

# **APPENDIX 'E'**

## **MTI STANDARDS- GROUND MOUNT SIGN**

**BREAKAWAY DETAILS FOR  
I-BEAM SIGN POSTS  
(WITH SCREW ANCHOR FOUNDATIONS)**

Traffic Engineering

ISSUE DATE: JULY 1999

REVISED: FEB 2000

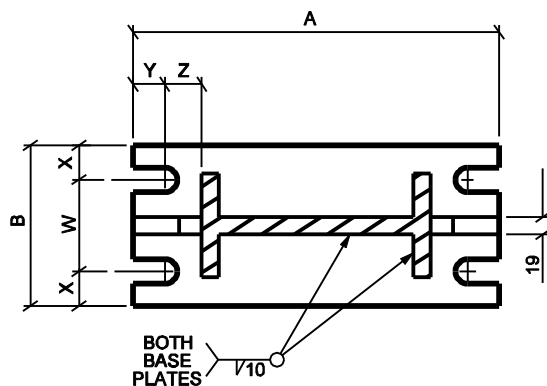
SC-1

Aluminum Post Foundation Data

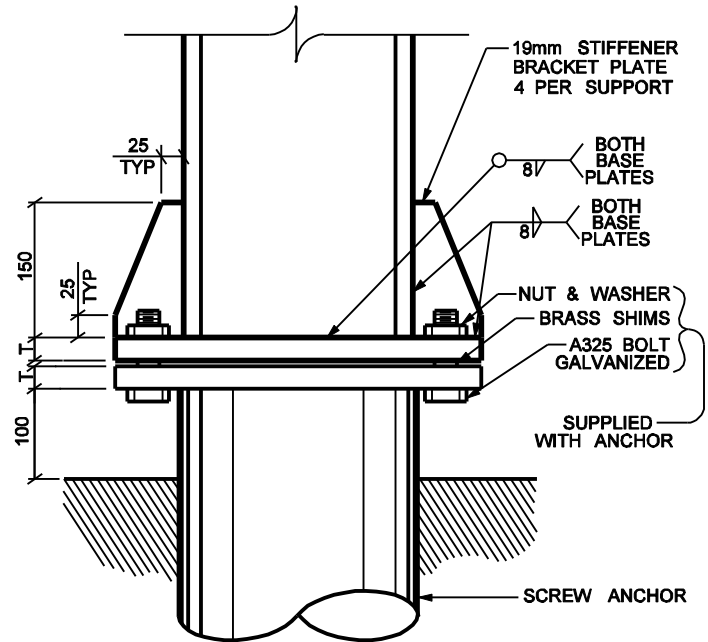
Post Size (mm)	Screw Anchor Colour Code	Hole Diameter (mm)	Bolt Diameter (mm)	Bolt Length (mm)	Bolt Torque (Nxm)	Baseplate Data						
						T (mm)	W (mm)	X (mm)	Y (mm)	Z (mm)	A (mm)	B (mm)
178	*White	21	19	90	500	25	89	32	29	35	305	152
178	Yellow	27	25	90	1200	25	102	38	35	41	406	178
254	Yellow	27	25	90	1200	25	102	38	35	41	406	178
305	Orange	30	29	90	1500	25	144	44	41	48	483	203

\*Not in production

NOTE: Aluminum shall conform to A.S.T.M. specification 6351-T6. (welded members)



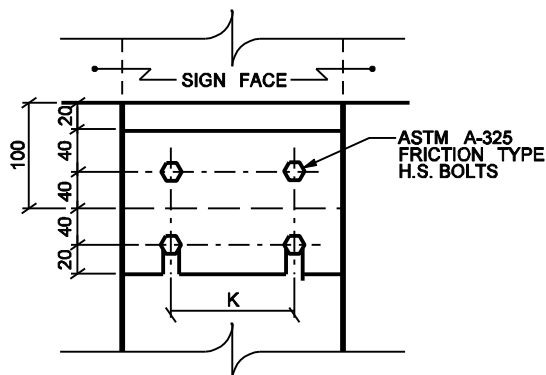
PLAN VIEW



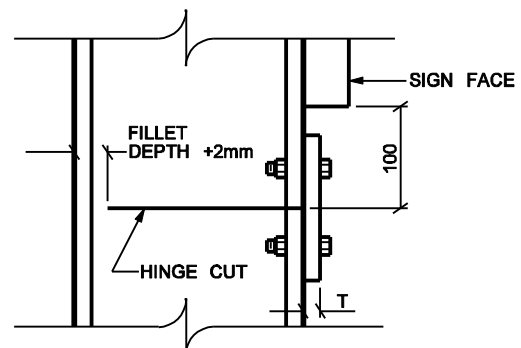
SIDE VIEW

Aluminum Post Hinge Data

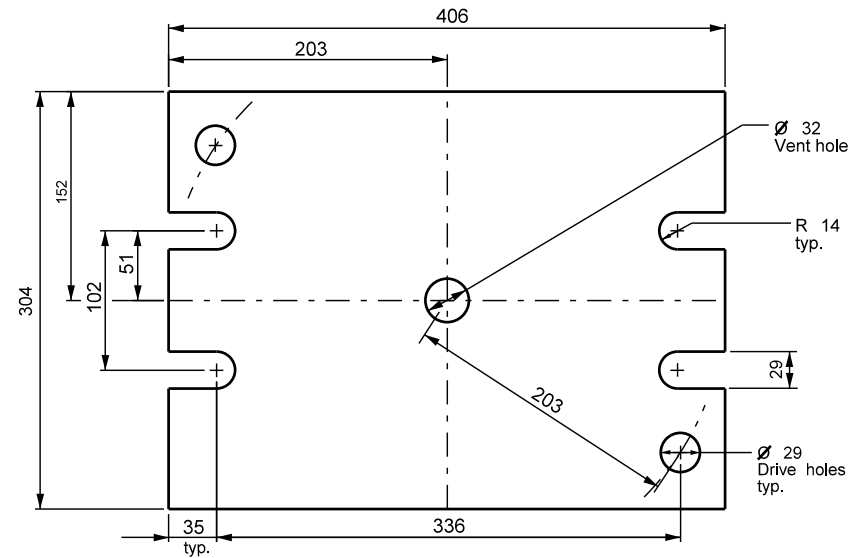
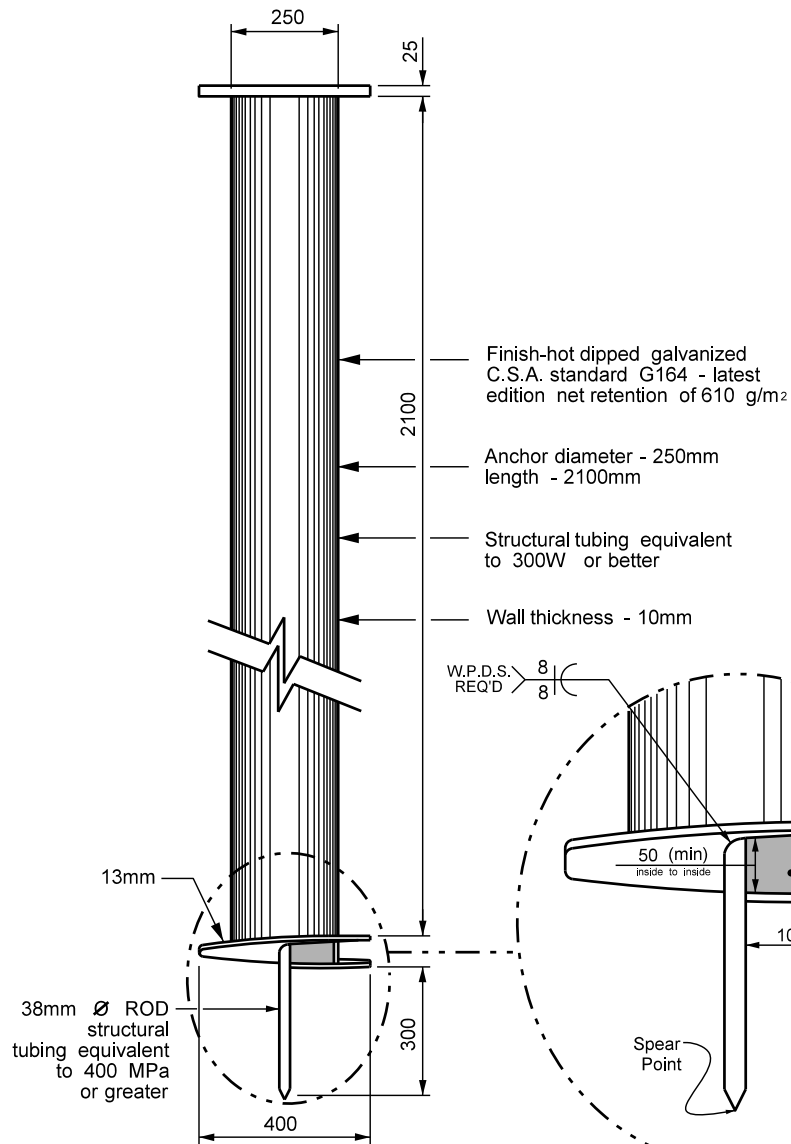
Post Size (mm)	Hole Diameter (mm)	Bolt Diameter (mm)	Bolt Torque (Nxm)	Hinge Data	
				T (mm)	K (mm)
178	18	16	285	10	50
254	18	16	285	10	65
305	22	20	500	11	75



FRONT VIEW



SIDE VIEW



**BASE PLATE  
(PLAN VIEW)**

**NOTES:**

1. Baseplate material H.R.S. - C.S.A. G40.21m-300W (or equivalent) - 25mm thick.
2. Break all corners and sharp edges.
3. All dimensions are in millimeters.
4. Bolts shall conform to ASTM F3125 Grade A325 Type 1 galvanized. Heavy hex nuts shall conform to ASTM A563 grade DH galvanized. Washers shall conform to ASTM F436 Type 1 galvanized.
5. Imperial sized ASTM F3125 Grade A325 bolts may be used in lieu of metric fasteners.
6. Supplied with 4 galvanized A-325 bolt assemblies 28.575mm  $\varnothing$  x 90mm.
7. Paint top of base plate yellow for identification purposes.
8. Drawing not to be scale.

REVISIONS	DESCRIPTION	BY
DATE	DESCRIPTION	BY
03-2007	BOLT & FLIGHT AW SIZES	AW
09-2007	REVISIONS	DC
11-2008	REVISIONS	DC
03-2014	DETAILS ADDED	DC
12-2016	DETAILS ADDED	LB
01-2020	ROD DIA. REVISED	LB

**Manitoba** 

**Transportation and Infrastructure**  
Traffic Engineering

**YELLOW SCREW ANCHOR AND APPLICABLE BASE PLATE  
FOR 178 mm & 254 mm I-BEAM**

ORIGINAL  
APPROVED BY: \_\_\_\_\_

SCALE:	N.T.S.
DATE:	JAN 00
PREP.BY:	DGC
SHEET	1 OF 1
<b>TE-230B</b>	