

CHAPTER 1303
DEPARTMENT OF LABOR AND INDUSTRY
MINNESOTA PROVISIONS OF STATE BUILDING
CODE

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1303.1000 TITLE.

This chapter shall be known as “Minnesota provisions.”

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1100 PURPOSE.

This chapter contains 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 safe minimum level of construction in an area not appropriately regulated in the International Building Code or International Residential Code.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1200 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.

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.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1300 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.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1400 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.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1500 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 re-modeled 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 hangers (no repair) | .001 |
| 2. Auction rooms | .0025 |
| 3 ² . Auditoriums, reviewing stands, stadiums, gymnasiums, public swimming pools, skating rinks | .001 |
| 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 |

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| 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.59; 16B.61; 16B.64*

History: *27 SR 1478*

1303.1600 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, St. 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. Sand must contain less than 70 percent material that will pass through a U.S. Standard No. 40 sieve and less than five percent material that will

pass through a No. 200 sieve (five percent fines), or be approved by an engineer competent in soil mechanics.

Exception: Slab on grade construction may be placed on any soil except peat or muck for detached one-story private garage, carport, and shed buildings not larger than 3,000 square feet.

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 subpart. Footing design must reflect eccentric loading conditions at slab edges, soil bearing capacity, and the requirements of International Building Code, chapter 19.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: 27 SR 1478; 32 SR 10

1303.1700 GROUND SNOW LOAD.

The ground snow load, P_g , to be used in determining the design snow loads for buildings and other structures shall be 60 pounds per square foot in the following counties: Aitkin, Becker, Beltrami, Carlton, Cass, Clearwater, Cook, Crow Wing, Hubbard, Itasca, Kanabec, Kittson, Koochiching, Lake, Lake of the Woods, Mahnomon, Marshall, Mille Lacs, Morrison, Norman, Otter Tail, Pennington, Pine, Polk, Red Lake, Roseau, St. Louis, Todd, and Wadena. The ground snow load, P_g , to be used in determining the design snow loads for buildings and other structures shall be 50 pounds per square foot in all other counties.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: 27 SR 1478; 32 SR 10

1303.1800 RADIAL ICE ON TOWERS.

The effect of one-half inch of radial ice must be included in the design of 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.59; 16B.61; 16B.64*

History: 27 SR 1478

1303.1900 [Repealed, 32 SR 10]

1303.2000 EXTERIOR WOOD DECKS, PATIOS, AND BALCONIES.

The decking surface and upper portions of exterior wood decks, patios, and balconies may be constructed of any of the following materials:

A. the heartwood from species of wood having natural resistance to decay or termites, including redwood and cedars;

B. grades of lumber which contain sapwood from species of wood having natural resistance to decay or termites, including redwood and cedars; or

C. treated wood.

The species and grades of wood products used to construct the decking surface and upper portions of exterior decks, patios, and balconies must be made available to the building official on request before final construction approval.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: 27 SR 1478

1303.2100 BLEACHER SAFETY.

All new bleachers, manufactured, installed, sold, or distributed where the bleachers or bleacher open spaces will be over 55 inches above grade or the floor below, and all bleacher guardrails if any part of the guardrail will be over 30 inches above grade or the floor below must comply with the State Building Code in effect and the provisions of Minnesota Statutes, section 16B.616.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: 27 SR 1478

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1303.2200 SIMPLIFIED WIND LOADS.

Subpart 1. Section 2200.

A. This section applies to the wind loads for the main wind force-resisting systems only.

B. In order to utilize wind loads from this part, the building shall meet the following requirements:

- (1) 60 feet or less in height;
- (2) height not to exceed least horizontal dimension;
- (3) enclosed building;
- (4) roof shape -- flat, gabled, or hip;
- (5) roof slope of 45 degrees maximum;
- (6) simple diaphragm building;
- (7) not a flexible building;
- (8) regular shape and approximately symmetrical;
- (9) no expansion joints or separations; and
- (10) no unusual response characteristics (for example: vortex shedding, galloping, or buffeting).

Subp. 2. **Simplified design wind pressures.** P_s represents the net pressures (sum of internal and external) to be applied to the horizontal and vertical projections of building surfaces. For the horizontal pressures, P_s is the combination of the windward and leeward net pressures. P_s may be determined from Equation Palt.

$$P_s = K_z t I_w P_{alt} \text{ (Equation Palt)}$$

where:

K_z = Topographic factor as defined in Chapter 6 of ASCE 7.

I_w = Importance factor as defined in Chapter 6 of ASCE 7.

P_{alt} = Alternative simplified design wind pressure from Table Palt.

TABLE Palt Horizontal and Vertical Pressure*

| | |
|-------|--------|
| Exp B | 15 psf |
| Exp C | 19 psf |
| Exp D | 22 psf |

*For vertical pressure, the above values are negative (upward).

Overhang Vertical Pressure*

| | |
|-------|---------|
| Exp B | -25 psf |
| Exp C | -30 psf |
| Exp D | -35 psf |

*Negative values are upward.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64*

History: *32 SR 10*