DIMENSIONS FOR MOUNTING CLAMP (ALL DIMENSIONS ARE IN INCHES)

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<th>MOUNTING CLAMP SIZE</th>
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T AND U BRACKET ATTACHMENT

1/4" X 2" SELF-CLINCHING MACHINE SCREW SIZED TO ALLOW CLEARANCE NEAR SLAB WITH ONE FINE THREAD AND ONE LOCK WASHER REQUIRED.

PIPE CLAMP CASTING

PIPE CLAMP CASTING SHALL BE ALUMINUM ALL ALUMINUM MATERIAL OR STEEL ALL STEEL MOUNTING CLAMP.

TYPICAL SINGLE BRACKET

TYPICAL BACK TO BACK

SECTION X-X

SECTION Y-Y

MOUNTING CLAMP FOR SOCKET OR SLIPBASE

TUBULAR STEEL SIGN SUPPORT DETAILS

STANDARD PLAN NO. S-614-8

Sheet No. 2 of 7
SURFACE MOUNT SLIPBASE BASE PLATE FABRICATION REQUIREMENTS

- BASE PLATE: 1½ INCH ASTM A 36 PLATE STEEL
- TOP PLATE: 1½ INCH PLATE (AS SHOWN) OR SCHEDULE 10, ASTM A 106, GRADE B
- MEET REQUIREMENTS OF STD PLAN NO. S-64-8, SHEET 3
- BASE PLATE MUST MEET REQUIREMENTS OF STD PLAN NO. S-64-8, SHEET 3
- TOP PLATE MUST MEET REQUIREMENTS OF STD PLAN NO. S-64-8, SHEET 3

SURFACE MOUNT SLIPBASE TUBULAR STEEL SIGN BASE REQUIREMENTS

- FOR CONCRETE SURFACES GREATER THAN 7 INCHES THICK
- FOR CONCRETE SURFACES GREATER THAN 12 INCHES IN WIDTH

- MOUNTING HARDWARE
  - A: EACH ½" x 3½" INCH LONG M5 SET SCREW (5)
  - C: EACH ½" INCH FLAT WASHER
  - D: EACH ½" INCH LOCK WASHER
  - E: EACH ½" INCH NUT
- ALL HARDWARE WILL BE GALVANIZED OR ZINC PLATED.

TUBULAR STEEL SIGN SUPPORT SURFACE MOUNT SLIPBASE NOTES

1. REFER TO SHEET PLAN NO. S-64-8, SHEET 5 FOR SLIPBASE CASTING INFORMATION
2. REFER TO SHEET PLAN NO. S-64-8, SHEET 7 FOR SLIPBASE CASTING INFORMATION
3. MAXIMUM ALLOWABLE DESIGN CAPACITY FOR HOLLOW BLOCK = 2000 LBS
4. MAXIMUM ALLOWABLE DESIGN CAPACITY FOR CONCRETE = 5900 LBS
5. PAY ITEM STEEL SIGN SURFACE MOUNT BASE PLATE (SLIPBASE) MUST INCLUDE BASE PLATE CASTING AND ALL NECESSARY HARDWARE (SLIPBASE CASTING MOUNTING HARDWARE AS SHOWN ON STD S-64-8, SHEET 3 AND SURFACE MOUNT SLIPBASE CASTING MOUNTING HARDWARE AS SHOWN IN STD S-64-8, SHEET 4)
6. PAY ITEM STEEL SIGN SURFACE MOUNT BASE PLATE (SLIPBASE) MUST INCLUDE BASE PLATE AND NECESSARY HARDWARE (SLIPBASE CASTING MOUNTING HARDWARE AS SHOWN ON STD S-64-8, SHEET 4)

SURFACE MOUNT SLIPBASE INSTALLATION

TUBULAR STEEL SIGN SUPPORT DETAILS

- 2029 W. Howard Place
- Denver, Colorado 80205
- Phone: 303-757-6053 Fax: 303-757-8219
- Safety & Traffic Engineering KCM

STANDARD PLAN NO.
S-64-8
Sheet No. 4 of 7
Issued By: Safety & Traffic Engineering Branch July 9, 2012
CLASS I SIGN COMBINATIONS (DIRECT ATTACHMENT)

* SEE NOTE 5 ON SHEET S *

CLASS I SIGN COMBINATIONS USING U-BRACKETS
**GENERAL NOTES**

1. Z-Bar length shall be 3 in. (76 mm). This shall be the minimum panel length for most typical panel combinations.

2. First and last holes shall be 2 in. (51 mm) from edge of Z-Brake.

3. T and U brackets shall terminate 2 in. (51 mm) from edge of panel. When a Zee is connected to a T-bracket, they shall be the same length except when the Zee is offset, in which case the Zee must extend beyond the maximum length of a T-bracket.

4. Two mounting clamps are required on Zees where there is only one Zee for the panel and the Zee is attached to only one post.

5. Zees shall be attached to T-brackets and U-brackets with U-clamps in mounting clamps.

6. Vertical spacing between sign panels shall be 1 in. to 3 in. in typical applications.

7. In special cases, Zee brackets may be used to mount signs that face different directions. The engineer shall determine the orientation of the sign panels and verify that the maximum allowable wind loads for the post are not exceeded.

**TUBULAR STEEL SIGN SUPPORT DETAILS**

Issued By: Safety & Traffic Engineering Branch July 4, 2012

**STANDARD PLAN NO.**

S-614-8

**Sheet No. 6 of 7**
CLASS II SIGN COMBINATIONS USING U-BRACKETS

CLASS II SIGN COMBINATIONS USING TWO POSTS

SEE NOTE 4 ON SHEET 5

NOTE: THIS CONFIGURATION IS PREFERABLE TO USING TWO SEPARATE SIGNS.