912.22. Installation standards for manufactured homes

(4) As to site preparation, the under-home grade, or ground, shall be cleaned of all vegetation and organic material, such as stumps, roots, etc., except grass not exceeding three inches in height. The area beneath and around the home shall be crowned, sloped or properly drained so that water will not flow or accumulate under the home. All grass and organic material shall be removed and the pier foundation placed on stable soil or compacted fill. When the soil compaction or soil-bearing capacity is not known, the local building authority in the locale may be consulted or a reading by the use of a pocket penetrometer may be obtained. The bottom of the footer or footers shall be placed on stable soil. The pier foundation shall be a minimum of three and one-half inches by sixteen inches by sixteen inches solid concrete pad or equivalent, precast or poured in place, or approved material by the regulatory agency. The regulatory agency, or its duly authorized representatives, shall cause products to be analyzed or tested to require that the pier foundation products have a deflection of not more than three-eighths inch under design load. Such testing may be conducted by an independent third party qualified and approved by the agency. Previous testing data submitted in other jurisdictions may be considered by the agency. Where the manufacturer's specifications have additional requirements other than the above, the more stringent shall apply. The landowner shall be responsible for proper site preparation in accordance with this Paragraph.
912.23. Foundations and piers

The following guidelines shall be used when the installation of foundations and piers is not specified in the manufacturer's instructions or when the manufacturer's installation instructions are not available:

(1) Piers:

(a) Piers shall be centered under the I-beam and installed as provided by rules promulgated by the commission. The first pier shall be within two feet of either end of the home. The pier foundation shall be a minimum of three and one-half inches by sixteen inches by sixteen inches solid concrete pad precast or poured in place, or other pad meeting the 2,500 PSI rating, or other approved material.

(b) Piers may be constructed of regular eight inches by eight inches by sixteen inches concrete blocks, open cells, solid (minimum eight inches by ten inches top), centered on the footing or foundation. A one inch or two inch by eight inch by sixteen inch treated or hardwood plate, or other approved material shall completely cover the top of the pier with shims, one-fourth inch minimum and one and one-half inch maximum, centered and driven tight from both sides of the I-beam between the wood plate or cap and the main frame. Single-tiered block piers shall be installed perpendicular to the main I-beam. However, when a pier has been capped with at least a four inch (three and one-half inch) solid concrete block or other approved material, one-fourth inch of wood stock or wood shims shall be installed between the pier and steel I-beam.

(c) Center line piers shall be located at each end of center line and shall be located on each end of the opening within six inches of jamb studs or ridge beam posts where openings four feet wide or greater occur. Any openings four feet or larger in the exterior sidewall or marriage wall shall require blocking at each end of the opening with four inch by sixteen inch by sixteen inch pads. Piers shall also be installed on each side of any perimeter door or fireplace. Bay windows or any opening forty-eight inches or more shall require blocking at each end. Fourteen feet or wider units with an I-beam spread of less than eighty-two inches and twelve feet wide units with an I-beam spread of less than seventy-five and one-half inches shall have perimeter blocking installed at a minimum of eight foot on center. Piers shall not be required under the clear, open, spans between ridge beam posts.

(d) All piers over thirty-six inches and corners over twenty-four inches in height shall be double tiered with blocks interlocked and capped with two four inch by eight inch by sixteen inch solid concrete blocks side by side and perpendicular to the I-beam, or other approved material and cushioned with wood shims or treated plate. Pier height is measured from the top of the footer or foundation to the top of the cement block stack, including four inch cap blocks.
(e) All piers over fifty-two inches shall be designed by an architect or engineer.

(f) Metal or precast support piers shall be installed on a base or footer of a minimum size of four inch by sixteen inch by sixteen inch solid concrete or other approved material.

(g) Metal or precast support piers shall be restricted to a maximum two inch locking mechanical height adjustment and shall be restricted to a maximum height of not more than twenty-four inches measured from the ground base or footer. This twenty-four inch maximum shall not include the two inch mechanical extension or adjustment. However, center line or perimeter supports are permitted to exceed the twenty-four inch maximum.

(h) The minimum distance between the finished grade under the manufactured home and the bottom of the I-beam shall be twelve inches.

(2) Foundations:

(a) Concrete, precast, sand and gravel pads or foundations shall be a minimum of two thousand five hundred pounds per square inch (PSI).

(b) Plastic pads or foundations shall be tested in the lower fifty percent of each soil class. (1,000-1,500 PSF soil type).
912.24. Installation standards for anchors and tie-downs

The following specifications are standards set for used manufactured homes when manufacturer's installation instructions and specifications are not available:

(1) Anchors:
   (a) All auger anchors shall be a minimum of thirty inches in height.
   (b) All anchors shall be tested to an ultimate load of four thousand seven hundred twenty-five pounds.

(2) Frame ties:
   (a) Used units where the manufacturer's specifications are not available shall be anchored every ten feet in Zone I, eight feet in Zone II, and six feet in Zone III, with anchors placed within two feet of each end.
   (b) Frame ties shall make at least one complete wrap around the chassis or frame and shall be looped from the top of the I-beam to the anchor. However, some frame tie straps may have to extend from the bottom of the I-beam or the I-beam on the opposite side to assure the proper angle due to the height of the home.
   (c) Each frame tie shall be installed to the component manufacturer's instructions.
   (d) All frame ties shall be secured to one of the main steel I-beams that run the length of the home.

(3) Marriage wall or centerline ridge beam column ties, shear wall ties, and frames ties:
   (a) Multiple section homes are to be secured at the centerline with straps or cables to the specifications in the manufacturer's manual or at the locations designated on the home.
   (b) Used multiple section homes shall have anchors installed at all factory-installed anchor strap connections including ridge beam column straps, shear wall straps or attachments, or other locations designated by the manufacturer.

(4) Multiple section homes shall be mechanically fastened every twenty-four inches at the bottom, end walls, and roof. A minimum thirty-gauge, eight-inch-wide, galvanized strip shall be centered over the peak and fastened with galvanized roofing nails at two inches on center at both sides of center line.
912.25. Installation standards for used manufactured homes in hurricane zones

When the manufacturer's printed setup requirements are not available for the applicable wind zone, the following guidelines are to be used:

(3) All designated tie points on the perimeter side walls shall be equipped with vertical and diagonal ties with stabilizer devices. When tie points are not designated on the side walls, vertical and diagonal ties with stabilizer devices shall be spaced a maximum of ten feet for Zone I, eight feet for Zone II, and six feet six inches for Zone III.

(4) Anchors and support piers shall be installed at the center line of each opening over five feet. Support piers shall be installed on each end of the marriage wall and at other locations that may be identified on the marriage wall.

(5) Shear wall interior partition wall which attaches to the side wall and is thirty-six inches or longer shall have vertical ties and support piers installed at each end.