

**1309.0403 SECTION R403, FOOTINGS.**

Subpart 1. **IRC section R403.1.4.1.** Section R403.1.4.1 is amended to read as follows:

**R403.1.4.1 Frost protection.** Footings shall not bear on frozen soil. Foundation walls, piers, and other permanent supports of buildings and structures not otherwise protected from frost shall be protected 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; or
5. Constructing in accordance with Minnesota Rules, chapter 1303.

Subp. 2. **IRC section R403.1.6.** IRC Section R403.1.6 is amended to read as follows:

**R403.1.6 Foundation anchorage.** Sill plates and walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Wood sole plates at all exterior walls on monolithic slabs, wood sole plates of braced wall panels at building interiors on monolithic slabs, and all wood sill plates shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. Bolts shall be at least 1/2-inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. A nut and washer shall be tightened on each bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than 7 bolt diameters from each end of the plate section. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. Cold-formed steel framing systems shall be fastened to the wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.1.1. When vertical reinforcing is required by other sections of this code, the foundation anchor bolts shall be within 8 inches (203 mm) of the vertical reinforcing. All anchor bolts installed in masonry shall be grouted in place with at least 1-inch (25 mm) of grout measured from the inside face of the masonry and the anchor bolt.

**Exceptions:**

1. Foundation anchor straps spaced as required to provide equivalent anchorage to 1/2-inch diameter (12.7 mm) anchor bolts. When vertical reinforcing is required by other sections of this code, the foundation anchor straps shall align with the reinforcing.
2. Walls 24 inches (609.6 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located

in the center third of the plate section and shall be attached to adjacent braced wall panels according to Figure R602.10.5 at corners.

3. Walls 12 inches (304.8 mm) total length or shorter connecting offset braced wall panels shall be permitted to be connected to the foundation without anchor bolts. The wall shall be attached to adjacent braced wall panels according to Figure R602.10.5 at corners.

**Statutory Authority:** *MS s 16B.59; 16B.61; 16B.64; 326B.02; 326B.101; 326B.106; 326B.13*

**History:** *27 SR 1475; 32 SR 12; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 44 SR 764*

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