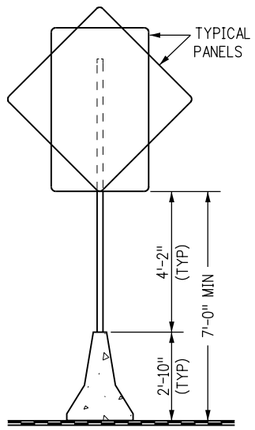


Typical Elevation

POST SELECTION TABLE
(90 MPH WIND LOAD DESIGN)

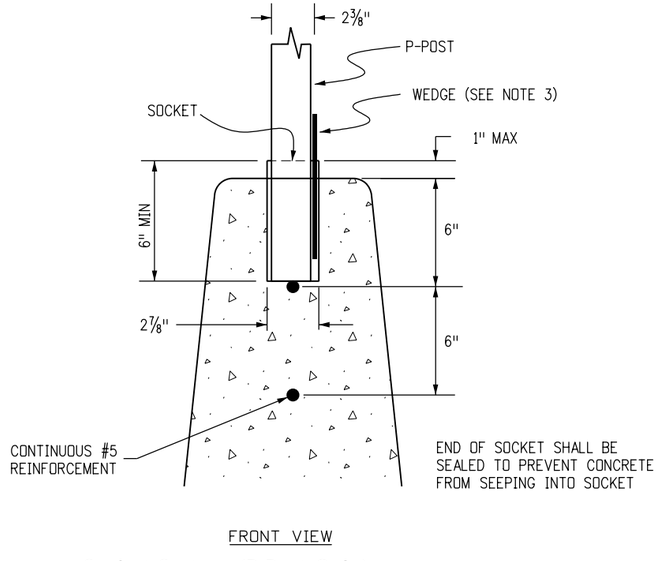
SIGN PANEL HEIGHT \ SIGN PANEL WIDTH	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	5'-0"
1'-6"	P	P	P	P	P	P	P1
2'-0"	P	P	P	P	P	P	P1
2'-6"	P	P	P	P	P1	P1	P1
3'-0"	P	P	P	P	P1	P1	P1
3'-6"	P	P	P1	P1	P1	P1	P1
4'-0"	P	P	P1	P1	P1	P1	P1
5'-0"	P1	P1	P1	P1	P1	P1	P1
6'-0"	P1	P1	P1	P1	P1	P1	P1
7'-0"	P1	P1	P1	P1	P1	P1	P2
8'-0"	P1	P1	P1	P1	P2	P2	P2

DIAMOND PANELS (30", 36" AND 48" SIDES) - P1

POST TYPE	P	P1	P2	FOR DETAILED POST SPECIFICATIONS SEE STANDARD PLAN S-614-8
OUTSIDE DIAMETER	2.375"	2.875"	2.875"	
WALL THICKNESS	0.080"	0.160"	0.276"	

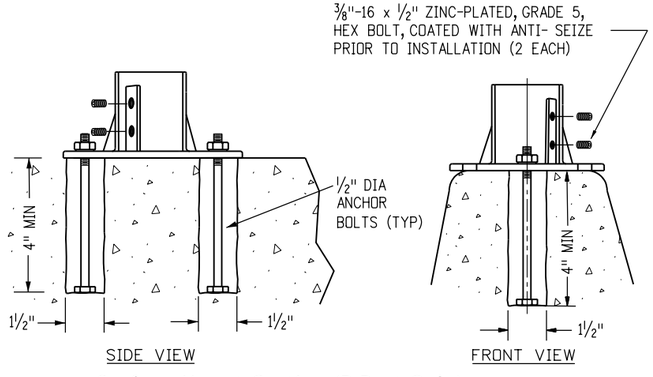
General Notes

1. For details of concrete barrier (cast-in-place and/or precast), see Standard Plans M-606-13, M-606-14, and M-606-15.
2. For sign panel fabrication details, see Standard Plans S-614-2, S-614-3, and S-614-4.
3. Socket systems and slip bases shall be assembled according to Standard Plan S-614-8.
4. Barrier walls shall be supported to prevent deformation during placement of slipbase stub or socket on cast-in-place installations.
5. The Engineer shall establish locations for all sign posts in accordance with details shown on the plans.
6. All sign posts shall be mounted plumb.
7. Bolts, nuts, washers and anchor bolts shall conform to ASTM A307. They shall all be galvanized in accordance with ASTM A153 or ASTM A164.
8. All steel cuts shall preferably be saw cuts; however, flame cutting will be permitted provided all edges are ground.
9. Mounting system for each sign location shall be as shown on the plans.
10. All welding is to be in accordance with AWS Specifications of current issue and shall be continuous.
11. Anchor bolts for retro-fit installation shall be 'Hilti Kwik Hus-ez' screw anchors and shall be drilled and filled with approved epoxy grout in 2 inch holes for ⅞-inch bolts and 1-½ inch holes for ½-inch bolts.
12. Retro-fit installation procedure shall not be used on new construction without approval of the Engineer.
13. Sign panels, mounted on concrete barrier, shall not encroach the travel lane.

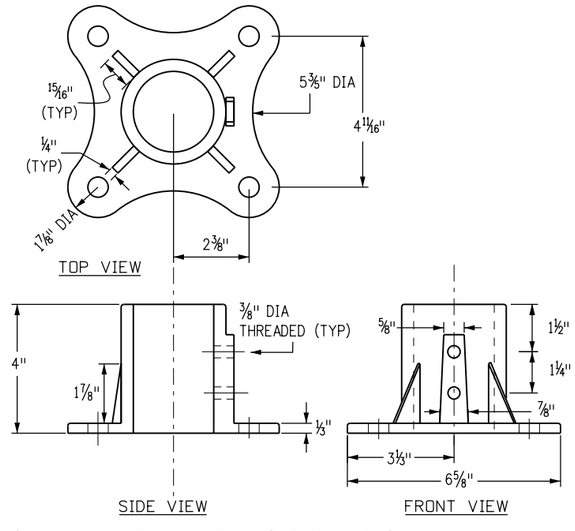


Socket System (P Post Only)

Cast-In-place Concrete Barrier Installation



Surface Mount Casting (P Post Only)



Surface Mount Casting Detail (P Post Only)

Retro-fit Concrete Barrier Installation

Computer File Information		Sheet Revisions	
Creation Date: 07/04/12		Date:	Comments
Created By: Lee			
Last Modification Date: 07/01/26			
Last Modified By: YSP			
CAD Ver.: ORD 10.12 Scale: Not to Scale Units: English			

Colorado Department of Transportation
Traffic Safety & Engineering Services
2829 West Howard Place
Denver, CO 80204
EB

Concrete Barrier Sign Post Installations

Issued by the Traffic Safety & Engineering Services: July 01, 2026

Standard Plan No.
S-614-21
Standard Sheet No. 1 of 2
Project Sheet Number:

Surface Mount Slipbase Tubular Steel Sign Base Requirements

For 2⅞ inch posts (P1 or P2 posts)
For concrete surfaces greater than 7 inches thick
For concrete surfaces greater than 12 inches in width

Mounting Hardware

- 8 - Each ⅝ x 5½ inch long 'Hilti Kwik Hus-Ez' Screw Anchors
- 16 - Each ⅝ inch flat washers
- 8 - Each ⅝ inch lock washers
- 8 - Each ⅝ inch nuts

All hardware will be galvanized or zinc plated.

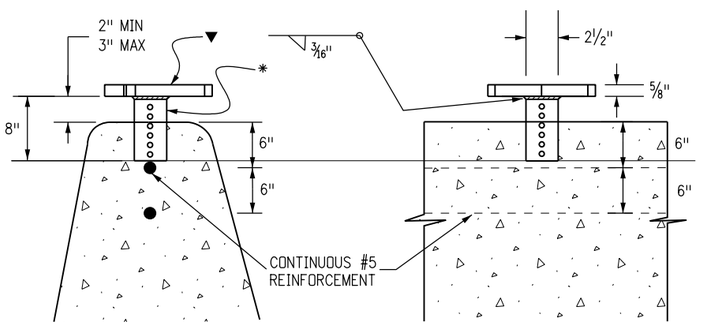
Installation Requirements:

Drill: (8) - ⅝ inch holes 6 inch deep, clean hole prior to installing anchors

Use additional washers for shimming to level base plate.

Surface Mount Slipbase Tubular Steel Sign Base Notes

1. Refer to signing plans for sign locations and height
2. Minumum allowable tension capacity for wedge anchors = 3000 pounds.
3. Maximum allowable moment for sign base = 5.13 kip-feet.

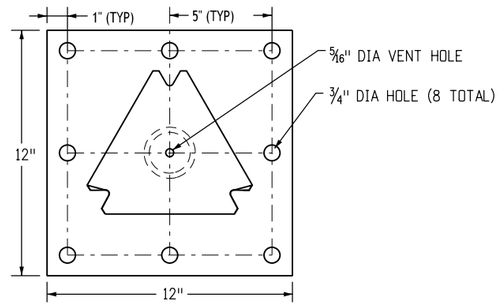


▼ BASE PLATE SHALL BE ⅝" ASTM A-36, 441 OR 572 STEEL PLATE. SEE STANDARD PLAN S-614-8 FOR DIMENSIONS.

* BASE STUB SHALL BE 2½" SQUARE 10 GAGE PERFORATED TUBING, FABRICATED AND GALVANIZED CONFORMING TO ASTM A-153

Slipbase Barrier Stub (P1 & P2 Posts)

Cast-In-Place Barrier Installation



Surface Mount Casting Detail (P1 & P2 Posts)

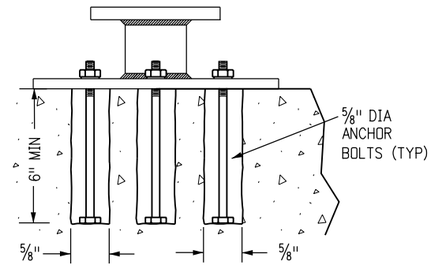
BASE PLATE FABRICATION REQUIREMENTS:

BASE PLATE: ¾ INCH ASTM A 36 PLATE STEEL

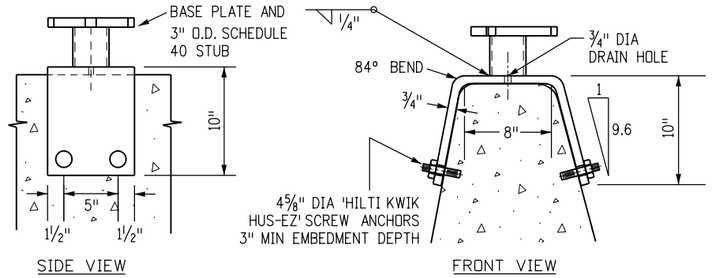
PIPE STUB: 3 INCH NOMINAL SCHEDULE 80, ASTM A 500 GR B

TOP PLATE: MUST BE COMPATIBLE WITH SLIPBASE CASTING FROM STANDARD PLAN NO. S-614-8

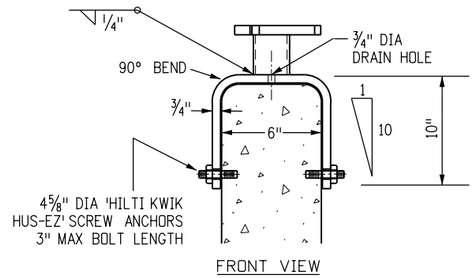
MEET ASTM A 123 GALVANIZING AFTER FABRICATION IS COMPLETED.



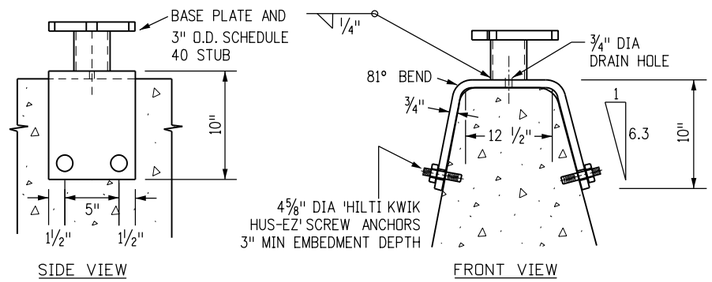
Surface Mount Casting (P1 & P2 Posts)



Type 7 Installation



Concrete Glare Screen Installation



Type 9 Installation

Saddle Bracket (P1 & P2 Posts)

Retro-fit Concrete Barrier Installation

Computer File Information		Sheet Revisions	
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Concrete Barrier Sign Post Installations

Issued by the Traffic Safety & Engineering Services: July 01, 2026

Standard Plan No.
S-614-21
Standard Sheet No. 2 of 2
Project Sheet Number: