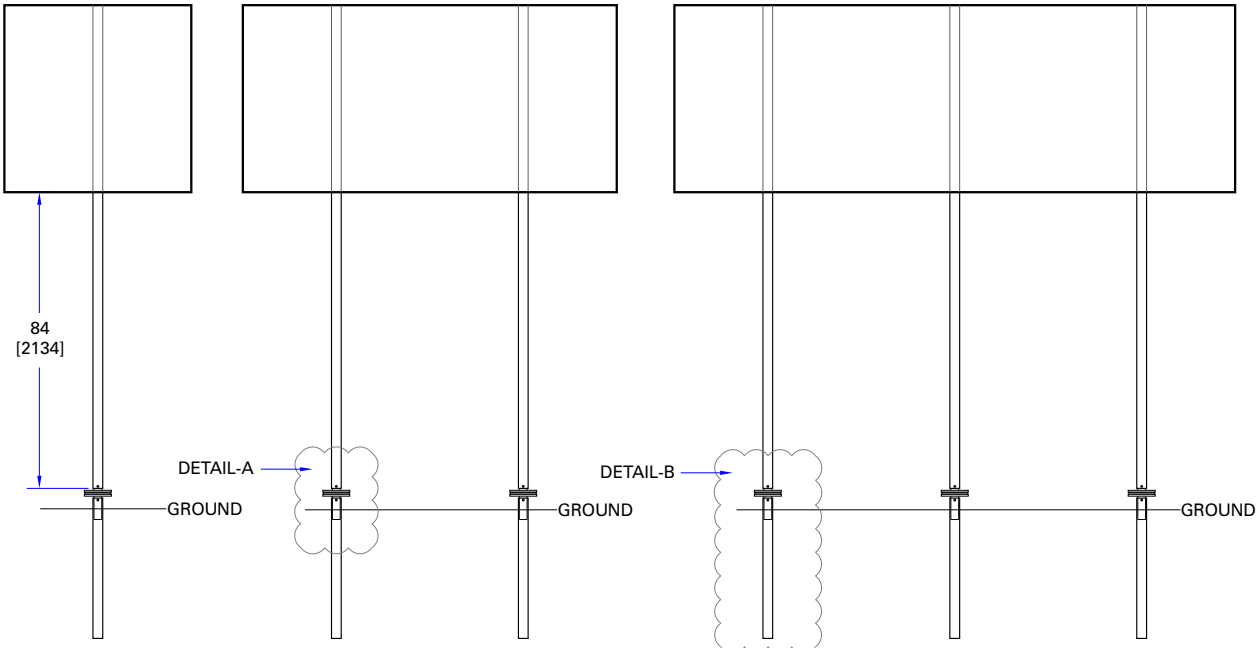
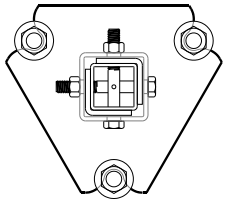
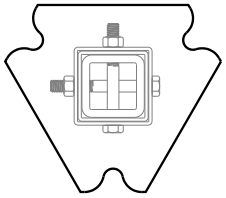



**SSS20a** **SSS20b** **SSS20c**

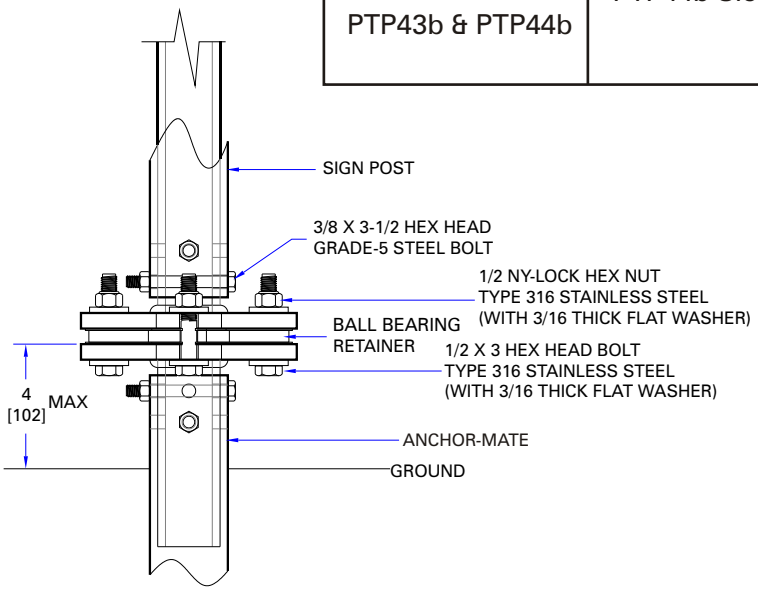


**TOP VIEW**

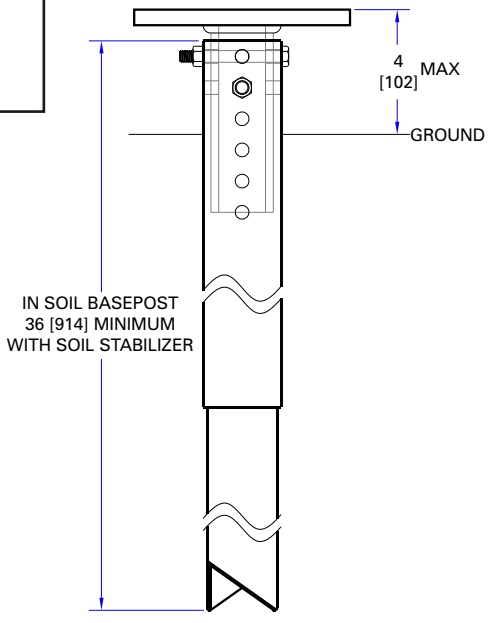
| SIGN POST | ANCHOR-MATE |
|---|---|
| PTP43b | PTP43b Anchor with PTP44b Sleeve |
| PTP43b & PTP44b | |



**TOP VIEW**




**DETAIL-A** SLIPBASE ASSEMBLY




**DETAIL-B** BASE POST

# ULTI-MATE SQUARE TUBE SLIPBASE

Ultimate Highway Products
PRIMUS company

**ULTIMATE HIGHWAY PRODUCTS, INC.**
P.O. BOX 7 - STANTON, CA 90680
800-730-4939 Fax 815-462-9562
Web Page http://uhp-inc.com

SSS20a-c

| SHEET NO. | REF. NO. |
|---|---|
| 1 of 2 | |

## INTENDED USE

The Ulti-Mate breakaway sign support Slip-Mate system is an omni-directional, bolt-on breakaway system used to support square steel tubing sign posts. The Slip-Mate system is designed to allow a traffic sign to breakaway near ground level upon impact by a vehicle. The Slip-Mate system can be used with single (SSS20a), double (SSS20b) or triple (SSS20c) sign post support system in any soil condition.

When installed in weak soil, a soil stabilizer (UM-SS) is required on each Anchor-Mate (bolted or welded). The embedment depth of the Anchor-Mate including the bottom component of the Slip-Mate system will be no higher than 4 in (102 mm) from the ground to avoid any further damage to vehicle upon impact.

The Slip-Mate system conforms to NCHRP 350 standards for breakaway sign supports.

## COMPONENTS

The Ulti-Mate breakaway sign support Slip-Mate system consists of three main components: an Anchor-Mate, an Ulti-Mate square steel sign post and the Slip-Mate system. The Anchor-Mate is constructed from PTP43b anchor and PTP44b sleeve and shall be a minimum of 36 in (914 mm) long and having holes on at least 12 in (305 mm) of its length starting with the first hole measured 0.5 in (12.7 mm) from the top of the Anchor-Mate and continuing at every 1 in (25.4 mm) down center to center. The Ulti-Mate square steel sign post can be PTP43b, PTP44b or both and can be perforated or selected punch in the same manner as of the Anchor-Mate.

The Slip-Mate system is a triangular, three bolt base with three Basic Components: Top coupling, middle ball bearing retainer and bottom coupling with clamping bolts including nuts and flat washers. Top coupling consists of a 2 in (51 mm) square steel tube with 0.25 in (6.35 mm) wall and 18.25 in (463.6 mm) in length welded to a 0.625 in (15.88mm) triangular steel plate. Bottom coupling consists of a 2 in (51 mm) square steel tube with 0.25 in (6.35 mm) wall and 6.25 in (158.8 mm) in length welded to a 0.625 in (15.88mm) triangular steel plate. The top and bottom 2 in (51 mm) steel tubing are structural ASTM A500 Grade B with a minimum yield strength of 46,000 psi (317 MPa).

The top and bottom 0.625 in (15.88mm) thick triangular steel plates are structural ASTM A572 Grade 50 with a minimum yield strength of 50,000 psi (345 Mpa). Both top and bottom couplings are hot dipped galvanized. The middle ball bearing retainer thickness is 0.5 in (12.7 mm). Ball bearings are stainless steel and 0.219 in (5.56 mm) in diameter. The top coupling, ball bearing retainer and bottom couplings are clamped together using three 316 stainless steel bolt with 0.5 in (12.7 mm) diameter and 3 in (76.2 mm) in length with dry lubricant. Steel nuts are 0.5 in (12.7 mm) stainless steel Ny-Lock nut. Flat washers are 0.188 in (4.78 mm) thick.

Clamping bolt torque: 40 lbs-ft (54.23 Nm) maximum.

## REFERENCE

S.I. Sillan, " Acceptable Uses of Perforated Square Steel Tube Sign Post Per Request of Western Highway Products". Geometric and Roadside Design Acceptance letter 62, Federal Highway Administration, June 3, 1996.

## CONTACT INFORMATION

Ultimate Highway Products, Inc
P.O. Box 7 - Stanton, CA 90680
800-730-4939 Fax 815-462-9562
Web Page http://uhp-inc.com

# ULTI-MATE SQUARE TUBE SLIPBASE