

1 Department of Labor and Industry
2 Adopted Permanent Rules Relating to Minnesota Provisions of the
3 Building Code

4 1303.1600 FOOTING DEPTH FOR FROST PROTECTION.

5 [For text of subpart 1, see M.R.]

6 Subp. 2. **Soil under slab on grade construction for**
7 **buildings.** When soil, natural or fill, is sand or pit run sand
8 and gravel, and of depth in accordance with minimum footing
9 depth requirements for each zone, slab on grade construction
10 which is structurally designed to support all applied loads is
11 permitted. Sand must contain less than 70 percent material that
12 will pass through a U.S. Standard No. 40 sieve and less than
13 five percent material that will pass through a No. 200 sieve
14 (five percent fines), or be approved by an engineer competent in
15 soil mechanics.

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

20 Footings for interior bearing walls or columns may be
21 constructed to be integral with the slab on grade for any height
22 building. Footings for exterior bearing walls or columns may be
23 similarly constructed for any height building when supporting
24 soil is as described in this subpart. Footing design must
25 reflect eccentric loading conditions at slab edges, soil bearing
26 capacity, and the requirements of International Building Code,
27 chapter 19.

1 1303.1700 GROUND SNOW LOAD.

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

13 1303.2200 SIMPLIFIED WIND LOADS.

14 Subpart 1. **Section 2200.**

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

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

- 19 (1) 60 feet or less in height;
- 20 (2) height not to exceed least horizontal
21 dimension;
- 22 (3) enclosed building;
- 23 (4) roof shape - flat, gabled, or hip;
- 24 (5) roof slope of 45 degrees maximum;
- 25 (6) simple diaphragm building;
- 26 (7) not a flexible building;

- 1 (8) regular shape and approximately symmetrical;
 2 (9) no expansion joints or separations; and
 3 (10) no unusual response characteristics (for
 4 example: vortex shedding, galloping, or buffeting).

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

11
$$Ps = KztIwPalt \text{ (Equation Palt)}$$

12 where:

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

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

15 Palt = Alternative simplified design wind pressure from
 16 Table Palt.

17 **TABLE Palt**
 18 **Horizontal and Vertical Pressure***

19	Exp B	15 psf
20	Exp C	19 psf
21	Exp D	22 psf

22
 23 *For vertical pressure, the above values are negative (upward).

24 **Overhang Vertical Pressure***

25	Exp B	-25 psf
26	Exp C	-30 psf
27	Exp D	-35 psf

28
 29 *Negative values are upward.

30 **REPEALER.** Minnesota Rules, part 1303.1900, is repealed.

31 **EFFECTIVE DATE.** These amendments are effective May 31, 2007, or
 32 five working days after the notice of adoption is published in

02/12/07

[REVISOR] CMG/DI AR3635

1 the State Register, whichever occurs later.