

COL. SIZE	2x4	2x4	2x4	2x4	2x4	3x4	3x4	3x4	*
FOUNDATION	0x2-0	0x2-0	0x2-0	0x2-3	0x2-3	0x2-6	0x2-6	0x2-6	*
COL. SIZE	2.5 *FT	2.5 *FT	3.0 *FT	4.0 *FT	4.0 *FT	N/A	N/A	N/A	*
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	N/A	N/A	*
COL. SIZE	W-1/2	W-1/2	W-2	W-2 1/2	W-2 1/2	W-2 1/2	W-2 1/2	N/A	*
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	*

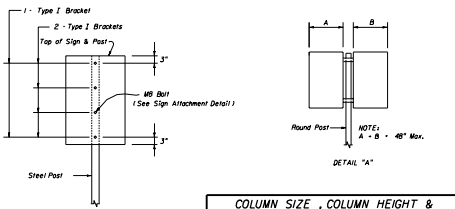
COL. SIZE	2x4	2x4	2x4	2x4	2x4	3x4	3x4	3x4	*
FOUNDATION	0x2-0	0x2-0	0x2-0	0x2-3	0x2-3	0x2-6	0x2-6	0x2-6	*
COL. SIZE	2.5 *FT	2.5 *FT	3.0 *FT	4.0 *FT	4.0 *FT	N/A	N/A	N/A	*
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	N/A	N/A	*
COL. SIZE	W-1/2	W-1/2	W-2	W-2 1/2	W-2 1/2	W-2 1/2	W-2 1/2	N/A	*
FOUNDATION	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	0x3-0	N/A	*

ALUMINUM ROUND POST
STEEL FLANGED CHANNEL POST
STEEL SQUARE TUBE POST

* Aluminum Round Post dimensions are given in inches. The size is shown as outside diameter times wall thickness.
 Steel Flanged Channel Post sizes are given in lb/ft. Section definitions and properties are shown on Sheet 2 of 2. (See OPL for approved posts.)
 Steel Square Tube Post dimensions for "W" are given in inches. The "W" dimension is defined on Section F.1. (See OPL for approved posts.)
 Foundation dimensions shown are given in feet & inches. The dimension shown is the minimum embedment of the driven post.

NOTES

- This Standard Index HBSS provides designs for driven single post sign installations for implementation of all locations within the State of Florida. The designs adhere to the following criteria:
 - Minimum Height - 14' Maximum
 - Sign's Area - 25 sq. ft. Maximum
 - Sign's Width - Single - 36" Maximum
Dual - 48" Maximum (See Detail "A")
 - Driven Post only
- Designs exceeding above criteria or requiring concrete footings are included on Index HB8U thru HB84.
- Specifications for Aluminum materials, Sign Panel Details, etc. are shown on standard Index HB80. Additional information and details are shown on Index HB8U thru HB84. Therefore, work this Standard Index HB85 with Standard Index HB80 to HB84.
- Sign Bracket requirements are shown on Index HB80 and sign WIND ZONES. If Flange Channels or Square Tubes are used, substitute two 3/8" bolts for each Type J Bracket. See Detail "B".
- All posts shall be installed Plumb.
- Steel for Flanged Channel Posts shall conform with ASTM A499 Grade 60, or ASTM A575 Grade 60.
- Steel for fabrication of square Tubes shall conform with ASTM A563 or ASTM A570. HOWEVER, STEEL FROM THE FABRICATED SQUARE TUBES MUST MEET A CERTIFIED MINIMUM YIELD STRENGTH OF 55 TSI.
- Steel Flanged Channel Posts with a 4 lb/ft are non-fragile and shall be installed with approved breakaway (frangible) bases. See Detail "C". The base and the sign posts shall be same size and type and the splice shall be 6" long and fastened with two bolts, 4" apart. The bolts shall be wrench-tightened sufficiently to clamp splice assembly tightly together. Bolts shall conform with ASTM A 304 Grade Dlx or SAE J995 Grade 8. Washers and spacers shall conform with ASTM A307 or A36.
- Steel Flanged Channel Posts with masses of 2.5 lb/ft and 3 lb/ft, all Aluminum Round Posts and all Steel Square Tubes included in this standard are fragile and do not require breakaway (frangible) bases. However, the contractor may mount frangible posts on approved breakaway bases.
- Bolts, Nuts and washers not included in note 8 above, shall conform with ASTM A307.
- Steel Posts shall be selected from the Department's book of Qualified Product List (QPL).
- All steel posts, and hardware shall be galvanized in accordance with ASTM A123 or A153, or AASHTO M81 Grade 2.
- Shop Drawings if the contractor proposes to utilize sign panel connections and/or breakaway devices not shown in this standard or in the above referenced standards, the Contractor shall submit shop drawings for approval.
- All dimensions are in inches, unless otherwise noted.

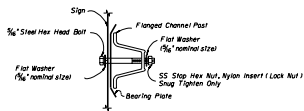
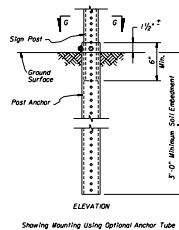
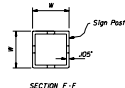
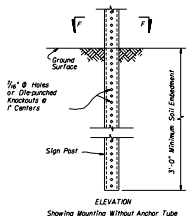
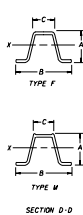
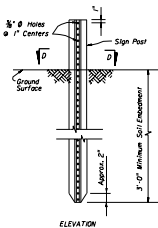


DETAIL "B" (See Note No. 4)
SIGN MOUNTING USING CHANNELS OR SQUARE TUBES

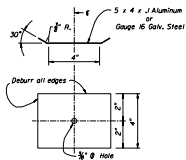
COLUMN SIZE, COLUMN HEIGHT & COLUMN FOOTINGS			
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN			
SINGLE COLUMN GROUND SIGNS			
Designed By	302	4-31	Approved By <i>[Signature]</i> SHEET STRUCTURES DESIGN PROJECT Drawn By 388 4-31 Checked By 353 4-31 00 1 of 2 HB85
Drawn By	388	4-31	
Checked By	353	4-31	
HEIGHT = 14' MAX. (ALL WIND ZONES)			

APPROVED STEEL FLANGED CHANNEL POSTS					
lb/ft*	Type	A (in.)	B (in.)	C (in.)	Sr (in. ²)
2.50	F	1.562	3.025	1.250	.30
2.50	M	1.500	3.063	1.281	.313
3.00	F	1.750	3.500	1.625	.430
3.00	M	1.675	3.500	1.313	.447
4.00	F	1.750	3.500	1.671	.560
4.00	M	1.938	3.500	1.313	.625

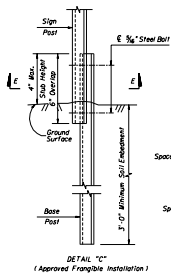
* + 4 Z



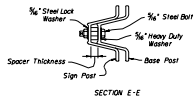
SIGN ATTACHMENT DETAIL



BEARING PLATE DETAIL

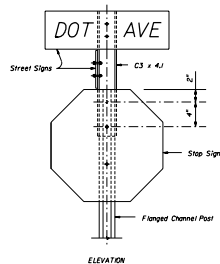


STEEL FLANGED CHANNEL POST DETAILS

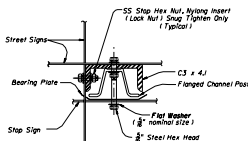


SECTION E-E

Spacer Thickness shall be as follows:
2.5 lb/ft Type M posts shall use 1/4" spacer.
Other posts shall use 3/8" spacer (or two 1/8").

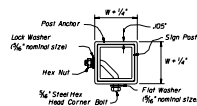


ELEVATION

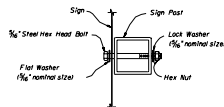


TOP VIEW

SIGN ATTACHMENT DETAIL



SECTION G-G



SIGN ATTACHMENT DETAIL

STEEL SQUARE TUBE POST DETAILS

COLUMN SIZE, COLUMN HEIGHT & COLUMN FOOTINGS			
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN			
SINGLE COLUMN GROUND SIGNS			
Revised By	Date	Approved By	
Designed By	03/28/09	Checked By	03/28/09
Drawn By	07/09	Scale	AS SHOWN
Checked By	03/29/09	Sheet No.	2 of 2

NOTE: All dimensions are in inches, unless otherwise noted.

HEIGHT = 14' MAX.
(ALL WIND ZONES)