

ORDINANCE MC

AN ORDINANCE PROVIDING FOR THE ADOPTION OF THE 2009 INTERNATIONAL BUILDING CODE AND AMENDMENTS AND ADDITIONS THERETO; THE 2009 INTERNATIONAL RESIDENTIAL CODE AND AMENDMENTS AND ADDITIONS THERETO; THE 2009 INTERNATIONAL EXISTING BUILDING CODE AND AMENDMENTS AND ADDITIONS THERETO; 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 2009.

The International Building Code, 2009 edition, including Appendix C and Appendix I as published by the International Code Council Inc., and amendments and additions thereto as provided in Section 3 of this ordinance are hereby adopted by Minnehaha County 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 in the unincorporated area of Minnehaha County and providing for issuance of permits and collection of fees therefore. The minimum building standards in the 2009 editions of the International Building Code and amendments thereto shall be applied to any building permit issued after May 1, 2011. A printed copy of such code and additions and amendments thereto is on file with the County Auditor.

SECTION 2. Repeal.

Ordinance MC35-07 is hereby repealed.

SECTION 3. Amendments, additions and deletions to the 2009 International Building Code.

The following sections and subsections of building code adopted in this article shall be amended, added, or deleted as follows. All other sections or subsections of the 2009 International Building Code shall remain the same.

101.1 Title.-These regulations shall be known as the Building Code of Minnehaha County, South Dakota hereinafter referred to as "this code."

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

Exceptions

1. Detached one- and two-family dwellings and multiple single-family dwellings (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 term International Fuel Gas Code shall mean the International Fuel Gas Code as adopted by the State of South Dakota and 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 term International Mechanical Code shall mean the International Mechanical Code as adopted by the State of South Dakota 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. The International Mechanical Code shall be administered by the State of South Dakota.

101.4.3 Plumbing. The term ICC Plumbing Code shall mean the ICC 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. ICC 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 State of South Dakota 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 State of South Dakota.

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 term ICC Electrical Code shall be mean the ICC 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. ICC Electrical Code shall be administered by the State of South Dakota.

103.1 Enforcement agency. The Department of Planning and Zoning shall be the enforcement agency and the official in charge thereof shall be known as the Planning Director.

103.2 Appointment. This section is deleted.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the Planning Director shall have the authority to appoint a Chief Building Inspector (referred to herein as the building official), the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers a delegated by the building official.

104.8 Liability. The building official, member of the board of appeals, 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 County'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 county, it's 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 Permits Required. Except as specified in Section 105.2, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, converted, or replaced unless a separate permit for each building or structure has first been obtained from the building official or designate. Permits for minor work may be exempted by the building official or designate.

106.2 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:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the projected floor area does not exceed 120 square feet (11.14 m²).
2. Fences.
3. Retaining walls.
4. Water tanks.
5. Platforms, sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below.
6. Painting, papering, floor covering, cabinets, countertops and similar finish work.
7. Temporary motion picture, television and theater stage sets and scenery.
8. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches (457mm) deep.
9. Replacement of roofing shingles.
10. Replacement of exterior siding.
11. Window awnings 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 of Group R-3 and U occupancies.
12. Swings and other playground equipment accessory to detached one- and two-family dwellings.
13. Non-fixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches (1,753 mm) in height.

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 the time of service and said time shall be specified on the permit.

109.2 Permit Fees. A fee for each permit as required by Section 105.1 shall be paid based on the construction costs as adopted by Resolution by the Board of County Commissioners. The fee schedules for the issuance of a building permit shall be as follows:

Table 1-A Building Permit Fees

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

Table 1-B Other Inspections and Fees

1. Inspection 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.

109.3 Building 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.

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 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.

110.3.10 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.

Section 111.2 Certificate issued. This section is deleted.

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 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.

113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of the code or the rules legally adopted there under have been incorrectly interpreted, the provision 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.

113.3 No employees of the jurisdiction shall be members of the Board of Appeals.

114.3 Prosecution of violation. If the notice of violation is not complied with in the time prescribed by such notice, 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.

114.4 Penalty. Failure to comply with any of the provisions of this ordinance shall constitute a violation of said ordinance and be punishable pursuant to South Dakota Codified Laws Chapter 7-18A-2; in addition the County may institute an action for civil injunctive relief as provided by law. Each day such violation is committed or permitted to continue, shall constitute a separate offense and shall be punishable as such.

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.

Section 202-Definitions.

STRICT LIABILITY OFFENSE. An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as 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 Daycare Center. The use of a building or structure, or portion thereof, for educational supervision, or personal care services for more than 12 children older than 2½ years of age, shall be classified as Group E occupancy.

308.3.1 Child care facility. A child care facility that provides care on a 24-hour basis to more than 12 children 2 1/2 years of age or less shall be classified as Group I-4.

308.5.2 Child care facility. A facility that provides supervision and personal care on less than a 24-hour basis for more than 12 children 2 1/2 years of age or less shall be classified as Group I-4.

Exception: A child day care facility that provides care for more than 5 but no more than 100 children 2 1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

403.2.1 Reduction in fire-resistance rating. Delete.

403.2.1.1 Type of construction. Delete.

403.2.1.2 Shaft enclosures. Delete.

406.1.4 Separation. Separations shall comply with the following:

1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) thick, or doors in compliance with Section 715.4.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted.
2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum of 0.019-inch (0.48 mm) sheet steel and shall have no openings into the garage.
3. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

501.2 Address identification. This section is deleted.

507.5.1 Property lines. Portions of an unlimited area building may be divided by platted property lines without requiring the construction of party walls if the whole building has:

1. Permanent open space on all sides as required by Sections 507.2, 507.3, 507.4, or 507.5; and
2. Proper legal agreements are submitted and approved by the building official and are recorded with the deed for each of the separate properties. These recorded agreements shall require that the buildings, as divided by property lines, be in conformance with the applicable provisions of the building and fire codes, as if the buildings were a single building on a single piece of property. In addition, the agreement must state that no individual building or property owner may modify any portion of the building in any way that would not be in compliance with the building and fire codes.

715.4.8 Door closing. Fire doors shall be 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, smokeproof 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.

716.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire dampers are not required at penetrations of shafts where:
 - 1.1. Steel exhaust subducts are extended at least 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside; or
 - 1.2. Penetrations are tested in accordance with ASTM E 119 or UL 263 as part of the fire-resistance-rated assembly; or
 - 1.3. Ducts are used as part of an approved smoke control system designed and installed in accordance with Section 909 and where the fire damper will interfere with the operation of the smoke control system; or
 - 1.4. The penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
2. In Group B and R occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, smoke dampers are not required at penetrations of shafts where:
 - 2.1. Kitchen, clothes dryer, bathroom, and toilet room exhaust openings are installed with steel exhaust subducts, having a minimum wall thickness of 0.187-inch (0.4712 mm) (No. 26 gage);
 - 2.2. The subducts extend at least 22 inches (559 mm) vertically; and
 - 2.3. An exhaust fan is installed at the upper terminus of the shaft that is powered continuously in accordance with the provisions of Section 909.11, so as to maintain a continuous upward airflow to the outside.

3. Smoke dampers are not required at penetration of exhaust or supply shafts in parking garages that are separated from other building shafts by not less than 2-hour fire-resistance-rated construction.
4. Smoke dampers are not required at penetrations of shafts where ducts are used as part of an approved mechanical smoke control system designed in accordance with Section 909 and where the smoke damper will interfere with the operation of the smoke control system.
5. Fire dampers and combination fire/smoke dampers are not required in kitchen and clothes dryer exhaust systems located at the point of entry into the shaft when installed in accordance with the International Mechanical Code.

907.2.9.3 Smoke detectors. System smoke detection shall be provided in each stairway and all exit corridors.

907.2.9.4 Heat detectors. Heat detectors shall be installed in each living unit, attic subdivision, any attached garages, and in all common areas such as recreation rooms, laundry rooms, furnace rooms, and similar areas. Living unit heat detectors shall consist of, at minimum, one 135-degree, fixed-rate-of-rise type detector, centrally located within each living unit.

Exception: Heat detection is not required in areas protected by an automatic fire extinguishing system installed in accordance with 903.3.1.1 or 903.3.1.2.

1008.1.7 Thresholds. Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height for sliding doors serving dwelling units or 1/2 inch (12.7 mm) 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: The threshold height shall be limited to 8 inches (203 mm) where the occupancy is Group R-2 or R-3; the door is an exterior door that is not a component of the required means of egress; the door, other than an exterior storm or screen door, does not swing over the landing or step; and the doorway is not on an accessible route as required by Chapter 11 and is not part of an Accessible unit, Type A unit or Type B unit.

1009.4.2 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 leading edges 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 leading edge. Winder treads shall have a minimum tread depth of 11 inches (279 mm) measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the

walk line and a minimum tread depth of 10 inches (254 mm) within the clear width of the stair.

Exceptions:

1. Alternating tread devices in accordance with Section 1009.10.
2. Ship ladders in accordance with Section 1009.11.
3. Spiral stairways in accordance with Section 1009.9.
4. Aisle stairs in assembly seating areas where the stair pitch or slope is set, for sightline reasons, by the slope of the adjacent seating area in accordance with Section 1028.11.2.
5. 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 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).
6. See Section 3404.1 or the International Existing Building Code for the replacement of existing stairways.
7. In Group I-3 facilities, stairways providing access to guard towers, observation stations, and control rooms, not more than 250 square feet (23 m²) 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).

1009.10 Alternating tread devices. Alternating tread devices are limited to an element of a means of egress in buildings of Groups F, H, and S from a mezzanine not more than 250 square feet (23 m²) in area and which serves not more than five occupants; in buildings of Group I-3 from a guard tower, observation station, or control room not more than 250 square feet (23 m²) in area; and for access to unoccupied roofs, mechanical rooms, penthouses, and equipment platforms.

1009.11 Ship ladders. Ship ladders are permitted to be used as a component of a means of egress to and from control rooms or elevated facility observation stations not more than 250 square feet (23 m²) with not more than five occupants for access to unoccupied roofs, mechanical rooms, penthouses, and equipment platforms.

Exception: Equipment and appliances on roofs or elevated structures are allowed to have ladders in accordance with the mechanical code.

Ship ladders shall have a minimum tread depth of 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is no less than 8 1/2 inches (216 mm).

The maximum riser height shall be 9 1/2 inches (241 mm). Handrails shall be provided on both sides of ship ladders. The minimum clear width at and below the handrails shall be 20 inches (508 mm).

1009.13 Stairway to roof. In buildings four or more stories above grade plane, one stairway shall extend to the roof surface, unless the roof has a slope steeper than four units vertical in 12 units horizontal (33 percent slope). In buildings without an occupied roof, access to the roof from the top story shall be permitted to be by an alternating tread device or a ships ladder.

1013.3 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 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 (1,067 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.

1015.2.1 Two exits or exit access doorways. Where two exits or exit access doorways are required from any portion of the exit access, the exit access including the exit doors or exit access doorways 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 the exit access including the exit doors or exit access doorways. Interlocking or scissor stairs shall be counted as one exit stairway.

Exceptions:

1. Where exit enclosures are provided as a portion of the required exit and are interconnected by a 1-hour fire-resistance-rated corridor conforming to the requirements of Section 1018, 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 of the exit doors or exit access doorways shall not be less than one-third of the length of the maximum overall diagonal dimension of the area served.

1015.2.2 Three or more exits or exit access doorways. Where access to three or more exits is required, at least two means of the exit access including two exit doors or exit access doorways shall be arranged in accordance with the provisions of Section 1015.2.1

**TABLE 1018.1
CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system ^c
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A, B, E, F, M, S, U	Greater than 30	1	0
R	Greater than 10	1	0.5
I-2 ^a , I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 ^b

- a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.8.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

1018.4 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet (6,096 mm) in length.

Exceptions:

1. In occupancies in Group I-3 of Occupancy Condition 2, 3, or 4 (see Section 308.4), 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, R-4, 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. 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.

**TABLE 1021.2
STORIES WITH ONE EXIT**

STORY	OCCUPANCY	MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE
First story or basement	A, B ^d , E ^e , F ^d , M, U, S ^d	49 occupants and 75 feet travel distance
	H-2, H-3	3 occupants and 25 feet travel distance
	H-4, H-5, I, R	10 occupants and 75 feet travel distance
	S ^a	29 occupants and 100 feet travel distance
Second story	B ^b , F, M, S ^a	29 occupants and 75 feet travel distance
	R-2	4 dwelling units and 50 foot travel distance

For SI: 1 foot = 304.8 mm.

- a. For the required number of exits for parking structures, see Section 1021.1.2.
- b. For the required number of exits for air traffic control towers, see Section 412.3.
- c. Repealed. .
- d. Group B, F, and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum travel distance of 100 feet.
- e. Day care occupancies shall have a maximum occupant load of 10.

1022.7 Discharge identification. A stairway in an exit enclosure 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.

1024.1 General. Approved luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M, and R-1 having occupied floors located more than 420 feet (128 m) above the lowest level of fire department vehicle access in accordance with Sections 1024.1 through 1024.5.

Exceptions:

1. Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, Exception 1.
2. Luminous egress path markings shall not be required in areas of open parking garages that serve as part of the exit path in accordance with Section 1027.1, Exception 3.

1029.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R and I-1 occupancies. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency escape and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

1. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.
2. Basements with a ceiling height of less than 80 inches (2,032 mm) shall not be required to have emergency escape and rescue windows.
3. High-rise buildings in accordance with Section 403.
4. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court, or exterior exit balcony that opens to a public way.
5. Basements without habitable spaces and having no more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape windows.

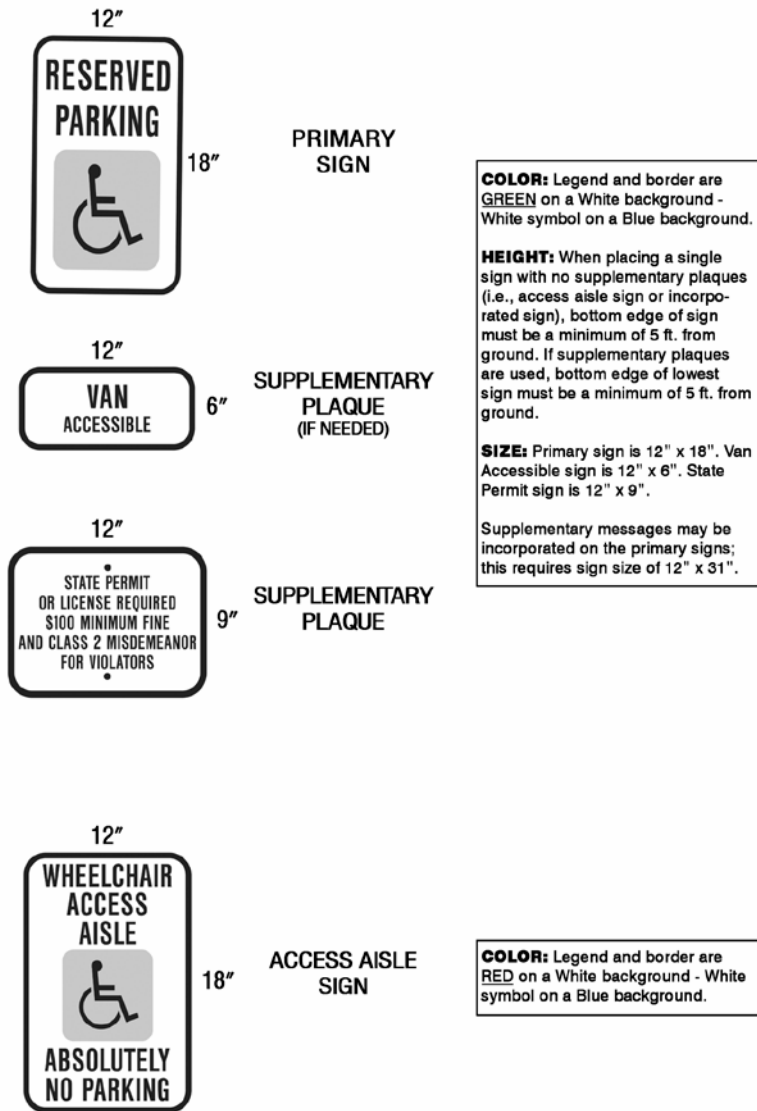
1029.2 Minimum size. Emergency escape and rescue openings shall have a minimum net clear opening of 5.0 square feet (0.46 m²).

1029.3 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.

1029.5.2 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 at least 12 inches (305 mm), shall project at least 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 1009.

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, 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."



1106.9 Access aisles and markings. Each access which 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 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.

1404.2.1 Weather-resistive sheathing papers. House wraps or weather-resistive sheathing papers consisting of spun bonded olefin sheets of high density polyethylene fibers are required to be installed on the exterior side of the sheathing material underneath material underneath the exterior covering.

1405.13.2 Window sills. In Occupancy Groups R-2 and R-3, one- and two-family and multiple-family dwellings where the opening of the sill portion of an operable window is located more than 72 inches (1,829 mm) above the finished grade or other surface below, the lowest part of the clear opening of the window shall be a minimum of 18 inches (457 mm) above the finished floor surface of the room in which the window is located. Glazing between the floor and a height of 18 inches (457 mm) shall be fixed or have openings such that a 5-inch-diameter (127 mm) sphere cannot pass through.

Exception: Openings that are provided with window guards that comply with ASTM F 2006 or F2090.

[P] 1503.4 Roof drainage. Design and installation of roof drainage systems shall comply with Section 1503 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% 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.

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 County has adopted 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, SD” dated September 2, 2009, 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 floodplain management ordinance, the provision 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.

1704.1 General. 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 1704. These inspections are in addition to the inspections identified in Section 110.

The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for the inspection of the particular type of construction or operation requiring special inspection. The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as the special inspector for the work designed by them, provided those personnel meet the qualification requirements of this section to the satisfaction of the building official. The special inspector shall provide written documentation to the building official demonstrating his or her competence and relevant experience or training. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of special inspection activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

Exceptions:

1. Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statutes and regulations governing the professional registration and certification of engineers or architects.
3. 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.
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 1704.3, 1704.4, 1704.5.1, 1704.5.3, 1704.7, 1704.8, and 1704.9 shall be considered as a guideline.

1704.4 Concrete construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.

Exceptions: 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 or 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 foundations support walls of light-frame construction.
 - 2.2. The footings are designed in accordance with Table 1809.7; or
 - 2.3. The structural design of the footing and foundations are based on a specified compressive strength, f'_c , no greater than 3,000 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 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.

1704.142 Exterior insulation and finish systems (EIFS). This Section is deleted.

Section 1717. Prefabricated construction.

17176.1. General.

1717.1.1 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.

1717.1.2 Scope. Unless otherwise specifically stated in this section, all prefabricated construction and materials used therein shall conform to all the requirements of this code.

17176.1.3 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.

17176.2 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 during prefabrication.

1717.3 Tests of assemblies. The building official may require special tests to be made on assemblies to determine their durability and weather resistance

1717.4 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.

1717.5 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.

1717.6 Permits, materials, plans, fees, certificate, and inspections.

1717.6.1 Materials. Materials and the assembly of thereof shall be inspected to determine compliance with this code. Every material shall be graded, marked or labeled as required as elsewhere in this code.

1717.6.2 Plans. One complete set of plans and specifications shall be submitted to the Planning Department for approval prior to the issuance of a building permit for a prefabricated structure. Plans shall be of sufficient detail and clarity to indicate compliance with all applicable codes.

1717.6.3. Permits and Fees. Permit fees shall be as follows:

1. The fee for a building permit shall conform to Section 1089.2.
2. Electrical and Plumbing Fees shall conform to the State fee requirements.

1717.6.4 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.

1717.6.6 Field erection. The building official shall inspect the placement of prefabricated assemblies at the building site to determine compliance with this code. Final inspections are to be made after the installation and finishing work has been completed and the building is ready for occupancy.

1806.2 Presumptive load-bearing values. The maximum allowable foundation pressure, lateral pressure, or lateral sliding-resistance values for supporting soils near the surface shall not exceed the values specified in Table 1806.2 unless data to substantiate the use of a higher value 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 is 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 and temporary structures.

1809.5 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected 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. Classified in Occupancy Category I, in accordance with Section 1604.5;
2. Area of 1,500 square feet (138,m2) or less for light-frame construction or 400 square feet (37,m2) or less for other than light-frame construction.
3. Eave height of 10 feet (3,048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

2308.9.3 Bracing. Braced wall lines shall consist of braced wall panels that meet the requirements for location, type amount of bracing as shown in Figure 2308.9.3, specified in Table 2308.9.3 (1) and are in line or offset from each other by not more than 4 feet (1,219 mm) except for offsets not more than 200 square feet. Braced wall panels shall start not more than 12 ½ feet (3,810 mm) from each end of a braced wall line. Braced wall panels shall be clearly indicated on the plans. Construction of braced wall panels shall be by one of the following methods:

1. Nominal 1-inch by 4-inch (25mm by 102 mm) continuous diagonal braces into top and bottom plates and intervening studs, placed at an angle not more than 60 degrees (1.0 rad) or less than 45 degrees (0.79 rad) from the horizontal and attached to the framing in conformance with Table 2304.9.1.
2. Wood board of 5/8 inch (15.9mm) net minimum thickness applied diagonally on studs spaced not over 24 inches (610 mm) o.c.

3. Wood structural panel sheathing with a thickness not less than 3/8 inch (9.5 mm) for 16-inch (406 mm) or 24-inch (610 mm) stud spacing in accordance with Tables 2308.9.3(2) and 2308.9.3(3).
4. Fiberboard sheathing panels not less than 1/2 inch (12.7 mm) thick applied vertically or horizontally on studs spaced not over 16 inches (406 mm) o.c. where installed with fasteners in accordance with Section 2306.6 and Table 2306.6.
5. Gypsum board [sheathing 1/2-inch-thick (12.7 mm) by 4-feet-wide (1,219 mm) wallboard or veneer base] on studs spaced not over 24 inches (610 mm) o.c. and nailed at 7 inches (178 mm) o.c. with nails as required by Table 2306.7.
6. Particleboard wall sheathing panels where installed in accordance with Table 2308.9.3(4).
7. Portland cement plaster on studs spaced 16 inches (406 mm) o.c. installed in accordance with Section 2510.
8. Hardboard panel siding where installed in accordance with Section 2303.1.6 and Table 2308.9.3(5).

For cripple wall bracing, see Section 2308.9.4.1. For Methods 2,3,4,6, 7, 8, each panel must be at least 48 inches (1,219 mm) in length, covering three stud spaces where studs are spaced 16 inches (406 mm) apart and covering two stud spaces where studs are spaced 24 inches (610 mm) apart.

For Method 5, each panel must be at least 96 inches (2,438 mm) in length where applied to one face of a panel and 48 inches (1,219 mm) where applied to both faces. All vertical joints of panel sheathing shall occur over studs and adjacent panel joints shall be nailed to common framing members. Horizontal joints shall occur over blocking or other framing equal in size to the studding except where waived by the installation requirements for the specific sheathing materials.

Sole plates shall be nailed to the floor framing and top plates shall be connected to the framing above in accordance with Section 2308.3.2. Where joists are perpendicular to braced wall lines above, blocking shall be provided under and in line with the braced wall panels.

3109.1 General. Swimming pools shall comply with the requirements of this section 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 which have a depth of 18 inches or more of water. No person in possession of land within the unincorporated area of the county, either as 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. The fence or wall shall be installed, inspected, and approved prior to filling with water.

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 Definition. The following word and term shall, for the purposes of this section and as used elsewhere in this code, have the meaning shown herein.

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

3109.4.1 Barrier height and clearances. The top of the barrier shall be at least 42 inches (1,066 mm) above graded measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 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 maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

3109.4.1.2 Solid barrier surfaces. This section is deleted.

3109.4.1.3 Closely spaced horizontal members. This section is deleted.

3109.4.1.4 Widely spaced horizontal members. This section is deleted.

3109.4.1.5 Chain link dimensions. This section is deleted.

3109.4.1.6 Diagonal members. This section is deleted.

3109.4.1.8 Dwelling wall as a barrier. This section is deleted.

3109.4.4 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, and latch described herein. A reasonable period within which to comply 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.

3109.4.5 Spas and Hot Tubs Exception. A self contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of 3109.4.1 & 3109.4.7.

3401.3 Compliance. Alterations, repairs, additions, and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions, and changes of occupancy in the State Fire Code, State Plumbing Code, State Electrical Code, International Residential Code, State Waste Water Code, and Minnehaha County On-Site Waste Water Treatment Systems Ordinance.

3408.2 Certificate of Occupancy. This Section is deleted.

3408.4 Change of Occupancy/Use Zoning Permit. A zoning permit is required prior to a change of occupancy. After the issuance of the permit an inspection of the building shall be made by the building official.

3410.1 Conformance. Structures moved into or within the jurisdiction shall comply with the provisions of this code for new structures.

Exceptions:

1. Mobile homes used as a dwelling and located in a mobile home park operated under a valid license.
2. Mobile homes used as a dwelling and located in a manufactured housing park.
3. Mobile homes uses as a dwelling in conformance with Minnehaha County Zoning Ordinance MC16-90 Sections 3.03 (A), 9.03 (B), 12.06 (C), and 12.06 (D); Joint Zoning Ordinance for Minnehaha County and City of Dell Rapids MC28-01 Sections 3.03 (E), 9.03 (B), 12.06 (C), and 12.06 (D); and the Joint Zoning Ordinance for Minnehaha County and City of Sioux Falls MC30-02 Sections 3.03 (A), 13.03 (B), 15.06 (C), and 15.06 (D).
4. Structures uses as a temporary office or shelter on a construction or development site when approved by the building official.
5. Structures used a temporary business office for a period not to exceed one year when approved by the building official and provided it meets the applicable accessibility requirements of this code.
6. Mobile homes used as a temporary dwelling as specified in Section 12.06 (E) of the Minnehaha County Zoning Ordinance MC16-90; in Section 12.06 (E) of the Joint Zoning Ordinance for Minnehaha County and City of Dell Rapids MC28-01; and in Section 15.06 (e) of the Joint Zoning Ordinance for Minnehaha County and City of Sioux Falls MC30-02.

7. Mobile homes/manufactured homes used as a sales office at a location where such homes are offered for sale provided it meets the applicable accessibility requirements of this code.

3408.1.1 Single Family Dwellings. The provision of this code shall apply to single family dwellings where it is deemed applicable by the Building Official.

3408.1.2 Prerequisites to moving a structure. A structure shall not be moved into or within the County until the following condition has been satisfied.

A building permit is required for all structures being moved. Prior to the issuance of a building permit, the building official shall conduct an inspection of the structure. No building permit shall be issued without the approval of the building official.

3408.1.3 Denial. If the applicant fails to agree or comply with the conditions as set forth herein or, in the judgment of the building official, the building or structure is in such a state of disrepair that it would not be safe to move the building, the building official shall issue a written denial of a building permit.

3410.2 Applicability. Structures existing prior to March 11, 1968, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3403 through 3409. The provisions in Sections 3412.2.1 through 3412.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S, and U. These provisions shall not apply to buildings with occupancies in Group H or I.

SECTION 4. Adoption International Residential Code 2009.

The International Residential Code, 2009 edition—including Appendix E, Appendix G, and Appendix H—as published by the International Code Council Inc. and amendments and additions thereto as provided in Section 5 of this ordinance are hereby adopted as the residential building code by Minnehaha County as provided by South Dakota Codified Laws Chapter 7-8-20(17) for regulating the design, construction, quality of materials, erection, installation, alteration, movement, repair, equipment, use and occupancy, location, removal, and demolition of detached one- and two-family dwellings and town houses not more than three stories in height with a separate means of egress and their accessory structures, and provides for the issuance of permits and the collection of fees therefore. The minimum building standards in the 2009 edition of the International Residential Code and amendments thereto shall be applied to any building permit issued after May 1, 2011. A printed copy of such code and additions and amendments thereto is on file with the County Auditor.

SECTION 5. Amendments, additions, and deletions to the 2009 International Residential Code.

The following sections and subsections of the residential building code adopted in this article shall be amended, added, or deleted as follows. All other sections or subsections of the 2009 International Residential Code shall remain the same.

R101.1 Title. These provisions shall be known as the Residential Code for One- and Two-Family Dwellings of Minnehaha County, and shall be cited as such and will be referred to herein as “this code.”

R101.2 Scope. The provisions of the International Residential Code for One- and Two-Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and town houses not more than three stories above grade plane in height with a separate means of egress and their accessory structures.

Exception: Existing buildings undergoing repair, alteration or additions, and change of occupancy may be permitted to comply with the International Existing Building Code.

R102.4.1 Electrical. The term ICC Electrical Code shall mean the ICC Electrical Code as adopted by the State of South Dakota. ICC Electrical Code shall be administered by the State of South Dakota.

R102.4.2 Gas. The term International Fuel Gas Code shall mean the International Fuel Gas Code as adopted by the State of South Dakota. The International Fuel Gas Code shall be administered by the State of South Dakota.

R102.4.3 Mechanical. The term International Mechanical Code shall mean the International Mechanical Code as adopted by the State of South Dakota. The International Mechanical Code shall be administered by the State of South Dakota.

R102.4.4 Plumbing. The term ICC Plumbing Code shall mean the ICC Plumbing Code as adopted by the State of South Dakota. ICC Plumbing Code shall be administered by the State of South Dakota.

R102.4.5 Property maintenance. The term International Property Maintenance Code shall mean the International Property Maintenance Code as adopted by the State of South Dakota. The International Property Maintenance Code shall be administered by the State of South Dakota.

R102.4.6 Fire prevention. The term International Fire Code shall mean the International Fire Code as adopted by the State of South Dakota. The International Fire Code shall be administered by the State of South Dakota.

R102.4.7 Energy. The term International Energy Conservation Code shall mean the International Energy Conservation Code as adopted by the State of South Dakota. The

International Energy Conservation Code shall be administered by the State of South Dakota.

R103.1 Enforcement agency. The Department of Planning and Zoning shall be the enforcement agency and the official in charge thereof shall be known as the Planning Director.

R103.2 Appointment. Deleted.

R103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the Planning Director shall have the authority to appoint a Chief Building Inspector (referred herein as the building official), the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

R104.8 Liability. The building official, member of the board of appeals, 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 any act or by reason of an act or omission in the discharge of official duties. Any suit 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 any immunities and defenses provided by other applicable state and federal laws. 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 code enforcement agency or the County be held as assuming any such liability by reason of the inspection authorized by this code or any permits or certificates issued under this code.

R105.1 Permits Required. Except as specified in Section 105.2, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved or converted unless a separate permit for each building or structure has first been obtained from the building official or designate. Permits for minor work may be exempted by the building official or designate.

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption 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.

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.14 m²).
2. Fences.
3. Retaining walls.
4. Water tanks.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, countertops, and similar finish work.
7. Prefabricated swimming pools that are less than 18 inches (610 mm) deep.
8. Swings and other playground equipment.
9. Window awnings.

Electrical: This section deleted.

Gas: This section deleted.

Mechanical: This section deleted.

R106.1.4 Energy efficiency. Construction documents for detached one- and two-family dwellings and townhomes shall be provided with the intended R-value for the ceilings, walls, floors, basement walls (if finished), slab perimeter R-value and depth, and crawl space walls.

R106.1.5 Foundation reinforcement. Construction for detached one- and two-family dwellings and town houses shall be provided with the intended reinforcement of foundation walls referenced in Tables R404.1.1(2), R404.1.1(3), and R404.1.1(4) for reinforced masonry foundation walls, Tables R404.1.2(2), R404.1.2(3), R404.1.2(4), and R404.1.1(8) for flat concrete foundation walls, and Tables 404.1.2(5), R404.1.2(5), and R404.1.2(6) for waffle-grid basement walls, and Table R404.1.2(7) for screed-grid basement walls where the foundation wall exceeds the provisions for plain masonry and concrete foundation walls.

R106.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be submitted and reviewed. One set of construction documents so reviewed shall be retained by the building official.

R108.2 Permit Fees. A fee for each permit as required by Section R105.1 shall be paid based on the construction costs as adopted by Resolution by the Board of County Commissioners. The fee schedules for the issuance of a building permit shall be as follows:

Table 1-A Residential Building Permit Fees R Division 3 (Including Congregate Residences Defined as R-3 and Accessory Group U Occupancies)

1. Residential structures\$60.00 or .4% of the construction costs, which ever is greater.
2. Building Permit Extension.....\$50.00 (maximum 180 days)

Table 1-B. Other Inspections and Fees

1. Inspection 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-half hour).....\$70.00
3. 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.
4. 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.

R108.3 Building 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.

R108.6. 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 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.

R108.7 Delinquent Accounts. The Planning Department may refuse to issue permits or conduct inspections for any person or business whose account is delinquent.

R109.1.1 Footing inspection. Inspection of the footings shall be made after poles or piers are set or trenches or basement areas are excavated and any required forms erected and any required reinforcing steel is in place and supported prior to the placing of concrete. The footing inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or equipment and special requirements for wood foundations.

R109.1.2 Plumbing, mechanical, gas and electrical systems inspections. Shall be made by the State of South Dakota.

R109.1.3 Floodplain inspections. Shall be made in accordance with Minnehaha County Flood Management Ordinance.

R109.1.4 Frame inspection. Inspection of the framing shall be made after the roof, all framing, fireblocking and bracing are in place and all pipes, chimneys and vents are complete.

R110.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has completed a final inspection and all construction and code requirements have been met to the building official's satisfaction.

Exceptions:

1. Accessory buildings or structures.

R110.3 Certificate issued. This section is deleted.

R110.4 Temporary occupancy. The building official is authorized to issue written permission of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary occupancy is valid.

R110.5 Revocation. The building official shall, in writing, suspend or revoke occupancy allowed under the provision of this code wherever occupancy was allowed in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provision of this code.

R112.1 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 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.

R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of the code or the rules legally adopted there under have been incorrectly interpreted, the provision 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.

R112.3 No employees of the jurisdiction shall be members of the Board of Appeals.

R113.3 Prosecution of violation. If the notice of violation is not complied with in the time prescribed by such notice, 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.

R113.4 Penalty. Failure to comply with any of the provisions of this ordinance shall constitute a violation of said ordinance and be punishable pursuant to South Dakota Codified Laws Chapter 7-18A-2; in addition the County may institute an action for civil injunctive relief as provided by law. Each day such violation is committed or permitted to continue, shall constitute a separate offense and shall be punishable as such.

Section R202. Definitions. Add the following definition.

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.

Table R301.2(1)

Climatic and Geographic Design Criteria

1.	Ground Snow Load (Footnote l).....	40 psf contour
2.	Wind Speed (Footnote d).....	90 mph
3.	Topographic Effects (Footnote k).....	no
4.	Seismic Design Category (Footnote f).....	A
5.	Weathering (Footnote a).....	Severe
6.	Frost Line Depth (Footnote b).....	42 inches (1,067 mm)
7.	Termite Damage (Footnote c).....	Slight to Moderate
8.	Winter Design Temperature.....	-11 Degrees Fahrenheit
9. .	Ice Barrier Underlayment Requirement (Footnote i).....	yes
10.	Flood Hazards. (Footnote g) Sioux Falls entered the regular phase of the National Flood Insurance Program on September 17, 1979.	
11.	Air Freezing Index (Footnote i).....	3,000
12.	Mean Annual Temperature.....	46 Degrees Fahrenheit

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., “negligible,” “moderate,” or “severe”) for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216, or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2 percent values for winter from Appendix D of the International Plumbing Code. Deviations

from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.

- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. To establish flood hazard areas, the county has adopted 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 engineered report entitled “The Flood Insurance Study for Minnehaha County, SD” dated September 2, 2009 as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) 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 city’s floodplain management ordinance, the provisions of the floodplain management ordinance shall prevail.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1, and R905.8.3.1 where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°)” at www.ncdc.noaa.gov/fpsf.html.
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table “Air Freezing Index - USA Method (Base 32°F)” at www.ncdc.noaa.gov/fpsf.html.
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall indicate “NO” in this part of the table.
- l. On roof systems that are not engineered, conventionally framed roof slopes with a rise of 3 inches (76.2 mm) or less to 12 inches (305 mm) shall be designed for a full or unbalanced snow load of not less than 30 pounds per square foot (1.44 kN/square meter) of horizontal projection. Where a roof system is designed to slope less than 1/4 inch (6.35 mm) per 12 inches (305 mm), a surcharge load of not less than 5 pounds per square foot (0.24 kN/square meter) in addition to the required live load due to snow shall be designed for.

Roof slopes with over 3 inches (76.2 mm) of rise per 12 inches (305 mm) shall be designed for a full or unbalanced snow load of not less than 25 pounds per square foot (1.2 kN/square meter) of horizontal projection.

Potential unbalanced accumulation of snow at valleys, parapets, roof structures, and offsets in roofs of uneven configuration shall be considered.

Table R301.5
Minimum Uniformly Distributed Live Loads
(in pounds per square foot)

USE	LIVE LOAD
Attics without storage ^b	10
Attics with limited storage ^{b, g}	20
Habitable attics and attics served with fixed stairs	30
Balconies (exterior) and decks ^e	40
Fire escapes	40
Guardrails and handrails ^d	200 ^h
Guardrails in-fill components ^f	50 ^h
Passenger vehicle garages ^a	50 ^a
Rooms	40
Stairs	40 ^c

For SI: 1 pound per square foot = 0.0479 kPa, 1 square inch = 645 mm², 1 pound = 4.45 N.

- a. Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-inch area.
- b. Attics without storage are those where the maximum clear height between joist and rafter is less than 42 inches, or where there are not two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 2 feet wide, or greater, located within the plane of the truss. For attics without storage, this live load need not be assumed to act concurrently with any other live load requirements.
- c. Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
- d. A single concentrated load applied in any direction at any point along the top.
- e. See Section R502.2.2 for decks attached to exterior walls.
- f. Guard in-fill components (all those except the handrail), balusters, and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.
- g. For attics with limited storage and constructed with trusses, this live load need be applied only to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high or greater by 2

feet wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided that each of the following criteria is met.

1. The attic area is accessible by a pull-down stairway or framed in accordance with Section R807.1.
2. The truss has a bottom chord pitch less than 2:12.
3. Required insulation depth is less than the bottom chord member depth.

The bottom chords of trusses meeting the above criteria for limited storage shall be designed for the greater of the actual imposed dead load or 10 psf, uniformly distributed over the entire span.

- h. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail and to the load on the in-fill components. These loads shall be determined independent of one another, and loads are assumed not to occur with any other live load.

**Table R302.1
Exterior Walls**

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	(Fire-resistance rated)	1 hour tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 5 feet
	(Not fire-resistance rated)	0 hours	> 5 feet
Projections	(Fire-resistance rated)	1 hour on the underside	< 3 feet
	(Not fire-resistance rated)	0 hours	≥ 3 feet
Openings	Not allowed	N/A	< 3 feet
	25% Maximum of Wall Area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R317.3	< 5 feet
		None required	5 feet

N/A = Not Applicable

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses provided with

an automatic fire-extinguishing system designed and installed in accordance with NFPA 13-D, or equivalent, if such walls do not contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

R302.2.1 Continuity. The fire-resistance-rated wall or assembly separating townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck, or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures.

Exterior walls that extend beyond an adjacent structure that has a fire separation distance less than 5 feet (1,523 mm) to a common property line shall have not less than a one-hour fire rating with exposure from both sides with no openings allowed therein.

Projections such as a deck which have a fire separation distance of less than 3 feet (914 mm) to a common property line shall have a 1-hour fire rating with exposure from both sides with no openings allowed therein which extends at least 30 inches (762 mm) above the projection.

R310.1 Emergency escape and rescue required. Basements and every sleeping room shall have at least one operable emergency and rescue opening. Such opening shall open directly into a public street, public alley, yard, or court. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided, they shall have a sill height of not more than 48 inches (1,220 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exception: Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m²).

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.0 square feet (0.465 m²).

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than 48 inches (1,220 mm) shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Sections R311.5 and R311.6. Ladders or rungs shall have an

inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center vertically for the full height of the window well.

Exception: The exterior landing or floor shall not be more than 8 inches (202 mm) below the top of the threshold provided the door does not swing over the landing or floor.

R311.3.1 Floor elevations at the required egress doors. Landings or floors at the required egress door shall not be more than 1 1/2 inches (38 mm) lower than the top of the threshold.

When exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8 inches (202 mm) below the top of the threshold.

Exception: A landing is not required where a stairway of two or fewer risers is located on the exterior side of the door, provided the door does not swing over the stairway.

R311.4.3 Landings at doors. There shall be a floor or landing on each side of each exterior door. The floor or landing at the exterior door shall not be more than 1.5 inches (38 mm) lower than the top of the threshold. The landing shall be permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2 percent).

Exceptions:

1. Where a stairway of two or fewer risers is located on the exterior side of a door, other than the required exit door, a landing is not required for the exterior side of the door provided the door, other than an exterior storm or screen door does not swing over the stairway.
2. The exterior landing at an exterior doorway shall not be more than 8 inches (202 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing.
3. The height of floors at exterior doors other than the exit door required by Section R311.4.1 shall not be more than 8 inches (202 mm) lower than the top of the threshold.

R311.7.4.3 Riser height. The maximum riser height shall be 8 inches (202 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The

greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R311.7.4.3 Profile. The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inch (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped under the tread above from the underside of the leading edge of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted.

Exception: A nosing is not required where the tread depth is a minimum of 110 inches (279 mm).

R311.7.7.2 Continuity. Handrails for stairways shall extend for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1 1/2 inch (38 mm) between the wall and the handrails.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at the turn.
2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.

R311.7.7.3 Grip size. All required handrails shall be of one of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of at least 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) with a maximum cross section of dimension of 2 1/4 inches (57 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).
2. Type II. Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail

above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

Exception: Exterior stairs are allowed to have a horizontal 2X member to form a 1 1/2 inch graspable dimension in lieu of the above referenced perimeter dimensions.

R312.3 Opening limitations. Required guards shall not have openings from the walking surface to the required guard height which allow passage of a sphere 5 inches (127 mm) in diameter.

Exception: The triangular openings at the open side of a stair, formed by the riser, tread, and bottom rail of a guard, shall not allow passage of a sphere 6 inches (153 mm) in diameter.

R314.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Where the ceiling height of a room is open to the hallway serving a bedroom exceeds that of the hallway by 24 inches (610 mm) or more, smoke detectors shall be installed in the hallway and in the adjacent room.

Exception. Hallways less than 4 feet (1,220 mm) in length are allowed to omit the smoke detector within the hallway adjacent to the bedrooms.

When more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

R314.3.1 Alterations, repairs, and additions. When alterations, repairs, or additions requiring a permit occur with a valuation in excess of \$1,000, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, *alteration*, or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

R317.1 Location required. Protection from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative treated in accordance with AWPA U1 for the species, product, preservative, and end use. Preservatives shall be listed in Section 4 of AWPA U1.

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
2. All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 6 inches (152 mm) from the exposed ground.
3. Sills and sleepers supporting bearing walls on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 1/2 inch (12.7 mm) on tops, sides, and ends.
5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground or less than 2 inches (51 mm) measured vertically from concrete steps, porch slabs, and similar horizontal surfaces exposed to the weather.
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.
7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below grade except where an approved vapor retarder is applied between the wall and the furring strips or framing members.

R319.1 Premises identification. This section is deleted.

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers, and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1).
2. Constructing in accordance with Section R403.3.
3. Constructing in accordance with ASCE 32.
4. Erected on solid rock.

Exceptions:

1. Protection of freestanding *accessory structures* with an area of 1,500 square feet (139 m²) or less, of light-frame construction, with an eave height of 10 feet (3,048 mm) or less shall not be required.
2. Protection of freestanding *accessory structures* with an area of 400 square feet (37 m²) or less, of other than light-frame construction, with an eave height of 10 feet (3,048 mm) or less shall not be required.
3. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

Footings shall not bear on frozen soil unless the frozen condition is permanent.

R404.4 Retaining walls. Retaining walls that are not laterally supported at the top and that retain in excess of 48 inches (1,220 mm) of unbalanced fill shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

R502.3.1 Sleeping areas and attic joists. Table R502.3.1(1) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R311.5 provided that the design live load does not exceed 40 psf (1.92 kPa) and the design dead load does not exceed 20 psf (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.4.

Table R602.3(1) Fastener Schedule for Structural Members; Row 5

Description of Building Elements	Number and Type of Fastener a, b, c, d	Spacing of Fasteners
Top or sole plate to stud, end nail	2-12d (3 1/2" x 0.135)	—

R602.10.1 Braced wall lines. Braced wall lines shall consist of braced wall panel construction in accordance with Section R602.10.3. The amount and location of bracing shall be in accordance with Table R602.10.1 and the amount of bracing shall be the greater of that required by the seismic design category or the design wind speed. Braced wall panels shall begin no more than 12.5 feet (3,810 mm) from each end of a braced wall line. Braced wall panels that are counted as part of a braced wall line shall be in line, except that offsets out-of-plane of up to 4 feet (1,219 mm) shall be permitted provided that the total out-to-out offset dimension in any braced wall line is not more than 8 feet (2,438 mm).

Exception: The offsets out-of-plane may exceed 4 feet (1,219 mm) and the out-to-out offset dimension may exceed 8 (2,438 mm) feet if the area of the offset is less than 200 square feet.

R602.10.1.4 Braced wall panel location. Braced wall panels shall be located in accordance with Figure R602.10.1.4(1). Braced wall panels shall be located not more than 25 feet (7,620 mm) on center and shall be permitted to begin no more than 12.5 feet (3,810 mm) from the end of a braced wall line in accordance with Section R602.10.1 and Figure R602.10.1.4(2). The total combined distance from each end of a braced wall line to the outermost braced wall panel or panels in the line shall not exceed 12.5 feet (3,810 mm). Braced wall panels may be offset out-of-plane up to 4 feet (1,219 mm) from the designated braced wall line provided that the total out-to-out offset of braced wall panels in a braced wall line is not more than 8 feet (2,438 mm) in accordance with Figures R602.10.1.4(3) and R602.10.1.4(4). All braced wall panels within a braced wall line shall be permitted to be offset from the designated braced wall line.

Exception: The offsets out-of-plane may exceed 4 feet (1,219 mm) and the out-to-out offset dimension may exceed 8 feet (2,438 mm) if the area of the offset is less than 200 square feet.

R612.2 Window sills. In dwelling units, where the opening of an operable window is located more than 72 inches (1,829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 18 inches (457 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4 inch (102 mm) diameter sphere where such openings are located within 18 inches (457 mm) of the finished floor.

Exceptions:

1. Windows whose openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
2. Openings that are provided with window fall prevention devices that comply with Section R612.3.
3. Openings that are provided with fall prevention devices that comply with ASTM F 2090.
4. Windows that are provided with opening limiting devices that comply with Section R612.4.

R703.2.1 Weather-resistive sheathing papers. House wraps or weather-resistive sheathing papers consisting of spunbonded olefin sheets of high density polyethylene fibers are required to be installed on the exterior side of the sheathing material directly underneath the exterior veneer.

R907.3 Recovering versus replacement. New roof coverings shall not be installed without first removing existing roof coverings where any of the following conditions occur:

1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.

Exceptions:

1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
2. Installation of metal panel, metal shingle, and concrete and clay tile roof coverings over existing wood shake roofs shall be

permitted when the application is in accordance with Section R907.4.

3. The application of new protective coating over existing spray polyurethane foam roofing systems shall be permitted without tear-off of existing roof coverings.

**TABLE N1102.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a**

Climate Zone	Fenestration U-Factor [Btu/hr-ft 2-degrees F]	Skylight ^b U-Factor	Glazed Fenestration SHGC	Ceiling R-Value ^l	Wood Frame Wall R-Value	Mass Wall R-Value ^k	Floor R-Value	Basement ^c Wall R-Value	Slab ^d R-Value and Depth	Crawl Space ^c Wall R-Value
6A	0.35	0.60	NR	49	20 or 13 + 5 ^h	15/19	30 ^e	10/13	10, 42 inches	10/13

- a. R-values are minimums. U-factors and solar heat gain coefficient (SHGC) are maximums. R-19 batts compressed in to nominal 2 x 6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. The first R-value applies to continuous insulation which is allowed to be applied at the time of finishing the basement, the second to framing cavity insulation; either insulation meets the requirement.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.2 and Table N1101.2.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
- i. For impact-rated fenestration complying with Section R301.2.1.2, the maximum U-factor shall be 0.75 in zone 2 and 0.65 in zone 3.
- j. For impact-resistant fenestration complying with Section R301.2.1.2 of the International Residential Code, the maximum SHGC shall be 0.40.
- k. The second R-value applies when more than half the insulation is on the interior.
- l. The minimum R-value for ceilings is further based on a minimum 6-inch (152 mm) heel height to allow the ceiling insulation to extend over the top plate.

N1103.2.2 Sealing. Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.4.

N1104.1 Repealed.

M1305.1.4.1 Ground clearance. Equipment and appliances supported from the ground shall be level and firmly supported on a concrete slab or other approved material extending not less than 1 1/2 inches (38 mm) above the adjoining ground. Such support shall be in accordance with the manufacturer's installation instructions. Appliances suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

M1403.1 Heat pumps and air conditioners. The minimum unobstructed total area of the outside and return air ducts or openings and supply air ducts to a heat pump and/or air conditioner shall be not less than 6 square inches per 1,000 Btu/h (13,208 mm²/kW) output rating or as indicated by the conditions of the listing of the heat pump air conditioner. Electric heat pumps shall conform to UL 1995.

M1403.2 Foundations and supports. Delete.

M1411.5 Insulation of refrigerant piping. Piping and fittings for refrigerant vapor (suction) lines shall be insulated with insulation having a thermal resistivity of at least R-2 and having external surface permeance not exceeding 0.05 perm [2.87 ng/(s - m² - Pa)] when tested in accordance with ASTM E 96.

M1411.6 Locking access port caps. Refrigerant circuit access ports located outdoors shall be fitted with tamper-resistant caps.

M1502.4.4.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10,668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1.

Section M1508. Subslab Soil Exhaust Systems.

M1508.1 General. When a subslab soil exhaust system is provided, the duct shall conform to the requirements of this section.

M1508.2 Materials. Subslab soil exhaust system duct material shall be air duct material listed and labeled to the requirements of UL 181 for Class 0 air ducts, or any of the following piping materials that comply with the Plumbing Code as building sanitary drainage and vent pipe: cast iron; galvanized steel; brass or copper pipe; copper tube of a weight not less than that of copper drainage tube, Type DWV; and plastic piping.

M1508.3 Grade. Exhaust system ducts shall not be trapped and shall have a minimum slope of 1/8 unit vertical in 12 units horizontal (1-percent slope).

M1508.4 Termination. Subslab soil exhaust system ducts shall extend through the roof and terminate at least 6 inches (152 mm) above the roof and at least 10 feet (3,048 mm) from any operable openings or air intake.

**Table M1601.1.1(2)
Gages of Metal Ducts and Plenums Used for Heating or Cooling**

Duct Size	Minimum Thickness Inches and (mm)	Equivalent Galvanized Sheet No.	Minimum Thickness (In.)
Round ducts and enclosed rectangular ducts			
14 inches or less	0.0157 (0.3950 mm)	30	0.0175
>14 to 18 inches	0.0187 (0.4712 mm)	26	0.018
>18 inches and over	0.0236 (0.6010 mm)	24	0.023
Exposed rectangular ducts			
14 inches or	0.0157 (0.3950 mm)	28	0.0175
Over 14 ^a inches	0.0187 (0.4712 mm)	26	0.018

For SI: 1 inch = 25.4 mm.

- a. For duct gages and reinforcement requirements at static pressures of 1/2 inch, 1 inch, and 2 inches w.g., SMACNA Duct Construction Standard Tables 2-1 ; 2-2 and 2-3 shall apply.

M1601.2 Factory-made ducts. Factory-made air ducts or duct material shall be approved for the use intended, and shall be installed in accordance with the manufacturer’s installation instructions. Each portion of a factory-made air duct system shall bear a listing and label indicating compliance with UL 181 and UL 181A or UL 181B.

Flexible air ducts shall be limited in length to 14 feet. Flexible air connectors are not allowed.

M1601.4.1 Joints and seams. Joints of duct systems outside the building envelope and all return ducts located within 10 feet (3.05 m) of any appliance or all return ducts within a mechanical room and the plenum/coil cabinet connections shall be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL181A and shall be marked 181A-P for pressure-sensitive tape, 181A-M for mastic or 181 A-H for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure-sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1 1/2 inches (38 mm) and shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. Closure systems used to seal metal

ductwork shall be installed in accordance with the manufacturer's installation instructions.

- Exceptions:**
1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
 2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
 3. Continuously welded and locking type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

M1601.4.3 Support. Metal ducts shall be supported by 1/2-inch (13 mm) wide 18-gage, 1-inch (25 mm) wide 24 gage, or 1 1/2-inch (39 mm) wide 26 gage metal straps or 12-gage galvanized wire at intervals not exceeding 10 feet (3,048 mm) or other approved means. Nonmetallic ducts shall be supported in accordance with the manufacturer's installation instructions.

M2101.1 General. Hydronic piping shall conform to Table M2101.1. Approved piping, valves, fittings and connections shall be installed in accordance with the manufacturer's installation instructions. Pipe and fittings shall be rated for use at the operating temperature and pressure of the hydronic system. Used pipe, fittings, valves or other materials shall be free of foreign materials.

Exception: Polyvinyl Chloride (PVC) plastic pipe conforming to ASTM D1785 or ASTM D2241 is an allowable material for hydronic piping.

G2407.6 (304.6) Outdoor combustion air. Outdoor combustion air shall be provided through opening(s) to the outdoors in accordance with Section G2407.6.1, G2407.6.2, or G2407.6.3. The minimum dimension of air openings shall be not less than 3 inches (76 mm).

Combustion air intake openings located on the exterior of a building shall have the lowest side of such openings located not less than 12 inches (305 mm) vertically from the adjoining grade level.

Combustion air intake opening shall be located a minimum of 3 feet from a gas meter.

G2407.6.3 Alternate combustion air sizing. As an alternate to the above-referenced combustion air openings, the net free area of openings, ducts, or plenums supplying air to an area containing fuel-burning appliances shall be as specified below.

When all air is taken from the outdoors for appliances and the total input of the appliances is less than 300,000 Btu/hr (1,704,000 W/ meters squared K), one outside air duct may be used and shall terminate below the draft hood. An exterior opening may be used in place of a duct provided that it is located at least 1 foot below the draft hood.

Combustion Air Requirements for Appliances Requiring an Outside Air Opening in Areas with 5,000 degrees Fahrenheit (2,777 degrees Celsius) or Greater Heating Days Total Input of Appliances Thousands of Btu/hr	Required Free Area of Air Supply Opening or Duct, Square Inches
25 (26.4 KJ/h)	7 (4,516 mm ²)
50 (52.8 KJ/h)	7 (4,516 mm ²)
75 (79.1 KJ/h)	11 (7,097 mm ²)
100 (106 KJ/h)	14 (9,032 mm ²)
125 (132 KJ/h)	18 (11,610 mm ²)
150 (158 KJ/h)	22 (14,190 mm ²)
175 (185 KJ/h)	25 (16,130 mm ²)
200 (211 KJ/h)	29 (18,710 mm ²)
225 (237 KJ/h)	32 (20,650 mm ²)
250 (264 KJ/h)	36 (23,230 mm ²)
275 (290 KJ/h)	40 (25,810 mm ²)
300 (317 KJ/h)	43 (27,740 mm ²)

1. For total inputs that fall between the listing figures, use the next largest listed input.
2. These figures are based on the maximum equivalent duct length of 20 feet (6.1 m). For equivalent duct lengths in excess of 20 feet (6.1 m) to and including a maximum of 50 feet (15.2 m), increase round duct diameter by one size. A square or rectangular duct may be used only where the required duct size is 9 square inches (5,800 mm²) or larger and the smaller dimension must be not less than 3 inches (76.2 mm).
3. The combustion air duct is required to be upsized one diameter size when a dryer is installed in the same room as the combustion air.

G2427.4.1 Plastic piping. Plastic piping used for venting appliances listed for use with such venting materials shall be approved.

Plastic pipe and fittings used to vent appliances shall be installed in accordance with the pipe manufacturer’s installation instructions and the appliance manufacturer’s installation instructions. Solvent cement joints between ABS pipe and fittings shall be cleaned.

Solvent cement joints between CPVC and PVC pipe and fittings shall be primed. The primer shall be a contrasting color.

Exception: Where compliance with this section would conflict with the appliance manufacturer's installation instructions.

G2408.1 (305.1) General. Equipment and appliances shall be installed as required by the terms of their approval, in accordance with the conditions of listing, the manufacturer's instructions and this code. Manufacturers' installation instructions shall be available on the job site at the time of inspection. Where a code provision is less restrictive than the conditions of the listing of the equipment or appliance or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

After completion of the installation, all safety and operating controls and venting shall be tested before placing the burner in service in accordance with the manufacturer's installation instructions. The following requirements need to be recorded and affixed to the inside of the gas train access panel:

1. The rate of flow of the gas or fuel shall be adjusted to within plus or minus five percent of the required Btu/hr rating at the manifold pressure specified by the manufacturer. When the prevailing pressure is less than the manifold pressure specified, the rates shall be adjusted at the prevailing pressure.
2. The gas inlet pressure per the manufacturer's installation settings.
3. The temperature rise across the heat exchanger per the manufacturer's installation settings.
4. The static pressure of the supply and return ducts per the manufacturer's installation settings.

Unlisted appliances approved in accordance with Section G2404.3 shall be limited to uses recommended by the manufacturer and shall be installed in accordance with the manufacturer's instructions, the provisions of this code and the requirements determined by the code official.

G2415.1 (404.1) Prohibited locations. Piping shall not be installed in or through a ducted supply, return or exhaust, or a clothes chute, chimney or gas vent, dumbwaiter or elevator shaft.

Part VII—Plumbing. Delete Chapter 25—Plumbing Administration; Chapter 26—General Plumbing Requirements; Chapter 27—Plumbing Fixtures; Chapter 28—Water Heaters; Chapter 29—Water Supply and Distribution; Chapter 30—Sanitary Drainage; Chapter 31—Vents; Chapter 32—Trap; and Chapter 33—Storm Drainage. The provisions of the Plumbing Code as adopted by the State of South Dakota shall apply to the installation, alterations, repairs, and replacement of plumbing systems, including equipment, appliances, fixtures, and appurtenances, and where connected to a water or

sewage system for detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories high with separate means of egress and their accessory structures.

Part VIII—Electrical. Delete Chapter 34—General Requirements; Chapter 35—Electrical Definitions; Chapter 36—Services; Chapter 37—Branch Circuit and Feeder Requirements; Chapter 38—Wiring Methods; Chapter 39—Power and Lighting Distribution; Chapter 40—Device and Lighting Fixtures; Chapter 41—Appliance Installation; Chapter 42—Swimming Pools; Chapter 43—Class 2 Remote-Control, Signaling and Power Limited Circuits. The provisions of the Electrical Code as adopted by the State of South Dakota shall apply to the installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of any electrical system, apparatus, wiring, or equipment for electrical, light, heat, power, fire alarms, and associate controls for detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories high with separate means of egress and their accessory structures.

AG102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

Above-Ground/On-Ground Pool. See “Swimming pool.”

Barrier. A fence, wall, building wall, or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

Hot Tub. See “Swimming pool.”

In-Ground Pool. See “Swimming pool.”

Residential. That which is situated on the premises of a detached one- or two-family dwelling or a one-family town house not more than three stories in height.

Spa, Nonportable. See “Swimming pool.”

Spa, Portable. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

Swimming Pool. Any structure intended for swimming or recreational bathing that contains water over 18 inches (457 mm) deep. This includes in-ground, above-ground, and on-ground swimming pools, hot tubs and spas.

Swimming Pool, Indoor. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

Swimming Pool, Outdoor. Any swimming pool which is not an indoor pool.

AG105.1 Application. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas, and hot tubs. These design controls are intended to provide protection against potential drowning and near drowning by restricting access to swimming pools, spas, and hot tubs.

This requirement shall be applicable to all new swimming pools hereafter constructed, other than indoor pools, and shall apply to all existing pools, which have a depth of 18 inches (475 mm) or more of water. No person in possession of land within the unincorporated area of the county, either as owner, purchaser, lessee, tenant, or a licensee, upon which is situated a swimming pool having a depth of 18 inches (475 mm) or more shall fail to provide and maintain such barrier as herein provided.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier that shall be installed, inspected and approved prior to filling with water, that completely surrounds and obstructs access to the swimming pool, which shall comply with the following:

1. The top of the barrier shall be at least 42 inches (1,067 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3. Where an aboveground 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:
 - 3.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or
 - 3.2. The ladder or steps shall be surrounded by a barrier, which meets the requirements of Item 1 above. When 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.
4. All gates or door openings through the barrier shall be equipped with self-closing and self-latching devices for keeping the door or gate securely

closed at all times when the pool is not in actual use, except that the door of any dwelling that form part of the enclosure need not be so equipped.

Exception: A property which meets all of the following standards and has an outdoor swimming pool shall be exempt from the requirements of Sections AG105.2

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.

AG105.3 Indoor swimming pool. Delete.

AG105.4 Prohibited locations. Delete.

AG105.5 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

Modifications 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, and 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.

SECTION 6. Adoption International Existing Building Code, 2009.

The International Existing Building Code, 2009 edition, including Appendix A, Referenced Standards, and Resource A, Guidelines on Fire Ratings of Archaic Materials and Assemblies, as published by the International Code Council Inc., and amendments and additions thereto as provided in this article are hereby adopted by Minnehaha County as provided by South Dakota Codified Laws Chapter 7-8-20(17) as an alternate for regulating and governing the repair, alteration, change of occupancy, addition, and relocation of existing buildings, including historic buildings, as herein provided and provides for the issuance of permits and the collection of fees therefore. The alternate minimum building standards in the 2006 edition of the International Existing Building Code and amendments thereto shall be applied to any building permit issued after May 1, 2011. A printed copy of such code and additions and amendments thereto is on file with the County Auditor.

Section 7. Amendments, additions and deletions to the 2009 International Existing Building Code.

The following sections and subsections of the existing building code adopted in this article shall be amended, added, or deleted as follows. All other sections or subsections of the 2009 International Existing Building Code shall remain the same.

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

101.9 Electrical. The term ICC Electrical Code shall mean the ICC Electrical Code as adopted by the State of South Dakota. ICC Electrical Code shall be administered by the State of South Dakota.

101.10 Gas. The term International Fuel Gas Code shall mean the International Fuel Gas Code as adopted by the State of South Dakota. The International Fuel Gas Code shall be administered by the State of South Dakota.

101.11 Mechanical. The term International Mechanical Code shall mean the International Mechanical Code as adopted by the State of South. The International Mechanical Code shall be administered by the State of South Dakota.

101.12 Plumbing. The term ICC Plumbing Code shall mean the ICC Plumbing Code as adopted by the State of South. ICC Plumbing Code shall be administered by the State of South Dakota.

101.13 Property maintenance. The term International Property Maintenance Code shall mean the International Property Maintenance Code as adopted by the State of South. The International Property Maintenance Code shall be administered by the State of South Dakota.

101.14 Fire prevention. The term International Fire Code shall mean the International Fire Code as adopted by the State of South. The International Fire Code shall be administered by the State of South Dakota.

101.15 Energy. The term International Energy Conservation Code shall mean the International Energy Conservation Code as adopted by the State of South. The International Energy Conservation Code shall be administered by the State of South Dakota.

103.1 Enforcement agency. The Department of Planning and Zoning shall be the enforcement agency and the official in charge thereof shall be known as the Planning Director.

103.2 Appointment. Deleted.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the Planning Director shall have the authority to appoint a Chief Building Inspector (referred to herein as the code official),

the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers a delegated by the building official.

104.8 Liability. The building official, member of the board of appeals, 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 County's liability insurance, immunities and any immunities and defenses provided by other applicable state and federal laws.

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 code enforcement agency or the city be held as assuming any such liability by reason of the inspection authorized by this code or any permits or certificates issued under this code.

105.1 Permits Required. No building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved or converted unless a separate permit for each building or structure has first been obtained from the building official or designate. Permits for minor work may be exempted by the building official or designate.

105.1.1 Annual permit. This section is deleted.

105.1.2 Annual permit records. This section is deleted.

107.1 General. The code official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to the time of service and said time shall be specified on the permit.

Structures used as a temporary business office shall be provided with an accessible route that meets accessibility requirements of this code.

107.3 Temporary Power. This section is deleted.

108.4. 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 a fee equal to the required permit fee. The code 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.

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

110.1 Altered area use and occupancy classification change. No building undergoing a change in occupancy shall be used or occupied, and no change in the existing occupancy classification of a building or portion thereof shall be made until the code official has completed a final inspection and all construction and code requirements have been met to the code official's satisfaction. Approval for occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

110.2 Certificate issued. This section is deleted.

112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code 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 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.

112.2 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.

113.3 Prosecution of violation. If the notice of violation is not complied with promptly, the code 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.

SECTION 202-DEFINITIONS. Add the following definition.

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.

[R] 602.4.3 International Residential Code. The following sections of Part V—Mechanical of the *International Residential Code* shall constitute the residential mechanical and fuel gas materials and methods requirements for Level 1 alterations.

1. All of Chapter 13, entitled “General Mechanical System Requirements,” except Section M1305.
2. All of Chapter 18, entitled “Chimneys and Vents.”
3. All of Sections G2431 through G2453 governing the appliances and equipment specifically identified therein.

705.3.1.2.1 Fire escape access and details. Fire escapes shall comply with all of the following requirements:

1. Occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking.
2. Access to a new fire escape shall be through a door, except that windows shall be permitted to provide access from single dwelling units or sleeping units in Group R-1, R-2, and I-1 occupancies or to provide access from spaces having a maximum occupant load of 10 in other occupancy classifications. Windows providing access to a fire escape shall comply with the following:
 - 2.1. The window shall have minimum net clear opening of 5 square feet (0.46m²).
 - 2.2. The minimum net clear opening height shall be 24 inches (610 mm) and the net clear opening width shall be 20 inches (508 mm).
 - 2.3. The bottom of the clear opening shall not be greater than 48 inches (1,220 mm) above the floor.
 - 2.4. The operation of the window shall comply with the operational constraints of the International Building Code.
3. Newly constructed fire escapes shall be permitted only where exterior stairs cannot be utilized because of lot lines limiting the stair size or because of the sidewalks, alleys, or roads at grade level.
4. Openings within 10 feet (3,048 mm) of fire escape stairs shall be protected by fire assemblies having minimum 3/4-hour fire-resistance ratings.

Exception: Opening protection shall not be required in buildings equipped throughout with an approved automatic sprinkler system.

5. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses, and child care centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

**TABLE 912.4
MEANS OF EGRESS HAZARD CATEGORIES**

Relative Hazard	Occupancy Classification
1 (Highest Hazard)	H, I
2	R-1, R-2, R-4,
3	A, E, M,
4	B, F-1, S-1, R-3
5 (Lowest Hazard)	F-2, S-2, U

**TABLE 912.5
HEIGHTS AND AREAS HAZARD CATEGORIES**

Relative Hazard	Occupancy Classification
1 (Highest Hazard)	H, I
2	R-1, R-2, R-4
3	A-1, A-2, A-3, A-4
4	E, F-1, S-1, M
5 (Lowest Hazard)	B, F-2, S-2, A-5, R-3, U

912.4.1 Means of egress for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table 912.4, the means of egress shall comply with the requirements of Chapter 10 of the *International Building Code*.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 803.1.

2. Existing stairways including handrails and guards complying with the requirements of Chapter 8 shall be permitted for continued use subject to approval of the code official.
3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed of wood lath and plaster in good condition or 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
5. Existing corridor doorways, transoms, and other corridor openings shall comply with the requirements in Sections 705.5.1, 705.5.2, and 705.5.3.
6. Existing dead-end corridors shall comply with the requirements in Section 705.6.
7. An existing operable window with clear opening area no less than 4 square feet (0.38 m²) and with minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, provided the operable window has a sill height of not more than 48 inches (1,220 mm) above the floor, shall be accepted as an emergency escape and rescue opening.

912.6.2 Exterior wall rating for change of occupancy classification to an equal or lesser hazard category. When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table 912.6, existing exterior walls, including openings, shall be accepted.

Exception. Where a property line is platted creating a Group R-3, multifamily dwelling (town house), the walls separating the dwelling units shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for a new structure. The fire-resistive elements are not required to be continuous between concealed floor spaces, although there shall be provided a draft stop, located above and in line with the dwelling unit separation walls.

1301.2 Applicability. Structures existing prior to March 11, 1968, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 4 through 12. The provisions of Sections 1301.2.1 through 1301.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, and S. These provisions shall not apply to buildings with occupancies in Group H or Group I.

Adopted this 15thday of March, 2011.

MINNEHAHA COUNTY

Chair, Board of County Commissioners

ATTEST:

County Auditor

1 st Reading	February 15, 2011
Legal Ad. – Argus Leader	February 23, 2011
Dell Rapids Tribune	February 23, 2011
Harford Area News	February 23, 2011
Public Hearing	March 15, 2011
Fact of Adoption – Argus Leader	March 23 & 30, 2011
Dell Rapids Tribune	March 23 & 30, 2011
Hartford Area News	March 23 & 30, 2011