

Rule 5.06.3: Sites Prone to Flooding

A. Prior to the installation of the Factory-Built home, the installer/transporter is responsible for determining if the home site is wholly or partially within a flood prone area. If the home is located within a flood prone area, the installer/transporter is also responsible for contacting the homeowner to determine if they have obtained the proper flood elevation permit/certificate for the property from the county floodplain coordinator. All new Factory-Built homes that are to be located in a flood prone area shall require the manufacturer's approval of the location of the home. If the location is approved by the manufacturer then the installation shall require that:

1. the home be set a minimum distance above the base flood elevation as determined by the LAHJ,
2. meet all the requirements set forth in the Federal Emergency Management Agency (FEMA) September 1985 publication, Factory-Built Home Installation in Flood Hazard Areas, and
3. shall have an engineer-designed foundation system installed.

B. All used Factory-Built homes that are installed within a flood prone area shall be required to:

1. be set a minimum height above the base flood elevation,
2. meet all the installation standards set forth in this Regulation,
3. meet all the installation standards set forth in the FEMA 1985 publication, and
4. shall be required to have an engineer- designed foundation system.

C. For all homes placed in sites that have a potential for flooding, special elevations and anchoring techniques are required. Consult an engineer and the LAHJ (local building official, etc.) to make sure that the design and construction of the foundation system of the home conform to applicable federal, state, and local codes and regulations.

Source: *Miss. Code Ann.* §§ 75-49-1, et seq.; 75-49-11 (Supp. 2015).

Rule 5.06.4: Soil Classification

The following soil classifications in Table I have been adopted for the purpose of determining design loads, specifications and holding power of anchors and tie-down devices.

Table I Soil Classification

Soil Class	Types of Soils	Blow Count (ASTM)	Test Probe (1) Torque Value (2)
I	Sound hard rock; Very dense and/or cemented	N/A	N/A
II	Sands, coarse gravel and cobbles, preloaded silts, clays and corals...	40 and up	More than 550 lbs.-in.

III	Medium-dense coarse, sands, sandy gravel, very stiff silts and clays....	24-39	350-549 lbs.- in.
IV(4)	Loose to medium dense sands, firm to stiff clays and silts, alluvian fill.....	(3) 14-23	(3) 200-349 lbs. – in.
V	Peat, organic silt, inundated silts, loose fine sand, alluvium, loess, varied clays, fill, fly ash....	0-14	0-200 lbs. – in.

1. The test probe is a device for measuring the torque of soils to assist in evaluating the holding capacity of the soils in which the anchor is placed. The test probe has a helix on it. The overall length of the helical section is 10.75 inches; the major diameter is 1.25 inches, the minor diameter is 0.81 inches; the pitch is 1.75 inches. The shaft must be of suitable length for anchor depth.
2. A measure synonymous with the moment of a force when distributed around the shaft of the test probe.
3. Below these values a registered professional engineer must be consulted.
4. A C-4 anchor must be used unless the soil is tested with a soil test probe and the readings allow for another soil type anchor to be used.

Source: *Miss. Code Ann.* §§ 75-49-1, et seq.; 75-49-11 (Supp. 2015).

Rule 5.06.5: Soil Type/Bearing Capacity

Under the Federal Standards, manufacturers are only required to provide one acceptable method for installing the home. However, manufacturers usually provide installation instructions that can be applied to a number of sites. These "generic" instructions commonly specify a minimum acceptable bearing capacity of the soil. Additionally, the manufacturer may offer options for acceptable footing sizes based on the bearing capacity of the soil. Installer/transporters and inspection personnel should first determine the bearing capacity of the soil in order to determine the proper size footing or foundation. Different soil types will have different bearing and holding capacities. The bearing capacity of the soil is the load per unit area that can be supported safely by the ground. The performance of the ground anchor is also related to the soil's holding capacity. In the absence of borings, test pits, and other soil investigations that provide information on the proposed site, the following description of soil types in Table II may be used for homes installed in Mississippi.

TABLE II – BEARING CAPACITY/SOIL TYPE*

Bearing Capacity, psf	Bearing Capacity kg/m2	Soil Type
2000	9765	Loose sand clay soils or medium soft clay
3000	14647	Firm or stiff clay
4000	19530	Loose fine sand or compact inorganic silt soils
6000	29295	Compact sand clay soils
8000	39059	Loose coarse to medium compact fine sand

*Note: The above table may be used if the soil characteristics are known. If the soil type is unknown, the following resources may be consulted to determine the soil type/bearing capacity:

- (a) LAHJ;
- (b) Soil conservation district;
- (c) United States Geological Survey;
- (d) The Resource Conservation Agency of the U. S. Department of Agriculture;
- (e) Highway Department;
- (f) Qualified Professional Engineer; and/or
- (g) Other methods approved by the Commissioner.

In lieu of determining the soil bearing capacity by the use of the methods described above, an allowable bearing capacity of 2000 psf may be used unless the site-specific information requires the use of lower values based on soil classification and soil type.

Source: *Miss. Code Ann.* §§ 75-49-1, et seq.; 75-49-11 (Supp. 2015).

Rule 5.06.6: Required Piers and Anchorages

A. All used Factory-Built homes require diagonal ties to restrict the unit from being pushed from the main support piers. These diagonal ties also restrict overturning of the structure. Additional over the top tie downs or vertical side wall tie downs to restrict overturning are required by some Factory-Built home installations. When a used Factory-Built home is relocated (secondary siting) **all** of the original diagonal and vertical tie downs for the wind zone designation of the home must be reinstalled.

B. Piers or load-bearing supports or devices shall be designed and constructed to evenly distribute the loads. The maximum pier loads are listed in Table III and Table IV. Piers shall be securely attached to each I-beam of the Factory-Built home and shall extend at least six (6) inches from the centerline of each I-beam. Other types of load-bearing supports or devices shall be listed or approved for the use intended.