

**ORDINANCE MC 61-22**  
**AN ORDINANCE PROVIDING FOR THE ADOPTION OF THE 2021**  
**INTERNATIONAL BUILDING CODE AND AMENDMENTS AND ADDITIONS**  
**THERE TO; AND FOR THE REPEAL OF ALL ORDINANCES AND RESOLUTIONS IN**  
**CONFLICT THEREWITH.**

**BE IT ORDAINED BY MINNEHAHA COUNTY, SOUTH DAKOTA:**

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

- (a) The *International Building Code*, 2021 edition, including Appendix C and Appendix I as published by the International Code Council Inc., and amendments and additions thereto as provided in this article are hereby adopted as the building code by the Minnehaha County as provided by South Dakota Codified Law Chapter 7-8-20(17) for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures in the unincorporated area of Minnehaha County and providing for the issuance of permits and collection of fees therefor.
- (b) The adoption of the *International Building Code*, 2021 edition, will become effective May 31<sup>st</sup>, 2022. The minimum building standards in the 2021 edition of the *International Building Code* and amendments thereto shall be applied to any building permit issued after May 27<sup>th</sup>, 2022.
- (c) A printed copy of such code and additions and amendments thereto is on file with the County Auditor.

**SECTION 2. Repeal.**

Ordinance MC54-19 is hereby repealed.

**SECTION 3. AMENDMENTS, ADDITIONS, AND DELETIONS TO THE 2018  
*INTERNATIONAL BUILDING CODE.***

*The following sections and subsections of the 2021 International Building Code adopted in this article shall be amended, added, or not adopted by Minnehaha County as follows. All other sections or subsections of the 2021 International Building Code as published shall remain the same.*

**[A] 101.1 Title.** These regulations shall be known as the Building Code of Minnehaha County, hereinafter referred to as “this code.”

**[A] 101.4.1 Gas.** The provisions of the International Fuel Gas Code as adopted by the State of South Dakota 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. The International Fuel Gas Code shall be administered by the State of South Dakota.

**101.4.2 Mechanical.** The provisions of the International Mechanical Code as adopted by the State of South Dakota 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. The International Mechanical Code shall be administered by the State of South Dakota.

**[A] 101.4.3 Plumbing.** The provisions of the International Plumbing Code as adopted by the State of South Dakota 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 International Plumbing Code shall be administered by the State of South Dakota.

**[A] 101.4.4 Property maintenance.** The provisions of the International Property Maintenance Code as adopted by the State of South Dakota 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 State of South Dakota.

**[A] 101.4.5 Fire prevention.** The provisions of the International Fire Code as adopted by the State of South Dakota 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.

**[A] 101.4.6 Energy.** The provisions of the International Energy Conservation Code as adopted by the State of South Dakota 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.

**[A] 101.4.8 Electrical.** The provisions of the NEC National Electric 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 NEC National Electric Code shall be administered by the State of South Dakota.

**[A] 103.1 Creation of enforcement agency.** The Department of Planning and Zoning shall be the enforcement agency and the official in charge thereof shall be known as the *building official*.

**[A] 103.2 Appointment.** Not adopted by Minnehaha County.

**[A] 104.8.1 Legal defense.** Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the County's liability insurance and defended by legal representatives 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 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 county, or 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.

**[A] 104.10.1 Flood hazard areas.** The building official shall not grant modifications to any provision required in flood hazard areas as established by the 2017 Revised Floodplain Management Ordinance for Minnehaha County

**[A] 105.1 Required.** Any *owner* or owner's 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, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*. The *building official* or *Planning Director* may exempt permits for minor work.

**[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. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet (11 m<sup>2</sup>). A placement permit is required by the zoning division. Such structures must still meet applicable setback requirements of the 1990 Revised Zoning Ordinance for Minnehaha County, the 2001 Revised Joint Zoning Ordinance for Minnehaha County and the City of Dell Rapids, and the Revised Joint Zoning Ordinance for Minnehaha County and the City of Sioux Falls.
2. Fences not over 6 feet (1829mm) high. Fences must still meet applicable requirements of the 1990 Revised Zoning Ordinance for Minnehaha County, the 2001 Revised Joint Zoning Ordinance for Minnehaha County and the City of Dell Rapids, and the Revised Joint Zoning Ordinance for Minnehaha County and the City of Sioux Falls.

3. Oil derricks.
4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the grade elevation to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18,925 L) and the ratio of height to diameter or width is not greater than 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route. A driveway permit may be required by the applicable road authority.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches (457 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
12. 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.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

**105.3 Application for permit.** To obtain a *permit*, the applicant shall first file an application therefor in writing on a form for that purpose.

Such application shall:

1. Identify and describe the work to be covered by the *permit* for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.

4. Be accompanied by *construction documents* and other information as required in Section 107.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the *building official*.

**[A] 105.5 Expiration.** Every permit issued shall become invalid 365 days after its issuance. The building official is authorized to grant, in writing, one extension of time, for a period not more than 180 days. The extension shall be requested in writing and justifiable cause demonstrated any fees paid before the original permit expires.

**[A] 107.1 General.** Submittal documents consisting of one complete set of plans in an electronic submittal in PDF format along with other *construction documents*, 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.

**[A] 107.3.1 Approval of construction documents.** When the *building official* issues a permit, the construction documents shall be reviewed for compliance. One set of construction documents so reviewed shall be retained by the *building official*.

**[A] 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 an extension for demonstrated cause.

**[A] 109.2 Schedule of permit fees.** Where a *permit* is required, a fee for each *permit* shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

The fee schedules for the issuance of a building permit shall be as follows:

**Table No. 1-A. Building Permit Fees**

1. Residential Structures \_\_\_\_\_ \$60.00 or 0.4% of the construction costs, whichever is greater.

2. Commercial/Industrial Structures \_\_\_\_\_ \$100.00 or 1% of the construction costs, whichever is greater.
3. Agricultural Structures \_\_\_\_\_ \$30.00 or 0.2% of the construction costs, whichever is greater.
4. Temporary Building Permit Fee \_\_\_\_\_ \$60.00
5. Building Permit Extension \_\_\_\_\_ \$50.00 (maximum 180 days)

**Table No. 1-B. Other Inspections and Fees**

1. Inspections outside of normal business hours, per hour\*  
(minimum charge – one hour) \_\_\_\_\_ \$70.00
2. Inspections for which no fee is specifically indicated, per hour\*  
(minimum charge – one hour) \_\_\_\_\_ \$70.00
3. Change of Occupancy/Use Zoning Permit \_\_\_\_\_ \$50.00
4. Board of Appeals. Before the board takes any action, the party or parties requesting such hearing shall pay the fee of \$250.00. Under no condition shall said sum or any part thereof be refunded for failure of said request to be approved.
5. A mileage fee based on the current rate per mile authorized by the Internal Revenue Service shall be charged for any inspection occurring outside Minnehaha County.

**[A] 109.3 Permit valuations.** The determination of value or valuation under any of the provisions of this code shall be made by the *building official*. 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*. Final building *permit* valuation shall be set by the building official.

**[A] 109.4. Work commencing before permit issuance.** Any person who commences any work before obtaining the necessary *permits* shall be subject to a fee equal to the required permit fee. The building official may apply said fee for each week the required permit is not obtained. Such fees are in addition to the required permit fees. Legal and/or civil proceedings may also be commenced.

**109.7 Delinquent accounts.** The Planning Department may refuse to issue permits or conduct inspections for any person or business whose account is delinquent.

**[A] 110.3.1 Footing inspection.** Footing inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. If an inspection is required for concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C94, the concrete need not be on the job.

**[A] 110.3.11 Final Inspections.** The final inspection shall be made after all the work required by the building permit is completed and prior to the building being occupied.

**[A] 111.2 Certificate issued.** After the *building official* inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department of building safety, the *building official* may issue a certificate of occupancy that contains the following relevant information:

1. The building *permit* number.
2. The address of the structure.
3. The name and address of the *owner* or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the *building official*.
7. The edition of the code under which the *permit* was issued.
8. The use and occupancy, in accordance with the provisions of Chapter 3.
9. The type of construction as defined in Chapter 6.
10. The design *occupant load*.
11. Where an *automatic sprinkler system* is provided, whether the sprinkler system is required.
12. Any special stipulations and conditions of the building *permit*.

**[A] 113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the *building official* 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 Minnehaha County Planning Commission. The Planning Commission acting as the board of appeals may call upon experts in the field of architecture, engineering and construction before making a decision on any appeal coming before them.

**[A] 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.

**[A] 114.4 Violation Penalties.** Pursuant to the County's authority South Dakota Codified Laws Chapter 7-18A-2, failure to comply with any of the provisions of this ordinance shall constitute a violation of said ordinance and be punishable by a fine not to exceed the fine established by SDCL 22-6-2(2) for each violation, or by imprisonment for a period not to exceed thirty days for each violation, or by both the fine and imprisonment; in addition the County may institute an action for civil injunctive relief as provided by SDCL Chapter 21-8. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such.

**[A] 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 performing 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 is authorized 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 incorporated by this code.

**[BF] 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.

**[BG] SWIMMING POOL.** Any structure intended for swimming, recreational bathing or wading that contains water over 18 inches (457mm) deep. This includes in-ground, aboveground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

**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*.

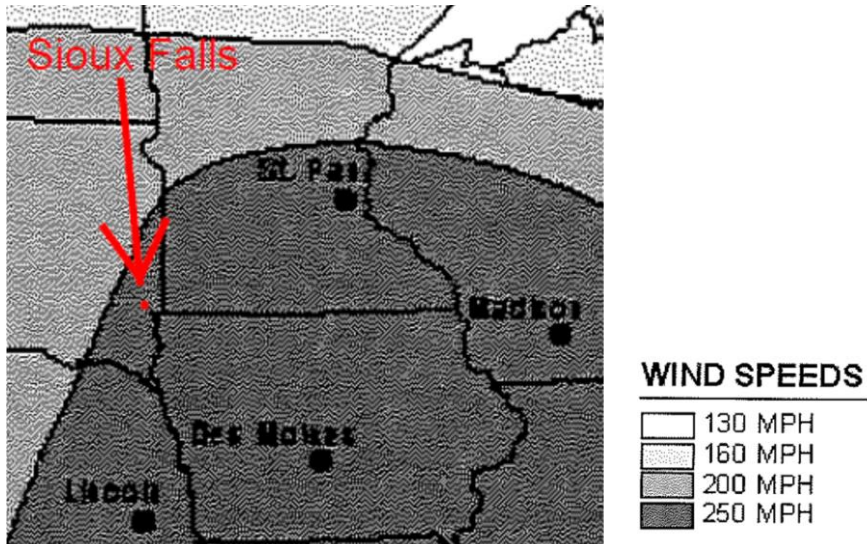
**310.4.2 Lodging houses.** Owner-occupied lodging houses with five or fewer guest rooms and 10 or fewer total occupants shall be permitted to be constructed in accordance with the *International Residential Code*.

**423.5 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 day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Buildings meeting the requirements for shelter design in ICC 500.





[F] 502.1 Address identification. Not adopted by Minnehaha County.

**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 two 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). The extension of the fire wall shall be not less than 30 inches (762 mm).

**Exception:** 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 (3,048 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 (3,048 mm) of the *fire wall*.

**714.5.1.2 Through-penetration firestop system.** Through penetrations of the fire-resistive membrane shall be protected by an approved through-penetration firestop system installed and tested in accordance with ASTM E814 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 1 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*.
3. Floor penetrations of maximum 4-inch (102 mm) nominal diameter metal conduit or tubing penetrating directly into metal-enclosed electrical power switchgear 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*.

**[F] 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 903.3.1.2 is required in Group I-1, Condition 1 or 2 facilities.
2. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than 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 system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge, and all floors below the level of exit discharge other than areas classified as an open parking garage.

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

**[F] 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 a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. A room or space where sprinklers are considered undesirable because of the nature of the contents, where 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 2 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, machinery spaces, control rooms and control 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.

**[F] 904.13.2 System interconnection.** The actuation of the fire suppression system shall automatically shut down the fuel 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.

**[F] 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 three 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 Group I-2, Condition 1 facilities and spaces permitted to be open to the *corridors* by Section

407.2. The system shall be activated in accordance with Section 907.4. Group I-2, Condition 2 occupancies shall be equipped with an automatic smoke detection system as required in Section 407.

**Exception:**

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 providers' 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.

**[F] 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*.

**[F] 907.2.8.4 Heat detectors.** Heat detectors shall be installed in each attic subdivision or similar areas not otherwise covered by an automatic fire-extinguishing system.

**Exceptions:**

1. Heat detection is not required in areas protected by an automatic fire-extinguishing system installed in accordance with Section 903.3.1.1 or in addition to the requirements of Section 903.3.1.2.
2. Heat detectors are not required where the fire partitions extend into and through the interstitial attic space.

**[F] 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 907.2.9.4.

**[F] 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 any of the following conditions apply:

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*.
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 not less than 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 1027.6, Exception 3.

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

**[F] 907.2.12.1.2 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] 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 access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*. 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.

<b>TABLE 1004.5 FLOOR A WANCES PER OCCUPANT</b>	
<b>FUNCTION OF SPACE</b>	<b>OCCUPANT LOAD FACTOR<sup>a</sup></b>
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
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	See Section 1004.6
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	See Section 1004.8
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	See Section 402.8.2
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 platform	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.

**1007.1.1 Two exits or exit access doorways.** Where two *exits*, *exit access doorways*, *exit access stairways* or *ramps*, or any combination thereof including the exit access, are required from any portion of the *exit access*, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them. Interlocking or *scissor stairways* shall be counted as one *exit stairway*.

**Exceptions:**

1. Where interior *exit stairways* or ramps are interconnected by a 1-hour fire-resistancerated corridor conforming to the requirements of Section 1020, the required exit separation shall be measured along the shortest direct line of travel within the corridor.
2. Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance shall be not less than one-third of the length of the maximum overall diagonal dimension of the area served.

**1007.1.2 Three or more exits or exit access doorways.** Where access to three or more *exits* is required, not less than two *exit* or *exit access doorways* including the exit access shall be arranged in accordance with the provisions of Section 1007.1.1. Additional required *exit* or *exit access doorways* shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

**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).

**Exceptions:**

1. In occupancy Group R-2 or R-3, threshold heights 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:
  - 1.1 The door is not part of the required *means of egress*.
  - 1.2 The door is not part of an *accessible route* as required by Chapter 11.
  - 1.3 The door is not part of an *Accessible unit, Type A unit* or *Type B unit*.



2. 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 4 ¾ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4 ½ 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. 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 ¾ inch (19.1 mm) but not more than 1 ¼ 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 that 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 that 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 ships ladders, *guards* shall not have openings that allow passage of a sphere 21 inches (533 mm) in diameter.

4. In assembly seating areas, *guards* required at the end of aisles in accordance with Section 1029.17.4 shall not have openings that allow passage of a sphere 5 inches (127mm) in diameter 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 that 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 that allow passage of a sphere 5 (127mm) inches in diameter.

**1020.4 Dead ends.** Where more than one *exit* or *exit access doorway* is required, the *exit access* shall be arranged such that dead-end *corridors* do not exceed 20 feet (6096 mm) in length.

**Exceptions:**

1. In 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 Groups 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 1013.

**1031.3.1 Minimum size.** *Emergency escape and rescue openings* shall have a minimum net clear opening of 5.0 square feet (0.46 m<sup>2</sup>).

**1031.3.3 Maximum height from floor.** *Emergency escape and rescue openings* shall have the bottom of the clear opening not greater than 48 inches (1,219 mm) measured from the floor.

**1031.5.2 Ladders or steps.** Window wells with a vertical depth of more than 48 inches (1,219 mm) shall be equipped with an *approved* permanently affixed ladder or steps. Ladders or rungs shall have an inside width of not less than 12 inches (305 mm), shall project not less than 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center (o.c.) vertically for the full height of the window well. The ladder or steps shall not encroach into the required dimensions of the window well by more than 6 inches (152 mm). The ladder or steps shall not be obstructed by the *emergency escape and rescue opening*. Ladders or steps required by this section are exempt from the *stairway* requirements of 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:**

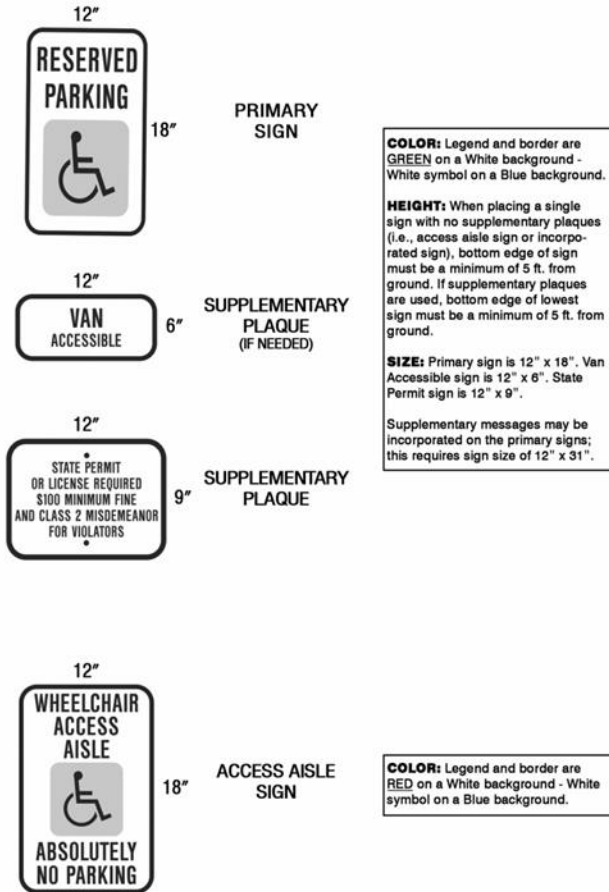
1. An *accessible route* from an accessible level is not required in facilities that are less than three stories in height or have less than 3,000 square feet (278.7 m<sup>2</sup>) per story. This exception shall not apply to:
  - 1.1 Multiple tenant facilities of Group M occupancies containing five 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.
  - 1.2 Stories or mezzanines containing offices of health care providers (Group B or I).
  - 1.3 Passenger transportation facilities and air- ports (Group A-3 or B).
  - 1.4 Government buildings.
2. *Stories*, *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.
5. Vertical access to elevated employee work stations within a courtroom is not required at the time of initial construction, provided a ramp, lift, or elevator can be installed without requiring reconfiguration or extension of the courtroom or extension of the electrical system.

**1106.8 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; 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.”

**1106.9 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 (1,219 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.



**1107.6.2.2.1 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 1107.7.
2. Existing structures on a site shall not contribute to the total number of units on a site.
3. The following provisions of the 2009 ICC/ANSI A117.1-2009 referenced in Section 1003 Type A Dwelling are applicable.
  - 3.1 A work surface in the kitchen referenced in Section 1003.12.3 Clear Floor Space of ICC/ANSI A117.1-2009 is not required.
  - 3.2 The reduced work height of the kitchen sink at 34 inches referenced in Section 1003.12.4.2 ICC/ANSI A117.1-2009 is not required.
  - 3.3 Appliances referenced in Section 1003.12.5 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 A117.1-2009.

**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 Minnehaha County (and incorporated areas)” dated September 2, 2009, November 16, 2011, March 7, 2017, and October 5, 2017, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. 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 county’s 2017 Revised 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 specified in Sections 1703.1.1 through 1703.1.3.

**1704.2 Special inspections and tests.** Where application is made to the *building official* for construction as specified in Section 105, the owner or the owner’s authorized agent, other than the contractor, shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705 and identify the *approved agencies* to the *building official*. These *special inspections* and tests are in addition to the inspections by the *building official* that are identified in Section 110.

**Exceptions:**

1. *Special inspections* and tests 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* and tests 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* and tests 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 contractor is permitted to employ the *approved agencies* where the contractor is also the owner.
5. 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 1705.2.3, 1705.3, 1705.6, 1705.7, and 1705.8 are considered as guidelines.

**1705.3 Concrete construction.** *Special inspections* and tests of concrete construction shall be performed in accordance with this section and Table 1705.3.

**Exception:** *Special inspections* and tests 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 or rock.
2. Continuous concrete footings supporting walls of buildings three stories or less above *grade plane* that are fully supported on earth or rock where:
  - 2.1 The footings support walls of light-frame construction.
  - 2.2 The footings and foundation walls are designed in accordance with Table 1809.7.
  - 2.3 The structural design of the footing is based on a specified compressive strength,  $f'_c$ , not more than 3,000 pounds per square inch (psi) (20.6 MPa), regardless of the compressive strength specified in the *approved construction documents* or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress 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.

**[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.

**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.
2. Constructing in accordance with ASCE 32.
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 (139 m<sup>2</sup>) or less for light- frame construction or 400 square feet (37 m<sup>2</sup>) or less for other than light-frame construction.
3. Eave height of 10 feet (3048 mm) 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*.

TABLE 2902.1 [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>f</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 building, 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 hospital 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 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 per dwelling unit
		Congregate living facilities with 16 or few 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 2903.1.4. 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, 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 3114 PUBLIC USE RESTROOM BUILDINGS IN FLOOD HAZARD AREAS.** Not adopted by the county.

**3109.1 General.** Swimming pools shall comply with the requirements of Sections 3109.2 through 3109.5 and other applicable sections of this code. These requirements shall be applicable to all new swimming pools hereafter constructed and shall apply to all existing pools that have a depth of 18 inches or more of water. No person in possession of land within the County, either as an owner, purchaser, lessee, tenant, or a licensee, upon which is situated a swimming pool having a depth of 18 inches or more, shall fail to provide and maintain such a fence or wall as herein provided.

Exception: A property which meets **all** of the following standards and has an outdoor swimming pool shall be exempt from the requirements of Sections 3109.4.1 & 3109.4.7.

1. The property is not within a residential zoning district.
2. The property is not located within a platted subdivision of five or more lots.
3. The swimming pool is greater than 500 feet from any dwelling other than a dwelling located on the same property.

**3109.2 Public swimming pools.** Public swimming pools shall be completely enclosed by a fence not less than 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.

**3109.3 Residential swimming pools.** Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.3.1 through 3109.3.3.

**3109.3.1 Barrier height and clearances.** The top of the barrier shall be not less than 42 inches (1,066 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level

or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

**3109.3.1.1 Openings.** Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.

**3109.3.1.2 Solid barrier surfaces.** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

**3109.3.1.3 Gates.** Access doors or gates shall comply with the requirements of Sections 3109.3.1.1 through 3109.3.1.2 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall be self-closing gates other than pedestrian access doors or gates shall have a self-latching device.

**3109.3.1.4 Pool structure as barrier.** Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.3.1.1 through 3109.3.1.3. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

**3109.3.2 Prohibited Locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**3109.3.3 Modifications.** Modification in individual cases, upon a showing of good cause with respect to height, nature, or location of a fence, wall, gates, or latches, or the necessity thereof, may be made by the building official, provided the protection as sought hereunder is not reduced thereby. The building official may grant permission for other protective devices or structures to be used as long as the degree of protection afforded by this substitute device or structure is not less than the protection afforded by the wall, fence, gate, or latch described herein. A reasonable period within which to comply with the requirements of this section for existing swimming pools shall be allowed, which period shall not exceed 90 days after notification by the building official.

**3109.4 Entrapment avoidance.** Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

Adopted this 19th day of April, 2022.

MINNEHAHA COUNTY

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Chair, Board of County Commissioners

ATTEST:

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County Auditor

1 <sup>st</sup> Reading	March 22, 2022
Legal Ad Argus Leader, Brandon Valley Journal, Garretson Gazette, Minnehaha Messenger	March 28, 2022 March 30, 2022 March 31, 2022 April 1, 2022
Public Hearing	April 19, 2022
Fact of Adoption Argus Leader, Brandon Valley Journal, Garretson Gazette, Minnehaha Messenger	April 25 & May 2, 2022 April 27 & May 4, 2022 April 28 & May 5, 2022 April 29 & May 6, 2022
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