
Joint Committee on Administrative Rules
ADMINISTRATIVE CODE

Section 870.220 Tiedown Installation Requirements

a) Equipment. All manufactured homes installed after July 1, 2005 must be installed with equipment approved by the Department.

b) Ties

1) Cable, strapping or other approved material shall be used for ties.

2) The ties shall connect from an anchor to the closest I-beam beneath the home. Ties shall not connect to steel outriggers, unless specifically stated in the home manufacturer's installation instructions. The angle formed between the tie and the ground shall be between 40 and 50 degrees. If this angle exceeds 50 degrees when the tie is connected to the nearest I-beam, a tie shall connect from an anchor to both I-beams of the unit.

3) Ties shall be evenly spaced on each side of the length of the home with a maximum separation of 12 feet and with the end ties within 2 feet of each end.

4) If steel strapping is used, it must be secured around the I-beam using an approved connecting device. Straps shall go from the anchor to the top of I-beam unless the home manufacturer's instructions indicate otherwise. Care shall be exercised to ensure that minimum bending radius is adhered to, so that the breaking strength of the strapping is not reduced.

5) The ties shall be secured to the I-beam of the home so that they will not become disconnected if the tension is loosened.

6) Ties must terminate with a D-ring, bolt or other tensioning device that will not lower the material strength below that stated in Section 870.200(a).

7) All cable ends shall be secured with at least two utility bolt type clamps or other fastening device.

c) Anchors

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- 1) All anchors must be installed to full depth as specified in the anchor manufacturer's installation instructions.
- 2) Stabilizing devices must be utilized when the load on the ground anchor is not applied in line with the anchor. Provisions shall be made to minimize the deflection or slicing through the soil by the anchor rod at ground level. The method of restricting deflection may be the encasement of the top portion of the anchor in a concrete collar or by the use of a stabilizer plate.
- 3) Ground anchors installed in line with the load of the anchor must be a minimum of 48 inches in length.
- d) Frost Heave. The following measures shall be taken for the specific type of installation in order to prevent frost heave, which can cause damage to a home:
 - 1) If the support system for the home does not extend below the frost depth but the anchors do, the ties shall be adjusted (loosened slightly in the fall and tightened in the spring) to compensate for the tension caused by the earth movement.
 - 2) If the support system for the home extends below the frost depth but the anchoring system does not, the ties shall be tightened in the fall and loosened slightly in the spring.
 - 3) If the anchoring system and the support system for the home both extend below the frost depth or neither extends below the frost depth, no provisions for frost heave are necessary.
- e) Permanent Foundation. Homes installed on a permanent foundation as defined in Section 870.10 are exempted from this Part.