, officer or employee in the lawful discharge of duties and enforcement of any provision of such codes or other pertinent laws or ordinances implemented through the enforcement of this code or enforced by the code enforcement agency shall be afforded all the protection provided by the City's liability insurance, immunities and any immunities and defenses provided by other applicable state and federal laws and shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, its officers, and employees be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

**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 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 unless a separate permit for each building or structure has first been obtained from the building official or designate. Minor work may be exempted from obtaining a permit by the building official or designate.

**[A] 105.2 Work exempt from permit.** Exemptions from *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 or ordinances of this jurisdiction. *Permits* shall not be required for the following:

**Building:**

1. Oil derricks.
2. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom grade elevation of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
3. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18,927 L) and the ratio of height to diameter or width is not greater than 2:1.
4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
5. Temporary motion picture, television and theater stage sets and scenery.
6. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
7. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
8. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
9. Children's playhouses which are less than 96 square feet, one story tall with side walls 8' feet or under.
10. Swings and other playground equipment accessory to detached one-and two-family dwellings.
11. Prefabricated swimming pools that are less than 24" inches (610 mm) deep.

**107.1 General.** Submittal documents consisting of one complete set of hard copy plans and an electronic submittal in PDF format along with other construction documents, such as a statement of special inspections, geotechnical report, and other data shall be submitted 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.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

**107.3.1 Approval of construction documents.** Before the issuance of a permit, the building official shall review and approve construction plans.

**108.1 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 365 days. The building official is authorized to grant extensions for demonstrated cause.

**109.2 Permit Fees.** A fee for each permit shall be paid as required, in accordance with the schedule as established by the City of Hartford.

**109.3 Building permit valuations.** The determination of value or valuation under any of the provisions of this code shall be made by the City of Hartford's Building Department. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official.

**109.4. Work Commencing before permit issuance.** Any person who commences any work on a building or structure before obtaining the necessary permits shall be subject to the doubling of the standard permit fee. Legal and/or civil proceedings may also be commenced.

**109.7 Delinquent Accounts.** The building official may refuse to issue permits or conduct inspections for any person or business whose account is delinquent.

**110.3.1 Footing inspection.** Footing inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place.

**111.1 Application for appeal.** Any person directly affected by a decision of the *building official* or a notice or order issued under this code shall have the right to appeal to the Board of Adjustments, provided that a written application for appeal is filed within 10 days after the day the decision, notice, or order was served. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or the requirements of this code is adequately satisfied by other means. The Board is additionally charged with the review of all proposed changes to the Building

Code and to submit recommendations to the responsible official and the city council. The board shall have authority relative to the interpretation of the administrative provisions of this code, but the board shall not be empowered to waive requirements of this code. The appeal process will align with the City of Hartford's zoning ordinance section 17-03. The City of Hartford's Board of Adjustments will be the representative body to hear all appeals.

**111.2 Membership of board.** The Board of Adjustments shall consist of a minimum of seven members who are qualified by experience and training to pass on matters pertaining to building codes and who are not employees of the jurisdiction.

**111.2.1 Alternate members.** Not adopted by the city.

**111.2.5 Compensation of Members.** Compensation of members shall be at a rate of \$50.00 for each scheduled meeting regardless of the number of agenda items. Members shall be compensated at this rate each time the Board of Adjustments is assembled for a scheduled meeting.

**Section 111.2 Certificate issued.** After the building official inspects the building and finds no violations of the provisions of this code or other laws that are enforced by the City, the building official shall issue a certificate of occupancy that shall contain the following:

1. The building permit number.
2. The address of the structure.
3. The legal address
4. The date of issuance.
5. The name of the building official.
6. Construction Type.
7. Occupancy Classification Group.
8. Sprinkler Requirements
9. Edition of the Code
10. Maximum Occupancy
11. Stipulations

**112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the building official or employee relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals consisting of the members of the City of Hartford Board of Adjustment.

**113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the building official or employee relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals consisting of the members of the City of Hartford Planning and Zoning Board.

**113.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been

incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority relative to the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.

**114.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to deem the violation as a strict liability offense and institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

**115.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. If no person can be located, the stop work order may be posted on the property. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

**201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter. In addition, the following words and terms are being added and/or modified to the defined terms already of this code.

**FIRE AREA.** The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building.

**STRICT LIABILITY OFFENSE.** An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited or failed to do an act which the defendant was legally required to do.

**305.2.2 Twelve or fewer children.** A facility having twelve or fewer children receiving such day care shall be classified as part of the primary occupancy.

**305.2.3 Twelve or fewer children in a dwelling unit.** A facility such as the above within a dwelling unit and having twelve or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**308.5.4 Twelve or fewer persons receiving care in a dwelling unit.** A facility such as the above within a dwelling unit and having twelve or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**310.4.2 Lodging Houses.** Owner-occupied lodging houses with five or fewer guest rooms and 10 or fewer total occupants shall be permitted to be constructed in accordance with the *International Residential Code*.

**423.4 Group E occupancies.** All Group E occupancies with an occupant load of 50 or more shall have a storm shelter constructed to withstand a wind of 200 mph.

**Exceptions:**

1. Group E daycare facilities.
2. Group E occupancies accessory to places of religious worship.
3. Buildings meeting the requirements for shelter design in ICC 500.

## **501.2 SPECIFICATIONS FOR NUMBERS**

### **502.1 Address identification.**

The street number displayed by each person on a multi-family or commercial building pursuant to the provisions of this article shall not be less than three (3) inches in height, and clearly visible from the street per City of Hartford local ordinance: #6.0104. Multi-building campus/complex developments addressed on private or public streets shall be provided with signage at the entrance to the campus/complex indicative of the address ranges within.

**603.1.2 Piping.** The use of combustible piping materials shall be permitted where installed in accordance with the limitations of the International Mechanical Code and the Plumbing Code.

**706.6.2 Buildings with sloped roofs.** Where a *fire wall* serves as an interior wall for a building, and the roof on one side or both sides of the fire wall slopes toward the fire wall at a slope greater than 2 units vertical in 12 units horizontal (2:12), the *fire wall* shall extend to a height equal to the height of the roof located 4 feet (1219 mm) from the *fire wall* plus 30 inches (762 mm). In no case shall the extension of the fire wall be less than 30 inches (762 mm).

**Exceptions:** The *fire wall* may terminate at the underside of the roof sheathing, deck or slab of the lower roof, provided:

1. The roof assemblies within 10 feet (3048 mm) of the wall has not less than a 1-hour *fire resistance rating* and the entire length and span of supporting elements for the rated roof assembly has a *fire-resistance rating* of not less than 1 hour.
2. Openings in the roof on each side of the fire wall shall not be located within 10 feet (3048 mm) of the *fire wall*.

**714.5.1.1.2 Through-penetration fire-stop system.** Through penetrations of the fire-



resistive membrane shall be protected by an approved through-penetration fire-stop system installed and tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (2.49 Pa). The system shall have an F rating/T rating of not less than one hour but not less than the required rating of the floor penetrated.

**Exceptions:**

1. Floor penetrations contained and located within the cavity of a wall above the floor or below the floor do not require a T rating.
2. Floor penetrations by floor drains, tub drains or shower drains contained and located within the concealed space of a horizontal assembly do not require a T rating.

**716.2.6.1 Door closing.** Fire doors shall be latching and self- or automatic-closing in accordance with this section.

**Exceptions:**

1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic- or self-closing devices.
2. The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Interior doors located in exit enclosures, smoke proof enclosures, and exit passageways in Group R and I-1 occupancies shall be automatic closing fire door assemblies in accordance with NFPA 80 and controlled in accordance with NFPA 72.

**717.5.2 Fire barriers.** Ducts and air transfer openings of fire barriers shall be protected with listed fire dampers installed in accordance with their listing. Ducts and air transfer openings shall not penetrate enclosures for interior exit stairways and ramps and exit passageways, except as permitted by Sections 1023.5 and 1024.6, respectively.

**Exceptions:** Fire dampers are not required at penetrations of fire barriers where any of the following apply:

1. Penetrations are tested in accordance with ASTM E119 or UL 263 as part of the fire resistance-rated assembly.
2. Ducts are used as part of an approved smoke control system in accordance with Section 909 and where the use of a fire damper would interfere with the operation of a smoke control system.
3. Such walls are penetrated by fully ducted HVAC systems, have a required fire resistance rating of 1 hour or less, are in areas of other than Group H, and are in

buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a fully ducted HVAC system shall be a duct system for conveying supply, return, or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than No. 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals. Nonmetal flexible air ducts shall be permitted in the following locations:

- 3.1 At the duct connection to the air handling unit or equipment located within the mechanical room in accordance with Section 603.9 of the *International Mechanical Code*.
- 3.2 From an overhead metal duct to a ceiling diffuser within the same room in accordance with Section 603.6.2 of the *International Mechanical Code*.

**903.2.6 Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.1 is required in Group I-1 Condition 1 or 2 facilities.
2. An automatic sprinkler system is not required where day care facilities are at the level of exit discharge and where every room where care is provided has at least one exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the level of exit discharge, all floors below the level of exit discharge, other than areas classified as an open parking garage.

**903.2.8 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Groups R-1 and R-4 fire areas and Group R-2 multifamily residences having six or more dwelling units.

**[F] 903.2.10 Group S-2 parking garages.** An *automatic sprinkler system* shall be provided throughout buildings classified as parking garages where any of the following conditions exist:

1. Where the fire area of the enclosed parking garage in accordance with Section 406.6 exceeds 12,000 square feet (1,115 m<sup>2</sup>).
2. Where the enclosed parking garage in accordance with Section 406.6 is located beneath other groups.

**Exception:** Enclosed parking garages located beneath Group R-3 occupancies.

**903.3.1.1.1 Exempt locations.** Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction, or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents when approved by the fire code official. Such rooms shall be separated from the remainder of the building by fire barrier walls and horizontal assemblies having a fire-resistance rating of not less than two hours.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than two hours.
4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. Fire service access elevator machine rooms and machinery spaces.
6. Machine rooms and machinery spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

**[F] 903.3.1.2 NFPA 13R sprinkler systems.** Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. Four stories or fewer above grade plane.
2. The floor level of the highest story is 60 feet (18,288 mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 60 feet (18,288 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from grade plane.

**[F] 903.3.5 Water supplies.** Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply

shall be protected against backflow in accordance with the requirements of this section and the Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

**904.13.2 System interconnection.** The actuation of the fire suppression system shall automatically shut down the fuel and/or electrical power supply to the cooking equipment and all electrical receptacles located beneath the hood. The fuel and electrical supply reset shall be manual.

**907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more.** Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

**Exceptions:**

1. Group A-3 occupancies used for religious worship.
2. Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

**907.2.2 Group B.** A manual fire alarm system, which activates the occupant notification system in accordance with Section 907.5 shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B occupant load of all floors is 500 or more.
2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.
3. The fire area contains an ambulatory care facility.
4. The Group B occupancy has more than two occupied levels.

**Exception:** Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

**907.2.6.2 Group I-2.** An automatic smoke detection system shall be installed in corridors in nursing homes, long-term care facilities, detoxification facilities, and spaces permitted to be open to the corridors by Section 407.2. The system shall be

activated in accordance with Section 907.5. Hospitals shall be equipped with smoke detection as required in Section 407.

**Exceptions:**

Corridor smoke detection is not required in smoke compartments that contain sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping unit and shall provide an audible and visual alarm at the care provider station attending each unit. Smoke detectors installed as part of an intelligent or addressable fire alarm system capable of annunciation of room origin at a constantly attended location shall be acceptable.

**907.2.8.2 Automatic smoke detection system.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior corridors serving sleeping units and at the top of each stairwell.

**Exception:** An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

**907.2.9 Group R-2.** Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1 through 907.2.9.5.

**907.2.9.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where:

1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge.
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or
3. The building contains more than 16 dwelling units or sleeping units.
4. The building contains four or more dwelling units or sleeping units above the level of exit discharge.

**Exceptions:**

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl

spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, egress court or yard.

2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4.

**907.2.9.4 Smoke detectors.** Automatic smoke detection shall be provided in each stairway and all exit corridors.

**907.2.13.1.2 Duct smoke detection.** Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m<sup>3</sup>/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m<sup>3</sup>/s) and serving not more than 10 air-inlet openings.
3. Duct smoke detectors installed more than 10 feet above a finished floor, above a ceiling, or on a rooftop shall be installed with remote test/indicators in an approved location below and in proximity to the unit served.

**[F] 907.5 Occupant Notification.** Occupant notification by fire alarms shall be in accordance with Sections 907.5.1 through 907.5.2.3.3. Occupant notification by smoke alarms in Group R-1 occupancies shall comply with Section 907.5.2.1.3.2.

**[F] 907.5.2.1.3 Audible signal frequency in Group R-1 sleeping rooms.** Audible signal frequency in Group R-1 occupancies shall be in accordance with Sections 907.5.2.1.3.1 and 907.5.2.1.3.2.

**[F] 907.5.2.1.3.1 Fire alarm system signal.** In sleeping rooms of Group R-1 occupancies, the audible alarm activated by a fire alarm system shall be a 520-Hz low-frequency signal complying with NFPA 72.

**[F] 907.5.2.1.3.2 Smoke alarm signal in sleeping rooms.** In sleeping rooms of Group R-1 occupancies that are required by Section 907.2.8 or 907.2.9 to have a fire alarm system, the audible alarm signal activated by single- or multiple-station smoke alarms in the dwelling unit or sleeping unit shall be a 520-Hz signal complying with NFPA 72. Where a sleeping room smoke alarm is unable to produce a 520-Hz signal, the 520-Hz alarm signal shall be provided by a listed notification appliance or a smoke detector with an integral 520-Hz sounder.

**912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus road or nearest point of fire department vehicle access or as otherwise *approved* by the building official and/ or local fire chief. A weather-rated horn/strobe connected to the fire detection or sprinkler system shall be located not lower than 8 feet above the fire department connection and within 10 feet horizontally of the connection. The weather-rated horn/strobe must be visible from the fire lane or street.

**Table 1004.5 Maximum Floor Area Allowances Per Occupant**

Function of Space	Occupant Load Factor <sup>a</sup>
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross

Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	<u>See Section 1004.6</u>
Assembly without fixed seats	
Concentrated (chairs only—not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	150 gross
Concentrated business use areas	<u>See Section 1004.8</u>
Courtrooms—other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	25 net
Shops and other vocational room areas	50 net
Exercise rooms	50 gross
Group H-5 fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Inpatient treatment areas	240 gross
Outpatient areas	100 gross



Sleeping areas	120 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mall buildings—covered and open	<u>See Section 402.8.2</u>
Mercantile	60 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Stages and platforms	15 net
Warehouses	500 gross

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>

a. Floor area in square feet per occupant

**1010.1.6 Thresholds.** Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50 percent slope).

**Exception:** In occupancy Group R-2 or R-3, threshold height for sliding and side-hinged exterior doors shall be permitted to be up to 8” inches (203 mm) in height if all of the following apply

1. The door is not part of the required means of egress.
2. The door is not part of an accessible route as required by Chapter 11.
3. The door is not part of an Accessible unit, Type A unit, or Type B unit.

In Type B units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 43/4 inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 41/2 inches (114 mm) above the exterior deck, patio or balcony for other doors.

**1011.5.2 Riser height and tread depth.** *Stair* riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the *nosings* of adjacent treads or between the stairway landing and the adjacent tread. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's *nosing*. *Winder* treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the *stair*.

**Exceptions:**

1. *Spiral stairways* in accordance with Section 1011.10.
2. *Stairways* connecting stepped *aisles* to cross *aisles* or concourses shall be permitted to use the riser/tread dimension in Section 1029.14.2.
3. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual *dwelling units* in Group R-2 occupancies; the maximum riser height shall be 8 inches (203 mm); the minimum tread depth shall be 10 inches (254 mm); the minimum *winder* tread depth at the walkline shall be 10 inches (254 mm); and the minimum *winder* tread depth shall be 6 inches (152 mm). A *nosing* projection not less than 3/4 inch (19.1 mm) but not more than 1 1/4 inches (32 mm) shall be provided on *stairways* with solid risers where the tread depth is less than 11 inches (279 mm).
4. See Section 503.1 of the *International Existing Building Code* for the replacement of existing *stairways*.
5. In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m<sup>2</sup>) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).

**1015.4 Opening limitations.** Required guards shall not have openings which allow passage of a sphere 5" inches (127 mm) in diameter from the walking surface to the required guard height.

**Exceptions:**

1. The triangular openings at the open sides of a stair, formed by the riser, tread,

and bottom rail shall not allow passage of a sphere 6 inches (152 mm) in diameter.

2. At elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.
3. In areas that are not open to the public within occupancies in Group B, I-3, F, H, M, or S, and for alternating tread devices and ship ladders, guards shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.
4. In assembly seating areas, guards at the end of aisles where they terminate at a fascia of boxes, balconies and galleries shall not have openings which allow passage of a sphere 5 inches in diameter (127 mm) up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, guards shall not have openings which allow passage of a sphere 8 inches (203 mm) in diameter.
5. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, guards on the open sides of stairs shall not have openings which allow passage of a sphere 5 inches (127 mm) in diameter.

**1020.5 Dead ends.** Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends in corridors do not exceed 20 feet (6096 mm) in length.

**Exceptions:**

1. In Group I-3, Condition 2, 3 or 4, occupancies, the dead end in a *corridor* shall not exceed 50 feet (15,240 mm).
2. In occupancies in Groups B, E, F, M, R-1, R-2, S and U, where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the length of the dead-end *corridors* shall not exceed 50 feet (15,240 mm).
3. In occupancies in Group I-1 where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of the dead-end corridors shall not exceed 30 feet (9,144 mm).
4. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.
5. In Group I-2, Condition 2 occupancies, the length of dead-end *corridors* that do not serve patient rooms or patient treatment spaces shall not exceed 30 feet (9,144 mm).

**1023.8 Barrier at level of exit discharge.** An interior exit stairway and ramp shall not continue below its level of exit discharge unless an approved barrier or a directional exit sign is provided at the level of exit discharge to prevent persons from unintentionally continuing into levels below. Directional exit signs shall be provided as specified in Section 1011.

**1031.3.1 Minimum size.** Emergency escape and rescue openings shall have a minimum net clear opening of 5.0 square feet (0.50 m<sup>2</sup>).

**1030.3 Maximum height from floor.** Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 48" inches (1219 mm) measured from the floor.

**1031.5.2 Ladders or steps.** Area wells with a vertical depth of more than 48 inches (1,219 mm) shall be equipped with an approved permanently affixed ladder or steps. The ladder or steps shall not be obstructed by the emergency escape and rescue opening when the window or door is in the open position. Ladders or steps required by this section shall not be required to comply with Section 1011.

**1104.4 Multistory buildings and facilities.** At least one accessible route shall connect each accessible story, mezzanine and occupied roofs in multilevel buildings and facilities.

**Exceptions:**

1. An *accessible route* from an accessible level is not required in facilities that are less than three stories in height or have less than 3000 square feet (279 m<sup>2</sup>) per story.

This exception shall not apply to:

- 1.1 Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the *accessible* levels; or
  - 1.2. *Stories* or *mezzanines* containing offices of health care providers (Group B or I); or
  - 1.3 Passenger transportation facilities and airports (Group A-3 or B); or
  - 1.4 Government buildings; or
  - 1.5 Structures with four or more dwelling units.
2. *Stories* or *mezzanines* or occupied roofs that do not contain *accessible* elements or other spaces as determined by Section 1107 or 1108 are not required to be served by an *accessible route* from an *accessible* level.

3. In air traffic control towers, an *accessible route* is not required to serve the cab and the floor immediately below the cab.
4. Where a two-story building or facility has one *story* or *mezzanine* with an *occupant load* of five or fewer persons that does not contain *public use* space, that *story* or *mezzanine* shall not be required to be connected by an *accessible route* to the *story* above or below.

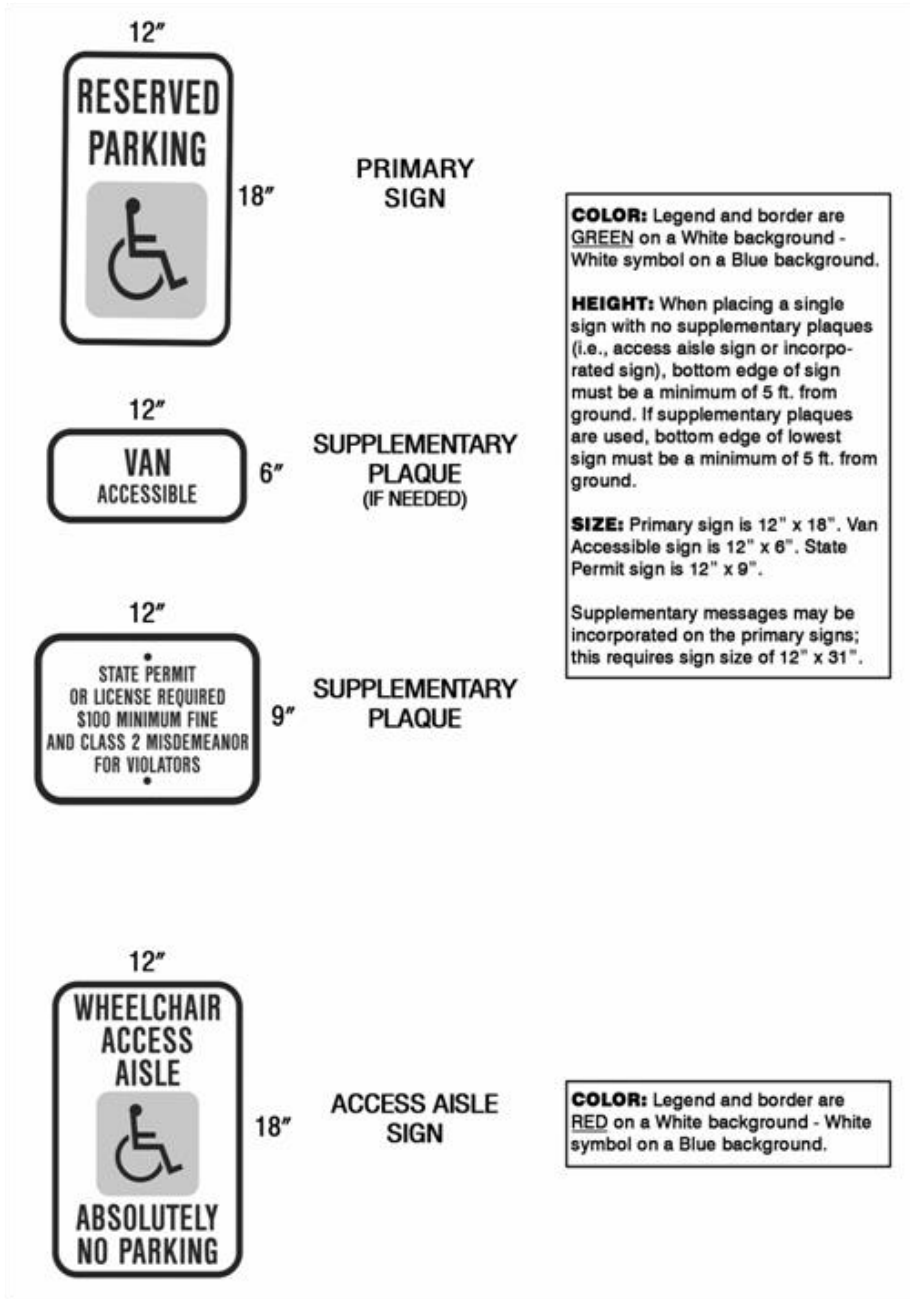
**1106.10 Signage.** Accessible parking spaces and access aisles are required to be identified by signs. Signs shall be located at the head of accessible parking stalls and access aisles. The bottom of the lowest signs shall be located at least 60 inches above the pavement.

As referenced below, standard and van accessible parking space signs shall state, “RESERVED PARKING” and include the International Symbol of Accessibility, and supplemental signage must additionally state, “STATE PERMIT OR LICENSE REQUIRED. \$100 MINIMUM FINE AND CLASS 2 MISDEMEANOR FOR VIOLATORS.” A van accessible parking space must have additional signage stating, “VAN ACCESSIBLE.” A van accessible access aisle must be provided with signage including the International Symbol of Accessibility which states, “WHEELCHAIR ACCESS AISLE. ABSOLUTELY NO PARKING.”

**1106.11 Access aisles and markings.** Each access that is part of an accessible route shall extend the full length of the parking space it serves. The aisle must have diagonally striped markings spaced every 4 feet (1219 mm). Boundaries of the access aisle must be marked. The end may be a squared or curved shape. Two parking spaces may share an access aisle.

Access aisles shall be placed on a level surface with a slope not to exceed 1:48.

Where an access aisle is located immediately adjacent to a sidewalk that provides the closest accessible route, the sidewalk must be provided with a curb ramp access to serve the access aisle.



**1108.6.2.2.1 Type A units.** In Group R-2 occupancies containing more than 20 dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be a Type A unit. All Group R-2 units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units.

**Exceptions:**

1. The number of Type A units is permitted to be reduced in accordance with Section 1108.7.

2. Existing structures on a site shall not contribute to the total number of units on a site.
3. The following provisions of the 2017 ICC/ANSI A117.1-2017 referenced in Section 1103 Type A Dwelling are applicable.
  - 3.1 A work surface in the kitchen referenced in Section 1103.12.3 Clear Floor Space of ICC/ANSI A117.1-2017 is not required.
  - 3.2 The reduced work height of the kitchen sink at 34 inches referenced in Section 1103.12.4.2 ICC/ANSI A117.1-2017 is not required.
  - 3.3 Appliances referenced in Section 1103.12.5 Appliances ICC/ANSI A117.1-2009 and Laundry Equipment requires only the clear floor space referenced in Section 305 Clear Floor Space of ICC/ANSI A117.1-2017.

**1205.3.3 Court Drainage.** The bottom of every court shall be properly graded and drained to a public sewer or other approved disposal system complying with the Plumbing Code.

**1301.1.1 Criteria.** Buildings shall be designed and constructed in accordance with the 2009 *International Energy Conservation Code*.

**1502.1 General.** Design and installation of roof drainage systems shall comply with this section, Section 1611 of this code, and shall be sized, and discharge in accordance with the Plumbing Code. Unless roofs are sloped to drain over roof edges, roof drains or scuppers shall be installed at each low point of the roof. Roofs shall be sloped a minimum of 1 unit vertical in 48 units horizontal (2 percent slope) for drainage unless designed for water accumulation in accordance with Section 1611.2 Ponding instability. Roof drainage water from a building shall not be allowed to flow over public property.

**1502.2 Secondary (emergency overflow) drains or scuppers.** Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. The installation and sizing of secondary emergency overflow drains, leaders and conductors shall comply with Section 1611 of this code and the Plumbing Code.

**1601.1 Scope.** The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

It shall not be the responsibility of the building official to determine engineering requirements of this code. Exclusive of conventional light-frame wood construction

provisions referenced in Section 2308, the method to resist loads as referenced in this chapter is the responsibility of a structural engineer or other qualified design professional.

**1612.3 Establishment of flood hazard areas.** To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The Flood Insurance Study for The City of Hartford, South Dakota” dated September 2, 2009, with the accompanying Flood Insurance Rate Map (FIRM), dated September 2, 2009 and related supporting data along with any revisions thereto, including all applicable LOMR data. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section. If there is a conflict between the provisions of this code and the city’s Floodplain Management Ordinance, the provisions of the Floodplain Management Ordinance shall prevail.

**1703.1 Approved agency.** An approved agency or the design professional of record shall provide all information as necessary for the building official to determine that the agency meets the applicable requirements.

**1704.2 Special inspections.** Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner’s agent shall employ one or more approved agencies to perform inspections during construction on the types of work listed under Section 1705. These inspections are in addition to the inspections identified in Section 110.

**Exceptions:**

1. Special inspections are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Unless otherwise required by the building official, special inspections are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. Special inspections are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.1.2 or the conventional light-frame construction provisions of Section 2308.
4. The frequency and amount of special inspections shall be as determined by the design professional of record. The continuous and periodic inspections referenced in Tables 1705.2.2, 1705.3, 1705.6, 1705.7 and 1705.8 are considered as guidelines.
5. The contractor is permitted to employ the approved agencies where the contractor is also the owner.



**1705.3 Concrete construction.** The special inspections and verifications for concrete construction shall be as required by this section and Table 1705.3.

**Exception:** Special inspections shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth and rock.
2. Continuous concrete footings and foundation walls supporting walls of buildings three stories or less above grade plane that are fully supported on earth or rock where:
  - 2.1. The footings and foundation walls support walls of light-frame construction; or
  - 2.2. The footings are designed in accordance with Table 1809.7; or
  - 2.3. The structural design of the footing and foundations is based on a specified compressive strength,  $f'c$ , no greater than 3000 pounds per square inch (psi) (20.6 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including pre-stressed slabs on grade, where the effective pre-stress in the concrete is less than 150 psi (1.03 MPa).
4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
5. Concrete patios, driveways, and sidewalks on grade.
6. Electrical, plumbing, and mechanical permits and fees shall conform to the State of South Dakota fee requirements.

**[BF] 1705.18 Fire-resistant penetrations and joints.** In high-rise buildings or in buildings assigned to Risk Category III or IV, special inspections for through-penetrations, membrane penetration fire-stops, fire-resistant joint systems, and perimeter fire containment systems that are tested and listed in accordance with Sections 714.4.1.2, 714.5.1.2, 715.3.1, and 715.4 shall be in accordance with Section 1705.18.1 or 1705.18.2.

**1710.1 Moving and location of buildings (within City limits):** No building or structure including mobile and prefabricated houses, shall be moved to any lot within the City of Hartford unless the owner of the building or lot shall first apply for and obtain a building permit. The application for the building permit shall include a plot plan showing

the location of the building on the lot and compliance with the yard requirements of local municipal zoning ordinances.

**1710.2 Moving and location of buildings (out of the City Limits):** No building or structure shall be moved out of the city limits, unless the owner of the building obtains a moving permit authorized by the Hartford City Council per City Ordinance 6.04 and follows all of the said regulations.

**1804.8 Grading permits required.** No person shall excavate or grade without first obtaining a permit from the city building department. If a building permit is not obtained, a separate grading permit must be obtained from the building official for each site and may cover both excavations and fills.

**Exceptions:**

1. A separate grading permit is not required from the building official where a site plan for a new building, structure, or addition is submitted for plan review where an excavation below finished grade for basements, footings, and foundations of a building, retaining wall, or other structure is authorized by a valid building permit.
2. A fill of less than 1 foot in depth and placed on natural terrain with a slope flatter than one unit vertical to five units horizontal (20 percent slope), or less than 3 feet (914 mm) in depth not intended to support structures, which does not exceed 300 cubic yards (229 m<sup>3</sup>) on any one lot and does not obstruct a drainage course.
3. Excavation, removal, or stockpiling of rock, sand, dirt, clay, or other like material as may be required by the state, county, or city authorities in connection with the construction or maintenance of roads and highways. This shall not exempt work for street construction when such work is performed by private developers. When the private developer has obtained a permit to perform site grading, a second permit will not be required for street grading.
4. When approved by the building official, grading in an isolated, self-contained area if there is no danger to public or private property.
5. Cemetery graves.
6. Refuse disposal sites controlled by other regulations.
7. Excavations for wells, tunnels, or utilities.
8. Mining, quarrying, excavating, processing, or stockpiling of rock, sand, gravel, aggregate, or clay where established and provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.

9. Exploratory excavations under the direction of soils engineers or engineering geologists.
10. An excavation that (1) is less than 2 feet (610 mm) in depth; or (2) does not create a cut slope of less than 5 feet (1,524 mm) in height and steeper than 1 unit vertical in 1 1/2 units horizontal (66.7 percent slope).

Exemptions from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

**1804.8.1 Grading permit requirements.** Grading shall be performed in accordance with a grading plan approved by the building official. Submitted plans shall indicate existing elevations, proposed elevations, method of erosion control, and shall include the legal description

**1806.2 Presumptive load-bearing values.** The load-bearing values used in design for supporting soils near the surface shall not exceed the values specified in Table 1806.2 unless data to substantiate the use of higher values are submitted and approved. Where the building official has reason to doubt the classification, strength or compressibility of the soil, the requirements of Section 1803.5.2 shall be satisfied.

Presumptive load-bearing values shall apply to materials with similar physical characteristics and dispositions. Where a presumed soil-bearing capacity is in excess of 3,000 psf (471 kPa/m) data to substantiate the use of the presumed higher value must be submitted from a soils engineer for approval from the building official. Mud, organic silt, organic clays, peat or unprepared fill shall not be assumed to have a presumptive load-bearing capacity unless data to substantiate the use of such a value are submitted.

**Exception:** A presumptive load-bearing capacity shall be permitted to be used where the building official deems the load-bearing capacity of mud, organic silt, or unprepared fill is adequate for the support of lightweight or temporary structures.

**1809.5 Frost protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line of the locality; or
2. Constructing in accordance with ASCE 32; or
3. Erecting on solid rock.

**Exception:** Free-standing buildings meeting all of the following conditions shall not

be required to be protected:

1. Assigned to Risk Category I
2. Area of 1500 square feet (138 m<sup>2</sup>) or less for light-frame construction or 400
3. Eave height of 10 feet or less. Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

**(P) 2901.1 Scope.** The provisions of this chapter and the Plumbing Code shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in buildings and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1209. Private sewage disposal systems shall conform to the Plumbing Code. The International Fire Code, the International Property Maintenance Code and the Plumbing Code shall govern the use and maintenance of plumbing components, appliances, equipment and systems. The International Existing Building Code and the Plumbing Code shall govern the alteration, repair, relocation, replacement and addition of plumbing components, appliances, equipment and systems.

**[P] Table 2902.1**  
**Minimum Number of Required Plumbing Fixtures <sup>a</sup>**  
**(See Sections 2902.1.1 and 2902.2)**

No.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS SEE SECTION 2902.1.4)		LAVATORIES		BATHTUBS/SHOWERS	DRINKING FOUNTAINS (SEE SECTION 2902.1.5)	OTHER
			Male	Female	Male	Female			
1	Assembly	Theaters and other buildings for the performing arts and motion pictures <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Nightclubs, bars, taverns, dance halls and buildings for similar purposes <sup>d</sup>	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink
		Restaurants, banquet halls and food courts <sup>d</sup>	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink
		Casino gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		—	1 per 1,000	1 service sink
		Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums <sup>d</sup>	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Passenger terminals and transportation facilities <sup>d</sup>	1 per 500	1 per 500	1 per 750		—	1 per 1,000	1 service sink
		Places of worship and other religious services <sup>d</sup>	1 per 150	1 per 75	1 per 200		—	1 per 1,000	1 service sink
		Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 120	1 per 60	1 per 200	1 per 150	—	1 per 1,000	1 service sink
		Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities <sup>d</sup>	1 per 120	1 per 60	1 per 200	1 per 150	—	1 per 1,000	1 service sink
2	Business	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial, ambulatory care and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	1 service sink
3	Educational	Educational facilities	1 per 50		1 per 50		—	1 per 100	1 service sink

4	Factory and industrial	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100	1 per 100	—	1 per 400	1 service sink
5	Institutional	Custodial care facilities	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Medical care recipients in hospitals and nursing homes <sup>b</sup>	1 per room <sup>c</sup>	1 per room <sup>c</sup>	1 per 15	1 per 100	1 service sink
		Employees in hospitals and nursing homes <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
		Visitors in hospitals and nursing homes	1 per 75	1 per 100	—	1 per 500	—
		Prisons <sup>b</sup>	1 per cell	1 per cell	1 per 15	1 per 100	1 service sink
		Reformatories, detention centers and correctional centers <sup>b</sup>	1 per 15	1 per 15	1 per 15	1 per 100	1 service sink
		Employees in reformatories, detention centers and correctional centers <sup>b</sup>	1 per 25	1 per 35	—	1 per 100	—
Adult day care and child day care	1 per 15	1 per 15	1	1 per 100	1 service sink		
6	Mercantile	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500	1 per 750	—	1 per 1,000	1 service sink <sup>e</sup>
7	Residential	Hotels, motels, boarding houses (transient)	1 per sleeping unit	1 per sleeping unit	1 per sleeping unit	—	1 service sink
		Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
		Apartment house	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units
		One- and two-family dwellings and lodging houses with five or fewer guestrooms	1 per dwelling unit	1 per 10	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		Congregate living facilities with 16 or fewer persons	1 per 10	1 per 10	1 per 8	1 per 100	1 service sink
8	Storage	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100	1 per 100	—	1 per 1,000	1 service sink

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.
- b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted, provided that each patient sleeping unit has direct access to the toilet room and provisions for privacy for the toilet room user are provided.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile classifications with an occupant load of 15 or fewer, a service sink shall not be required.
- f. The required number and type of plumbing fixtures for outdoor swimming pools shall be in accordance with Section 609 of the *International Swimming Pool and Spa Code*.

**2902.1.4 Substitution for water closets.** In a toilet room or bathroom, urinals shall not be substituted for more than 67 percent of the required water closets.

**2902.1.5 Drinking fountains.** Where water is served in restaurants or where bottled water is served in other occupancies, drinking fountains shall not be required. Drinking fountains shall not be installed in public restrooms.

**[P] 2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for *dwelling units* and *sleeping units*.
2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum *occupant load* is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum *occupant load* is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 2902.1.2.
6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets are installed in accordance with Section 2902.2.2. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall.

**[P] 2902.6 Small occupancies.** Drinking fountains and service sinks shall not be required for an occupant load of 15 or fewer.

**3111.2 Solar thermal systems.** Solar thermal systems shall be designed and installed in accordance with this section, the *International Mechanical Code*, and the *International Fire Code*. Where light-transmitting plastic covers are used, solar thermal collectors shall be designed in accordance with Section 2606.12.

## **Section 3116. Prefabricated construction.**

### **3116.1. General.**

**3114.1.1 Purpose.** The purpose of this section is to regulate materials and establish methods of safe construction where any structure or portion thereof is wholly or partially prefabricated.

**3116.1.2 Scope.** Unless otherwise specifically stated in this section, all prefabricated construction and materials used therein shall conform to all the requirements of this code.

**3116.1.3 Definitions.**

*Prefabricated assembly* is a structural unit, the integral parts of which have been built or assembled prior to incorporation in the building.

*Prefabricated structures* are structures, the parts of which are fabricated and assembled in a central assembly point, where on-site building, electrical, plumbing, and mechanical rough-in inspections occur at the assembly location.

**3116.2 Tests of materials.** Every approval of a material not specifically mentioned in this code shall incorporate as a proviso the kind and number of nationally recognized tests to be made.

**3116.3 Tests of assemblies.** The building official may require special tests to be made on assemblies to determine their durability and weather resistance.

**3116.4 Connections.** Every device used to connect prefabricated assemblies shall be designed as required by this code and shall be capable of developing the strength of the members connected, except in the case of members forming part of a structural frame as specified in Chapter 16. Connections shall be capable of withstanding uplift forces as specified in this code and in Chapter 16.

**3116.5 Pipes and conduits.** In structural design, due allowance shall be made for any material to be removed for the installation of pipes, conduit, and other equipment.

**3116.6. Permits, materials, plans, fees, certificate, and inspections.**

**3116.6.1 Materials.** Materials and the assembly thereof shall be inspected to determine compliance with this code. Every material shall be graded, marked, or labeled as required elsewhere in this code.

**3116.6.2 Plans.** One complete set of plans and specifications shall be submitted to the building inspection division of planning and building services for approval prior to issuing a building permit for a prefabricated structure. Plans shall be of sufficient detail and clarity to indicate compliance with all applicable codes (electrical, plumbing, building, mechanical, and zoning).

**3116.6.3 Permits and fees.** Permit fees shall be as follows:

1. The fee for a building permit shall conform to Tables 1-A and 1-B, and the plan review fee, if applicable, shall be in accordance with Table 1-C.
2. Electrical, plumbing, and mechanical permits and fees shall conform to the respective permit requirements and fee schedules.

**3116.6.4 Certificate.** A certificate of approval shall be furnished with every prefabricated assembly and prefabricated structure, except where the assembly is readily accessible to inspection at the site. The certificate of approval shall certify that the assembly in question has been inspected and meets all the requirements of this code. When mechanical equipment is installed so that it cannot be inspected at the site, the certificate of approval shall certify that such equipment complies with the laws applying thereto.

**3116.6.5 Certifying agency.** To be acceptable under this code, every certificate of approval shall be made by the approved agency.

**3116.6.6 Field erection.** The building official shall inspect placement of prefabricated assemblies at the building site to determine compliance with this code. Installation and finishing work at the building site must be performed by locally licensed contractors where required. Final inspections are to be made after the installation and finishing work has been completed and the building is ready for occupancy.

**3116.6.7 Continuous inspection.** If continuous inspection is required for certain materials where construction takes place on the site, it shall also be required where the same materials are used in prefabricated construction.

**Exception:** Continuous inspection will not be required during prefabrication if the approved agency certifies to the construction and furnishes evidence of compliance.

**3303.1 Construction documents.** No person shall demolish or wreck a building or structure without first obtaining a razing permit. Permit fees shall be paid in accordance with City Ordinance #718 and associated table of minimum value. *Construction documents* and a schedule for demolition shall be submitted where required by the *building official*. Where such information is required, no work shall be done until such *construction documents* or schedule, or both, are *approved*. The applicant shall secure insurance covering any possible liability that could incur during demolition.

**3303.6 Utility connections.** Service utility connections shall be discontinued and capped in accordance with the *approved* rules and the requirements of the applicable governing authority. Before a razing permit can be issued, the applicant must furnish approval from the city officials that applicable permits have been secured to ensure that all utilities will be properly disconnected and inspected as per city engineer's specifications. The applicant shall be responsible for notifying other utilities of such anticipated demolition.

Adopted this 1st day of March 2022

---

Mayor or Council President



ATTEST:

---

Municipal Finance Officer

(Seal)

First Reading: February 17, 2022  
Second Reading and Adoption: March 1, 2022  
Published: March 11, 2022  
Effective Date: March 31, 2022