

1350.2700 FOUNDATION AND SUPPORT SYSTEMS.

Subpart 1. **General.** Each manufactured home shall be installed on a foundation system or shall have a support system as specified in this part. A minimum clearance of 12 inches shall be maintained beneath the underside of the main frame (I-beam or channel beam) in the area of utility connections when the manufactured home is not installed on a foundation system.

Subp. 2. **Manufactured homes with installation instructions.** Individual footings and load-bearing piers or listed supports shall be sized and located to support the loads specified in the manufacturer's installation instructions to ensure that the manufacturer's warranty remains valid.

Subp. 3. **Manufactured homes for which installation instructions are not available.** Unless the entire support system is designed by a registered professional engineer, and approved by the authority having jurisdiction prior to installation, supports shall be spaced not more than ten feet apart for manufactured homes 12 feet wide or less, and not more than eight feet apart for manufactured homes over 12 feet wide, beginning from the front wall of the manufactured home, with not more than two feet open-end spacing at the area of the main frame. Supports shall be installed directly under the main frame (or chassis) of the manufactured home. Methods other than those specified herein shall be approved prior to installation by the authority having jurisdiction. Double-wide manufactured homes built with a conventional frame shall have additional supports placed under the center (mating) line at each end wall, and at the support columns located at the sides of center wall openings eight feet in width or greater. The supports shall be constructed to withstand the weight calculated by multiplying one-half the width of the opening (in feet) times one-half the width of the home (in feet) multiplied by 37-1/2 pounds per square foot. (30-pound snow load and 7-1/2 pound roof load.)

Subp. 4. **Footings.** The required load-bearing capacity of individual load-bearing supports and their footings shall be calculated at not less than a combined live and dead load of 95 pounds per square foot. Footings shall be adequate in size to withstand the tributary live and dead loads of the manufactured home and any concentrated loads.

Footings shall be at least 16-inch by 16-inch by four-inch solid concrete blocks or other product approved for the use intended. As an alternate, two eight-inch by 16-inch by four-inch solid concrete blocks can be used as footings provided the joint between the blocks is parallel to the steel I-beam frame.

Footings or pier foundations, when required, shall be placed level on firm undisturbed soil or on controlled fill which is free of grass and organic materials, compacted to a minimum load-bearing capacity of 2,000 pounds per square foot (unless otherwise approved by an engineer). Where unusual soil conditions exist as determined by the authority having jurisdiction, footings shall be designed specifically for such conditions.

Subp. 5. **Piers.** Piers or load-bearing supports or devices shall be designed and constructed to evenly distribute the loads. Piers shall be securely attached to the frame of the manufactured home or shall extend at least six inches from the centerline of the frame member. Load-bearing supports or devices shall be listed and labeled, or shall be designed by a registered professional engineer, and shall be approved for the use intended, prior to installation, or piers shall be constructed as follows:

A. Piers less than 40 inches in height shall be constructed of open or closed cell, eight-inch by 16-inch concrete blocks (with open cells vertically placed upon the footing). Single-stacked block piers shall be installed with the 16-inch dimension perpendicular to the main (I-beam) frame. The piers shall be covered with a two-inch by eight-inch by 16-inch wood or concrete cap. (See part 1350.3300, subpart 1).

B. Subject to the limitations of subpart 6, piers between 40 to 80 inches in height and all corner piers over three blocks high shall be double blocked with blocks interlocked and capped with a four-inch by 16-inch by 16-inch solid concrete block, or equivalent. (See part 1350.3300, subpart 2).

C. Subject to the limitations of subpart 6, piers over 80 inches in height shall be constructed in compliance with item B, and they shall be laid in concrete mortar and steel reinforcing bars inserted in block cells filled with concrete. (See part 1350.3300, subparts 3 and 4).

Subp. 6. **Elevated manufactured homes.** When more than one-fourth of the area of a manufactured home is installed so that the bottom of the main frame members is more than three feet above ground level, the manufactured home stabilizing system shall be designed by a qualified registered professional engineer and the installation shall be approved prior to installation by the authority having jurisdiction.

Subp. 7. **Plates and hardwood shims.** A cushion of wood plate not exceeding two inches in thickness and hardwood shims not exceeding one inch in thickness may be used to fill any gap between the top of the pier and the main frame. Two-inch or four-inch solid concrete blocks may be used to fill the remainder of any gap. Hardwood shims shall be at least four inches wide and six inches long and shall be fitted and driven tight between the wood plate or pier and main frame.

Subp. 8. **Skirting material.** Skirting materials, when used, must be of materials resistant to decay and must have a minimum of one square foot of free area ventilation for every 150 square feet of floor area. If skirting is used, a minimum of 24-inch by 18-inch access area must be installed in the skirting. Crawlspace foundation systems must meet the requirements of the State Building Code.

Statutory Authority: *MS s 326B.02; 326B.101; 326B.106; 326B.13; 327.32; 327.33; 327B.01 to 327B.12*

History: *24 SR 1846; 34 SR 866*

Published Electronically: *January 4, 2010*