TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS

NOTE

There are various devices approved for the Triangular Slip Base System. Please reference the Material Producer List for approved slip base systems. The devices shall be installed per manufacturers’ recommendations. Installation procedures shall be provided to the Engineer by Contractor.

GENERAL NOTES

1. Slip base shall be permitted to be used for the following slip base systems:
   - 10 MSG Tubing, 0.035" outside diameter
   - 0.125" nominal diameter
   - Seamless or electro-welded steel tubing or pipe
   - Cast iron or asbestos cement pipe

2. Bolted or welded joints shall be permitted to be used for the following slip base systems:
   - 0.125" outside diameter (0.035" wall thickness)
   - Carbon steel or low alloy
   - Cast iron

3. Bolted or welded joints shall be permitted to be used for the following slip base systems:
   - 0.125" outside diameter (0.035" wall thickness)
   - Carbon steel or low alloy
   - Cast iron

4. Bolted or welded joints shall be permitted to be used for the following slip base systems:
   - 0.125" outside diameter (0.035" wall thickness)
   - Carbon steel or low alloy
   - Cast iron

CONCRETE ANCHOR

Concrete anchor consists of 5/8" diameter anchor bolts with high-strength concrete. Anchor bolts shall be provided with cast-iron or steel sleeves. Anchor bolts shall be installed with Type III epoxy or resin adhesive. Epoxy adhesive shall be 0.035" in diameter. Epoxy adhesive shall be applied to the anchors with a minimum of 0.035" in diameter. Epoxy adhesive shall be applied to the anchors with a minimum of 0.035" in diameter.
Universal Anchor System with Thin-Walled Tubing Post

Concrete anchor consists of 5/8" diameter bolt with 1 1/2" penetration depth in the upper end, a heavy hex nut per ASTM A563 and harden washer per ASTM A576, the stud bolt shall have anchorage washers and ultimate tensile strength of 30,000 psi respectively. Nuts, bolts, and washers shall be galvanized per AWS E24.9. "Galingalizing." Top of bolt shall extend at least flush with top of nut when installed, the anchor, when installed in 4000 psi normal-weight concrete with a 5/8" minimum embedment, shall have a minimum ultimate tensile strength of 24,000 psi, respectively. All anchor systems shall have been installed with Type I" special washers and "Galingalizing". Suitable washers and sealants shall be applied per the manufacturer's recommendations.

Wedge Anchor High Density Polyethylene (HDPE) System

**Sign Installation Using a Prefabricated T-Bracket for Thin-Wall Tubing Post**

NOTE

The device shall be installed per manufacturer's recommendations. Installation procedure shall be provided by the Owner to Contractor.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMH(TWT)-08

S: 93-10
M: 001
D: 08

February 2008

WEDGE & UNIVERSAL ANCHOR WITH THIN WALL TUBING POST


---

**GENERAL NOTES**

1. The wedge anchor system and the universal anchor system with thin wall tubing post may be used to support to 10 square feet of sign face or to 10 square feet of sign face and 2 horizontal elements to 2.6 x 0.9 m (8 x 3 ft)

2. The threaded rod, wedges, and plate-locked T-bracket shall be permanently attached to a circular mesh wrapping, which is permanently attached to the concrete slab. Wedges shall be provided with a minimum of 5/8" diameter bolt with a 1 1/2" penetration depth in the upper end, a heavy hex nut per ASTM A563 and harden washer per ASTM A576, the stud bolt shall have anchorage washers and ultimate tensile strength of 30,000 psi respectively. Nuts, bolts, and washers shall be galvanized per AWS E24.9. "Galingalizing." Top of bolt shall extend at least flush with top of nut when installed, the anchor, when installed in 4000 psi normal-weight concrete with a 5/8" minimum embedment, shall have a minimum ultimate tensile strength of 24,000 psi, respectively. All anchor systems shall have been installed with Type I" special washers and "Galingalizing". Suitable washers and sealants shall be applied per the manufacturer's recommendations.

3. The wedge anchor system and the universal anchor system with thin wall tubing post may be used to support to 10 square feet of sign face or to 10 square feet of sign face and 2 horizontal elements to 2.6 x 0.9 m (8 x 3 ft).

4. Materials used for use with thin wall tubing post shall conform to the following specifications:

   - 150 MPa tubing, 13/32" outside diameter (9/16"");
   - 0.100" nominal wall thickness;
   - Stabilizers or other non-conductive washers shall be used:
     - Steel: 0.575" to 0.595" outside diameter should be selected.
     - Aluminum: 0.600" to 0.620" outside diameter should be selected.

5. Guide rails shall be the 21 gauge sheet steel, flush with top of nut when installed, the anchor, when installed in 4000 psi normal-weight concrete with a 5/8" minimum embedment, shall have a minimum ultimate tensile strength of 24,000 psi, respectively. All anchor systems shall have been installed with Type I" special washers and "Galingalizing". Suitable washers and sealants shall be applied per the manufacturer's recommendations.

6. The wedge anchor system and the universal anchor system with thin wall tubing post may be used to support to 10 square feet of sign face or to 10 square feet of sign face and 2 horizontal elements to 2.6 x 0.9 m (8 x 3 ft).