

Subject: Accessory storage shed frost protection and wind anchorage.

In accordance with the Michigan Building Code MBC 1809.5 exception 1b and the Michigan Residential Code MRC R403.1 exception 1; "Freestanding accessory structures with an area of 600 square feet or less, of light frame construction, with an eave height of 10 feet of less shall not be required" ... to have frost protection. As such all freestanding storage sheds meeting the maximum area of 600 sf and maximum eave height of 10' requirements may be placed on grade with no frost protection.

Wind anchorage for a storage shed constructed on treated wood runners supported on grade shall be provided as follows:

- sheds up of 20 feet in length: 4 earth anchors, 2 on each long side Locate a minimum of 12" and a maximum of 24" from each corner
- sheds up to 40 feet in length: 6 earth anchors, 3 on each long side Locate a minimum of 12" and a maximum of 24" from each corner and at the center

Earth anchors shall be one of the following:

- auger type with a minimum 30" shank length and single 4" flutes or
- duck bill type with a minimum 1,000 lbs pull out rating

Sheds shall be secured to each earth anchor with either of the following:

- 1. Anchor strap or cable pre-tensioned snug to limit motion.
 - Each anchor strap shall be attached to a suitable bracket, or loop rated at a working load of 350 pounds, anchored through the exterior wall sheathing and into the floor framing rim joist with a minimum of 1- ½"Ø thru bolt or 2-%"Ø lag screws.
- 2. 1-1/2"Ø HDG lag screw with oversized HDG washer.

The single lag screw shall be anchored through the exterior wall sheathing and into the floor framing rim joist

If you have any questions concerning this information please call this office.

Sincerely,

Mark A. Pressell P.E.