

CHAPTER 1300

DEPARTMENT OF ADMINISTRATION

MINNESOTA STATE BUILDING CODE

CODE ADMINISTRATION

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1300.1700 [Repealed, 19 SR 1340]

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1300.1900 [Repealed, 19 SR 1340]

1300.2000 [Repealed, 19 SR 1340]

1300.2050 TITLE.

The chapters referenced in part 1300.2400, subpart 6, including the standards they adopt by reference, are the Minnesota State Building Code, and may be cited as such or referred to as the “code.”

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.2100 PURPOSE AND APPLICATION.

Subpart 1. **Purpose.** Parts 1300.2100 to 1300.3100 govern responsibilities undertaken pursuant to Minnesota Statutes, sections 16B.59 to 16B.75. They relate to the administration and enforcement of the Minnesota State Building Code.

Parts 1300.3900 to 1300.6300 identify requirements of the code that are mandated by Minnesota Statutes, are needed to address Minnesota’s climatic conditions, or are otherwise determined necessary to provide a minimum safe level of construction.

The purpose of the code is to provide minimum standards to safeguard life and limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all structures within a jurisdiction that adopts and enforces the code, and certain equipment specifically covered by the code.

The purpose of the code is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of the code.

Subp. 2. **Application.** The code applies statewide except as provided for in Minnesota Statutes, sections 16B.72 and 16B.73, and supersedes the building code of any municipality. The code does not apply to agricultural buildings except with respect to state inspections required or rulemaking authorized.

The administrative chapter of the Uniform Building Code, chapter 1, as amended, governs the application of the code.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.2300 SCOPE.

The code applies to the construction, alteration, moving, demolition, repair, and use of any building or structure within a municipality, except work located primarily in a public way, public utility towers and poles, mechanical equipment not specifically regulated in the code, and hydraulic flood control structures.

If different sections of the code specify different materials, methods of construction, or other requirements, the most restrictive section governs. If there is a conflict between a general requirement and a specific requirement, the specific requirement applies.

If reference is made in the code to the appendix, the provisions in the appendix do not apply unless a local authority has specifically adopted them.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74*

1300.2400 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 1300.2100 to 1300.3100.

Subp. 2. **Administrative authority.** “Administrative authority” means building official.

Subp. 2a. **Adult day care center.** “Adult day care center” means a facility that provides adult day care to functionally impaired adults on a regular basis for periods of less than 24 hours a day in a setting other than a participant’s home or the residence of the facility operator.

A. “Class E” means any building or portion of a building used for adult day care purposes for those participants who are capable of taking appropriate action for self-pres-

ervation under emergency conditions as determined in accordance with part 9555.9730 and must meet Group E, Division 3 occupancy requirements.

B. "Class I" means any building or portion of a building used for adult day care purposes for those participants who are not capable of taking appropriate action for self-preservation under emergency conditions as determined in accordance with part 9555.9730 and must meet Group I, Division 2 occupancy requirements.

Subp. 3. **Agricultural building.** "Agricultural building" means a building that meets the requirements of Minnesota Statutes, section 16B.60, subdivision 5.

Subp. 4. **Building official.** "Building official" means the municipal building code administrative authority certified under Minnesota Statutes, section 16B.65, subdivisions 2 and 3.

Subp. 5. **City.** "City" means a home rule charter or statutory city.

Subp. 6. **Code.** "Code" means the Minnesota State Building Code adopted under Minnesota Statutes, section 16B.61, subdivision 1, and includes the following chapters of Minnesota Rules:

- A. 1300, Minnesota Building Code;
- B. 1301, Building Official Certification;
- C. 1302, Construction Approvals;
- D. 1305, Adoption of the Uniform Building Code;
- E. 1306, Special Fire Protection Systems;
- F. 1307, Elevators and Related Devices;
- G. 1310, Building Security;
- H. 1315, Adoption of the National Electrical Code;
- I. 1325, Solar Energy Systems;
- J. 1330, Fallout Shelters;
- K. 1335, Floodproofing Regulations;
- L. 1340, Facilities for the Handicapped;
- M. 1346, Adoption of the Uniform Mechanical Code;
- N. 1350, Manufactured Homes;
- O. 1360, Prefabricated Buildings;
- P. 1365, Snow Loads;
- Q. 1370, Storm Shelters (Manufactured Home Parks);
- R. 4715, Minnesota Plumbing Code; and
- S. 7670, Minnesota Energy Code.

See part 1300.2900 for those chapters that may be adopted at the option of a municipality which has adopted the code.

Subp. 7. **Commissioner.** "Commissioner" means the commissioner of administration.

Subp. 7a. **Family day care home.** "Family day care home" means a residence or portion of a residence licensed by the Department of Human Services under chapter 9502 for no more than ten children at one time of which no more than six are under school age and must meet Group R, Division 3 occupancy requirements.

Subp. 7b. **Group family day care home.** "Group family day care home" means any residence or portion of a residence licensed by the Department of Human Services under chapter 9502 for no more than 14 children at any one time and must meet Group R, Division 3 occupancy requirements.

Subp. 8. **Mandatory terms.** Mandatory terms include "must" and "shall," which have the same meaning.

Subp. 8a. **Manufactured home.** "Manufactured home" has the meaning given in Minnesota Statutes, section 327.31, subdivision 3, and for the purpose of determining occupancy separations, is considered a Group R, Division 3 occupancy.

Subp. 9. **Mayor and city council.** "Mayor" and "city council" mean governing body whenever they appear in the code.

Subp. 10. **Municipality.** "Municipality" means a city, county, or town meeting the requirements of Minnesota Statutes, section 368.01, subdivision 1, the University of Minnesota, or the state of Minnesota for public buildings and state licensed facilities.

Subp. 10a. **Recyclable materials.** "Recyclable materials" means materials that are separated from mixed municipal solid waste, for the purpose of recycling, including paper, glass, metals, automobile oil, and batteries. Refuse-derived fuel or other material that is destroyed by incineration is not a recyclable material.

Subp. 10b. **Recycling.** "Recycling" means the process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use.

Subp. 10c. **Supervised living facility.** "Supervised living facility" means a facility in which there is provided supervision, lodging, meals, and, in accordance with the provisions of rules of the Minnesota Department of Human Services, and the Minnesota Department of Health, counseling and developmental habilitative or rehabilitative services to persons who are mentally retarded, chemically dependent, adult mentally ill, or physically handicapped.

A. "Class A-1 supervised living facility" means a supervised living facility for ambulatory and mobile persons who are capable of taking appropriate action for self-preservation under emergency conditions as determined by program licensure provisions for six or fewer persons and must meet Group R, Division 3 occupancy requirements.

B. "Class A-2 supervised living facility" means a supervised living facility for ambulatory and mobile persons who are capable of taking appropriate action for self-preservation under emergency conditions as determined by program licensure provisions for more than six persons and must meet Group R, Division 1 occupancy requirements.

C. "Class B-1 supervised living facility" means a supervised living facility for ambulatory, nonambulatory, mobile, or nonmobile persons who are not mentally or physically capable of taking appropriate action for self-preservation under emergency conditions as determined by program licensure provisions for six or fewer persons and must meet Group R, Division 3 occupancy requirements.

D. "Class B-2 supervised living facility" means a supervised living facility for ambulatory, nonambulatory, mobile, or nonmobile persons who are not mentally or physically capable of taking appropriate action for self-preservation under emergency conditions as determined by program licensure provisions for seven to 16 persons and must meet Group R, Division 1 occupancy requirements.

E. "Class B-3 supervised living facility" means a supervised living facility for ambulatory, nonambulatory, mobile, or nonmobile persons who are not mentally or physically capable of taking appropriate action for self-preservation under emergency conditions as determined by program licensure provisions for over 17 persons and must meet Group I, Division 2 occupancy requirements.

Subp. 11. **State building official.** "State building official" means the person who, under the direction and supervision of the commissioner, administers the code.

Subp. 11a. **State licensed facilities.** "State licensed facilities" means a building and its grounds that are licensed by the state as a hospital, nursing home, supervised living facility, free-standing outpatient surgical center, or correctional facility.

Subp. 12. **State-owned buildings.** "State-owned buildings" means buildings and structures financed in whole or in part by state funds that are under the exclusive jurisdiction and custodial control of one or more state departments or agencies.

Subp. 13. **Town.** "Town" means a town meeting the requirements of Minnesota Statutes, section 368.01.

Subp. 14. **Uniform Building Code or UBC.** "Uniform Building Code" or "UBC" means the Uniform Building Code, as promulgated by the International Conference of Building Officials, Whittier, California, and as adopted by reference in part 1305.0010.

Subp. 15. **Ventilation.** "Ventilation" is the process of supplying or removing air by natural or mechanical means to or from any space. The air may or may not have been conditioned.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.2500 CODE ADOPTION AND AMENDMENTS.

Under Minnesota Statutes, section 16B.61, the code is adopted and periodically updated to include current editions of national model codes in general use and existing state-wide specialty codes and their amendments.

Under Minnesota Statutes, section 16B.64, subdivisions 5 and 6, amendments to the code may be proposed and initiated by any interested person. Proposed amendments must be submitted in writing on a form provided by the commissioner.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74*

1300.2600 APPLICATION FOR APPEAL.

Subpart 1. **Form of request.** Under Minnesota Statutes, section 16B.67, a person aggrieved by the final determination of a municipality as to the application of the code may, within 180 days of that determination, appeal to the commissioner. The appeal must be accompanied by a cashier's check, certified check, money order, or equivalent, payable in the amount of \$70 to the "Commissioner of Administration."

Subp. 2. **Contents of request.** The appeal must contain the following:

- A. the name and address of the applicant appealing the decision;
- B. the attorney representing the applicant, if any;
- C. municipality information, including the name of the municipality, the building official, and the local appeal board chair;
- D. a description of the property, including the address of property involved;
- E. a description of the structure, including occupancy, size, and construction type;
- F. a copy of the municipality's written decision;
- G. the specific nature of the appeal, including but not limited to code sections that are applicable to the specific question, code sections that may indirectly apply, and a listing of issues involved; and
- H. any other relevant information requested in writing by the commissioner.

Subp. 3. **Hearing.** The commissioner shall arrange for the Office of Administrative Hearings to conduct a hearing on an appeal under Minnesota Statutes, sections 14.57 to 14.69. The party not prevailing shall pay the costs of the contested case hearing, including fees charged by the Office of Administrative Hearings and the expenses of transcript preparation. Costs under this subpart do not include attorney fees.

Subp. 4. **Copies of determinations.** Copies of final determinations of the commissioner must be sent to the appellant and the municipality involved or the attorney representing the appellant or municipality.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.2700 STATE SURCHARGE FEES.

All municipal permits issued for work under the code are subject to a surcharge fee. The fees are established by Minnesota Statutes, section 16B.70. Reports and remittances by municipalities must be filed with the commissioner, directed to the attention of the state building official.

Surcharge fees imposed by the state are in addition to municipal permit fees. Surcharge report forms and information may be obtained by writing the commissioner, to the attention of the state building official.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.2800 MINNESOTA STATE BUILDING CODE INFORMATION AND ASSISTANCE.

Building code information or assistance may be obtained by contacting the state building official in writing or by telephone.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.2900 OPTIONAL ADMINISTRATION.

Subpart 1. [Repealed, 19 SR 1340]

Subp. 2. **Administration optional.** The following chapters of the code are not mandatory but may be adopted without change by a municipality which has adopted the code:

A. chapter 1306, special fire protection systems;

B. chapter 1310, building security; and

C. chapter 1335, floodproofing regulations, parts 1335.0300 to 1335.3100, sections 200.2 to 1405.3.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74; 19 SR 1340*

1300.3000 DISCLAIMER CLAUSE.

The inclusion of specific requirements relative to the manner of installation of any plant or equipment in one or more parts of the code does not limit this procedure to any particular type of installer or provide a basis upon which determination of the right to perform a procedure shall be made. The authority for this determination is in the various licensing statutes or ordinances for each type of installer who performs the work.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74*

1300.3100 SEVERABILITY.

If any provision of the Minnesota State Building Code is held invalid, the invalidity does not affect any other provisions of the code that can be given effect without the invalid provision, and to this end, the provisions of the code are declared to be severable.

Statutory Authority: *MS s 16B.61*

History: *15 SR 74*

1300.3900 RESTROOM FACILITIES IN PUBLIC ACCOMMODATIONS.

Subpart 1. **Ratio.** In a place of public accommodation subject to this part, the ratio of water closets for women to the total of water closets and urinals provided for men must be at least three to two, unless there are two or fewer fixtures for men. This part becomes effective July 1, 1995.

Subp. 2. **Application.** This part applies only to the construction of buildings or structures of public accommodation or where the cost of alterations to an existing place of public accommodation exceeds 50 percent of the estimated replacement value of the existing facility.

Subp. 3. **Definition.** For purposes of this part, "place of public accommodation" means a publicly or privately owned sports or entertainment arena, stadium, theater, community or convention hall, special event center, amusement facility, or special event center in a public park, that is designed for occupancy by 200 or more people.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.4100 SPACE FOR COMMUTER VANS.

Every parking ramp or other parking facility must include spaces for the parking of motor vehicles having a capacity of seven to 16 persons. The number of required spaces must be determined by two percent of the gross designed parking area with a minimum of two spaces. The minimum vertical clearance to and within required spaces is 98 inches.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.4300 ROOF COVERING; SEVERE CLIMATE.

For the purpose of determining underlayment requirements in either the Uniform Building Code or the One- and Two-Family Dwelling Code, the entire state of Minnesota is subject to wind-driven snow and roof ice buildup.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.4500 ROOF ACCESS.

Unless specifically exempted by the building official due to space limitation, roof height above grade or other special considerations, buildings on which any heating, air conditioning, or refrigeration equipment is hereafter installed on the roof, which equipment will require periodic inspection, service, and maintenance in accordance with the Minnesota State Mechanical Code, chapter 1346, must meet the requirements in items A to C:

A. A stairway complying with UBC Chapter 10 or a stair leading to a scuttle or bulkhead in the roof having such equipment must be provided to make the equipment safely accessible. The stair leading to the scuttle or bulkhead must be placed at an angle of not more than 60 degrees measured from the horizontal with flat treads not less than six inches in width and a minimum length of 24 inches at the tread. No riser may be more than nine inches and handrails must be provided on both sides of the access stairs. The opening of the scuttle or bulkhead must not be less than nine square feet in area with a minimum dimension not less than two feet. This required access may not be located in or pass through the elevator shaft or elevator machine room.

B. The roof access opening and equipment must be located with at least six feet of clearance from the edge of the roof or similar hazards, unless a suitable rail or guard at least 42 inches high is provided.

C. Each unit of equipment must have an accessible disconnect switch and convenience outlet installed as required in both the Electrical Code and Minnesota State Mechanical Code.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.4700 RECYCLING SPACE.

Subpart 1. **Requirement.** Space must be provided for the collection, separation, and temporary storage of recyclable materials within or adjacent to all new or significantly remodeled buildings or structures that contain 1,000 square feet or more.

Exception: Residential structures with fewer than four dwelling units.

Subp. 2. **Location.** Space designated for recycling shall be located so it is at least as convenient as the location where other solid waste is collected. If feasible, recycling space should be adjacent to other solid waste collection space. Recycling space must be located and designed in accordance with the provisions of this code and ordinances of the jurisdiction.

Subp. 3. **Identification on plans.** Space designated for recycling must be identified on plans submitted for a building permit.

Subp. 4. **Minimum space.** Space designated for recycling must be sufficient to contain all the recyclable materials generated from the building. The minimum amount of recycling space required must be the number of square feet determined by multiplying the gross square feet of floor areas assigned to each use within a building as set forth in subpart 5, Table 1-A, times the corresponding factor.

Subp. 5. TABLE 1-A MINIMUM RECYCLING SPACE REQUIREMENTS.

	USE ¹	FACTOR
1.	Aircraft hangars (no repair)	.001
2.	Auction rooms	.0025
3. ²	Auditoriums, reviewing stands, stadiums, gymnasiums, public swimming pools, skating rinks	.001

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4.	Lodge rooms, conference rooms, lounges, stages, exhibit rooms	.0025
5.	Dance floors, churches ³ and chapels, lobby	.001
6.	Dining rooms	.003
7. ³	Drinking establishments	.004
8. ³	Bowling alleys (excluding lanes)	.0025
9. ³	Children's homes and homes for the aged	.0025
10.	Classrooms	.002
11.	Courtrooms	.001
12.	Dormitories	.0025
13.	Exercise rooms	.001
14.	Garages, parking	.001
15. ³	Hospitals and sanitariums, nursing homes	.0025
16. ³	Hotels	.002
17.	Apartments	.0025
18.	Kitchens – commercial	.003
19. ³	Libraries	.002
20.	Locker rooms	.001
21.	Malls	.0025
22.	Manufacturing areas	.0025
23.	Mechanical equipment rooms	.001
24. ³	Nurseries for children (day care)	.002
25.	Offices	.0025
26.	School shops and vocational rooms	.0025
27.	Storage and stock rooms	.0025
28.	Warehouses	.001
29.	All others	.0025

Footnotes:

¹ The area of a use must include all areas serving or accessory to a use (corridors, accessory use areas, etc.).

² Exclude playing areas, courts, fields, and like areas.

³ The factors for these uses are intended to include all incidental uses typical of these types of facilities.

If the provisions of Table 1–A are excessive due to a specific use, space for recycling may be considered individually by the administrative authority.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.4900 SPECIAL EGRESS DEVICES.

Subpart 1. Group E, Division 1 occupancies. If approved by the building official, exit doors in a Group E, Division 1 occupancy or portions of a Group E, Division 1 occupancy, may be equipped with approved, listed egress–control devices of access–control type, provided the building is equipped throughout with an approved, supervised automatic fire alarm and smoke–detection system and the Group E, Division 1 occupancy or portion of the Group E, Division 1 occupancy is protected by an approved automatic sprinkler system.

These devices must:

- A. automatically deactivate upon activation of any of the following:
 - (1) the sprinkler system;
 - (2) the smoke–detection system;
 - (3) the fire alarm trouble signal;
 - (4) a manual switch from a location which is constantly attended during normal school hours (such as the office);
- B. automatically deactivate upon loss of electrical power to any of the following:
 - (1) the egress–control device;
 - (2) the fire alarm system;
 - (3) the smoke detection system;
 - (4) exit illumination as required by UBC Section 1012;
- C. regardless of the means of deactivation, be relocked by manual means only at the door;
- D. initiate an irreversible process which will deactivate the egress–control device upon activation of a manual release device located within five feet of the affected doors. The manual release device must be located 40 inches to 48 inches above the floor and must be identified by a sign that reads:

“PULL TO EXIT”

The egress–control device must deactivate within an approved time period not to exceed a total of 30 seconds. The time–delay established for each egress–control device must deactivate within an approved time period not to exceed a total of 30 seconds. The time delay established for each egress–control device must not be field adjustable.

A sign must be provided on the door located above and within 12 inches of the panic bar or door–latching hardware reading:

“THIS DOOR WILL UNLOCK UNDER EMERGENCY FIRE CONDITIONS”

The sign letters must be at least one inch in height and must have a stroke of not less than one–eighth inch.

Emergency lighting must be installed throughout the exit system.

The total number of special egress–control devices in any one egress path must be such that the aggregate time delay of all units does not exceed 30 seconds.

Subp. 2. Group A occupancy in conjunction with Group E, Division 1, occupancy. If approved by the building official, exit doors serving Group A occupancies in conjunction with a Group E, Division 1, occupancy may be equipped with approved, listed, egress–control devices of access–control type, provided the building is equipped throughout with an approved, supervised automatic fire alarm and smoke–detection system and the Group A occupancy or portion of the Group A occupancy is protected by an approved automatic sprinkler system.

These systems must be installed so as to:

A. include a sensor on the egress side arranged to detect an occupant approaching the doors, with the doors designed to unlock upon detection of an approaching occupant;

B. automatically deactivate the egress-control device upon activation of any of the following:

- (1) the sprinkler system;
- (2) the smoke-detection system;
- (3) the fire alarm trouble signal;

and provide that the doors be relocked by manual means only at the door;

C. automatically deactivate the egress-control device upon loss of electrical power to any of the following:

- (1) the egress-control device;
- (2) the fire alarm system;
- (3) the smoke detection system;
- (4) exit illumination as required by UBC Section 1012;

D. include doors arranged to unlock from a manual release device which is located 40 inches to 48 inches above the floor and within five feet of the secured doors. The manual release device must be readily accessible and clearly identified by a sign that reads:

"PUSH TO EXIT"

The sign letters must be at least one inch in height and have a stroke of not less than one-eighth inch. When operated, the manual release device must result in direct interruption of power to the lock, independent of the access control system electronics, and the door must remain unlocked for a minimum of 30 seconds.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.5100 USE OF BUILDINGS BY LOWER GRADES.

Subpart 1. Buildings equipped with complete automatic sprinkler and fire alarm systems. Rooms occupied by preschool, kindergarten, and first and second grade students for classrooms, latchkey, day care, early childhood family education, teen parent, or similar programs may be located on any floor level below the fourth story of a school building if the building is protected throughout by an approved automatic sprinkler system and a complete automatic fire alarm system consisting of automatic smoke detection throughout the exit system and approved smoke detection in all rooms and areas other than classrooms and offices.

Subp. 2. Other buildings. Rooms used by preschool, kindergarten, or first grade students for classrooms, latchkey, day care, early childhood family education, teen parent, or similar programs, must be located on the story of exit discharge, and rooms used by second grade students, for any purpose, must be located on the story of exit discharge or one story above unless one of the following conditions is met:

A. an approved automatic sprinkler system is provided throughout the building, the use of the affected room or space is limited to one grade level at a time, and exiting is provided from the affected room or space which is independent from the exiting system used by older students; or

B. a complete approved automatic fire alarm system is installed throughout the building consisting of automatic smoke detection throughout the exit system and approved detection in all rooms and areas other than classrooms and offices, the use of the affected room or space is limited to one grade level at a time, and exiting is provided from the affected room or space which is independent from the exiting system used by older students.

For purposes of this subpart, pupils from second grade down are considered one grade level.

Subp. 3. Accessory spaces. Accessory spaces, including gymnasiums, cafeterias, media centers, auditoriums, libraries, and band and choir rooms, which are used on an occasional basis by preschool, kindergarten, and first and second grade students are permitted to be located one level above or one level below the story of exit discharge, if the building is pro-

tected throughout by an approved automatic sprinkler system or a complete approved corridor smoke detection system.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.5300 CORRIDOR CONSTRUCTION.

Subpart 1. Group B and M occupancies. In existing Type I and II–F.R. buildings housing Group B and M occupancies, corridor walls may be of approved wired glass set in metal frames. The glass height must not exceed two-thirds of the width of the corridor. A draft curtain of at least one-hour fire-resistive construction and not less than 24 inches in height must be provided to protect the corridor from the Group B or M occupancy area (tenant space). The draft curtain must be located above the glass and extend a minimum of 24 inches below any finished ceilings in the tenant space. If the finished ceiling is not a fire-rated assembly, the draft curtain must extend from the wire glass to a rated ceiling or floor assembly. When the Group B or M occupancy area (tenant space) is protected by an approved automatic sprinkler system for a distance of 12 feet in depth adjoining the corridor, and the corridor is not less than 12 feet in width, glass other than wired glass may be approved. Open grille-type gates and similar enclosing or security devices may be used in corridor walls of corridors not less than 12 feet in width, when the entire story is protected by an approved automatic sprinkler system.

In existing buildings of other than Type I or of Type II–F.R. construction, this exception is not permitted, unless the entire building is provided with an approved automatic sprinkler system.

Subp. 2. Group I, Division 1.1 occupancies. In hospital and nursing home occupancies (I–1.1) doors entering sleeping rooms from a corridor need not be constructed or maintained as self-closing or automatic-closing when the building is equipped with an approved automatic sprinkler system.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.5500 FOOTING DEPTH FOR FROST PROTECTION.

Subpart 1. Minimum footing depth. In the absence of a determination by an engineer competent in soil mechanics, the minimum allowable footing depth in feet due to freezing is five feet in Zone I and 3–1/2 feet in Zone II.

Zone I includes the counties of: Aitkin, Becker, Beltrami, Carlton, Cass, Clay, Clearwater, Cook, Crow Wing, Douglas, Grant, Hubbard, Itasca, Kanabec, Kittson, Koochiching, Lake, Lake of the Woods, Mahnommen, Marshall, Mille Lacs, Morrison, Norman, Otter Tail, Pennington, Pine, Polk, Red Lake, Roseau, Saint Louis, Todd, Traverse, Wadena, and Wilkin.

Zone II shall include the counties of: Anoka, Benton, Big Stone, Blue Earth, Brown, Carver, Chippewa, Chisago, Cottonwood, Dakota, Dodge, Faribault, Fillmore, Freeborn, Goodhue, Hennepin, Houston, Isanti, Jackson, Kandiyohi, Lac Qui Parle, Le Sueur, Lincoln, Lyon, McLeod, Martin, Meeker, Mower, Murray, Nicollet, Nobles, Olmsted, Pipestone, Pope, Ramsey, Redwood, Renville, Rice, Rock, Scott, Sibley, Sherburne, Stearns, Steele, Stevens, Swift, Wabasha, Waseca, Washington, Watonwan, Winona, Wright, and Yellow Medicine.

Less depths may be permitted when supporting evidence is presented by an engineer competent in soil mechanics.

Subp. 2. Soil under slab on grade construction for buildings. When soil, natural or fill, is sand or pit run sand and gravel, and of depth in accordance with minimum footing depth requirements for each zone, slab on grade construction which is structurally designed to support all applied loads is permitted. Footings for interior bearing walls or columns may be constructed to be integral with the slab on grade for any height building. Footings for exterior bearing walls or columns may be similarly constructed for any height building when supporting soil is as described in this item. Footing design must reflect eccentric loading conditions at slab edges, soil bearing capacity, and the requirements of UBC Chapter 19. Slab on

grade construction for detached buildings of Group U, Division 1 occupancies may be placed on any soil except peat or muck.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.5700 RADIAL ICE ON OPEN FRAME TOWERS.

The effect of one-half inch of radial ice must be included in the design of open frame towers including all supporting guys. This effect must include the weight of the ice and the increased profile of each such tower component so coated.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.5900 AUTOMATIC GARAGE DOOR OPENING SYSTEMS.

All automatic garage door opening systems that are installed, serviced, or repaired for garages serving residential buildings, must comply with the provisions of Minnesota Statutes, sections 325F.82 and 325F.83.

Statutory Authority: *MS s 16B.61*

History: *19 SR 1340*

1300.6100 CONVENTIONAL FOUNDATION CONSTRUCTION.

Subpart 1. **Conventional foundation construction.** The provisions in this part may be used for the design and construction of conventional foundations serving Group R, Division 3, and Group U, Division 1 occupancies subject to the approval of the building official. Other methods may be used provided a satisfactory design is submitted showing compliance with the other provisions of this code.

TABLE 2-A

Foundation wall reinforcement requirements of 12-inch thick hollow unit masonry or eight-inch thick cast-in-place (CIP) concrete.

Height of unbalanced backfill	Size of vertical reinforcing bars required when foundation wall is constructed in soil groups I or II of Table 2-B	
	Group I Soil	Group II Soil
5 feet	No. 4 bars	No. 4 bars
6 feet	No. 4 bars	No. 5 bars
7 feet	No. 4 bars	No. 5 bars
8 feet	No. 5 bars	No. 6 bars

Notes:

1. All reinforcing is to be installed vertically a maximum of six feet on center. Vertical reinforcing bars must be placed three inches clear maximum from the inside nonpressure face of masonry walls and 1-1/2 inches clear maximum from the inside face of the CIP walls.

2. Reinforcing may be omitted in wall sections ten feet or less in length that are bounded by wall corners or by wall offsets or returns at least two feet in depth.

3. Reinforced cells of hollow unit masonry must be filled solid with grout having a specified compressive strength at 28 days of 2,000 psi. Reinforcing steel must be ASTM A615 grade 40.

4. Hollow masonry units must be ASTM C-90 Grade N-1 and be installed with Type M or Type S mortar.

5. Cast-in-place concrete must have a 28-day minimum strength of 3,000 psi.

6. Anchor bolts must be installed to align with vertical reinforcing in addition to the locations and in the manner specified in Uniform Building Code, Section 1806.6 or Figure R-303 of the One and Two Family Dwelling Code.

7. If foundation walls are parallel to floor framing, solid blocking or diagonal bracing must be installed at the anchor bolt locations in the first two joist or truss spaces.

8. Floor framing must be nailed to the sill plate in accordance with Uniform Building Code Table 23-I-Q or Table R-402.3a of the One and Two Family Dwelling Code. In addition, approved metal angle clips must be used to fasten floor joists, trusses, or blocking to the sill plate at the anchor bolt locations. The clips must not be less than 18 gauge and be fastened to the plate and adjoining joists, trusses, or blocking with at least three 1-1/2 inch by 8d nails in each leg of the clip.

9. Foundation walls must not exceed a height of 8-1/2 feet, as measured from the basement floor. Height of unbalanced fill must also be measured from the basement floor.

10. Prior to backfilling, foundation walls must be laterally supported by floor construction at both top and bottom or by adequate temporary bracing.

11. A foundation drainage system must be installed, consisting of a foundation drain complying with Uniform Building Code Appendix 1824.3 and 1824.4, section R-305.1 of the One and Two Family Dwelling Code, or other approved design.

12. Foundations must also comply with the applicable construction provisions of Uniform Building Code chapters 19 and 21.

TABLE 2-B
TYPES OF SOILS AND THEIR PROPERTIES

Soil group	Unified soil classification system symbol	Soil description	Drainage Characteristics	Volume change potential expansion
Group I Excellent	GW	Well-graded gravels, gravel sand mixtures, little or no fines.	Good	Low
	GP	Poorly graded gravels or gravel sand mixtures little or no fines.	Good	Low
	SW	Well-graded sands, gravelly sands, little or no fines.	Good	Low
	SP	Poorly graded sands or gravelly sands, little or no fines.	Good	Low
	GM	Silty gravels, gravel-sand-silt mixtures.	Good	Low
	SM	Silty sand, sand-silt mixtures.	Good	Low
Group II Fair to Good	GC	Clayey gravels, gravel-sand-clay mixtures.	Medium	Low
	SC	Clayey sands, sand-clay mixture.	Medium	Low
	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.	Medium	Low
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sands, clays, silty clays, lean clays.	Medium	Medium
Group III Poor	CH	Inorganic clays of high plasticity, fat clays	Poor	High
	MH	Inorganic silts, micaceous or distomaceous fine sandy or silty soils, elastic silts.	Poor	High
Group IV Unsatisfactory	OL	Organic silts and organic silty clays of low plasticity.	Poor	Medium
	OH	Organic clays of medium to high plasticity, organic silts.	Unsatisfactory	High
	Pt	Peat and other highly organic soils.	Unsatisfactory	High

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Statutory Authority: *MS s 16B.61*

History: *19 SR 1735*