

ALUMINUM COLUMN (POST) SELECTION TABLE
(WIND SPEED = 110 MPH)


TOTAL PANEL AREA (SF)	'H' (FT)												
	8	9	10	11	12	13	14	15	16	17	18	19	20
3													
4													
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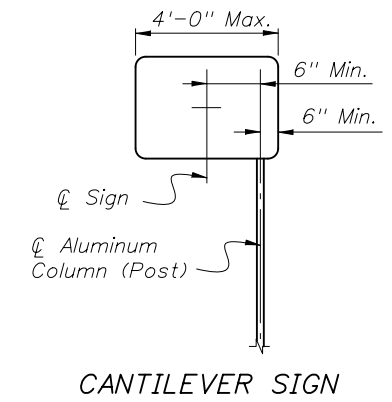
ALUMINUM COLUMN (POST) SELECTION TABLE
(WIND SPEED = 130 MPH)

TOTAL PANEL AREA (SF)	'H' (FT)												
	8	9	10	11	12	13	14	15	16	17	18	19	20
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ALUMINUM COLUMN (POST) SELECTION TABLE
(WIND SPEED = 150 MPH)

TOTAL PANEL AREA (SF)	'H' (FT)												
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 = If CANTILEVER SIGN configuration (see Cantilever Sign Details) falls in this region, use next larger post size than that indicated.

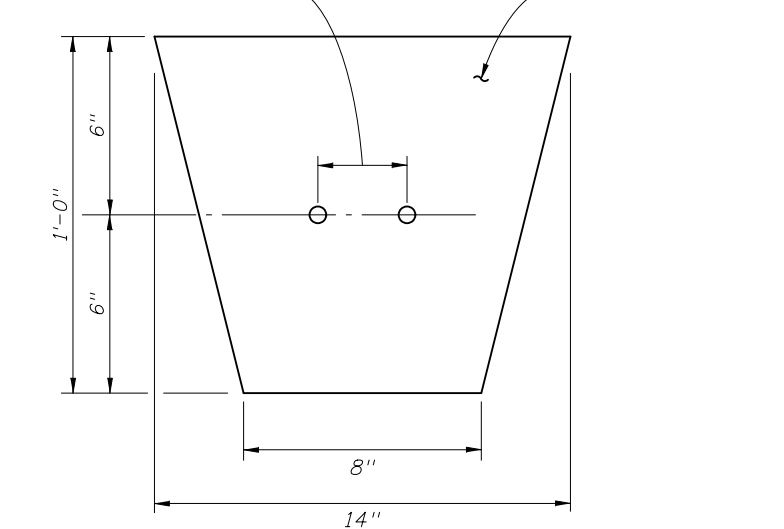


NOTE:
All cantilever sign installations shall comply with Standard Index 17302.

POST AND FOUNDATION TABLE							
Foundation Alternatives							
Post Size	Driven Post *		Concrete (Class I)				
	Diameter (IN)	Wall (IN)	Depth (FT)		Diameter (FT)	Depth (FT)	Stub Length (FT)
			without Soil Plate	with Soil Plate			
0	2.0	1/8	4.5	2.5	2.0	2.0	2.0
1	2.5	1/8	5	3	2.0	2.0	2.0
2	3.0	1/8	5	3.5	2.0	2.5	2.5
3	3.5	3/16	6	4.5	2.0	3.0	3.0
4	4.0	1/4	---	---	2.0	4.0	3.0
5	4.5	1/4	---	---	2.0	4.0	3.0
6	5.0	1/4	---	---	2.0	4.5	3.0
7	6.0	1/4	---	---	2.0	5.0	3.0
8	8.0	5/16	---	---	2.0	5.5	3.0

* INSTALLING FRANGIBLE COLUMN SUPPORTS:
Columns (posts) may be installed by driving the columns in accordance with this Index, or as an alternate method, the columns (posts) may be set to the depth indicated in preformed holes backfilled with suitable material tamped in layers not thicker than 6" to provide adequate compaction or filled with flowable fill or bagged concrete.

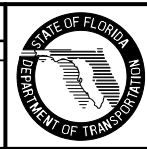
3/16" Ø Bolt Holes (Hole spacing to match U-Bolts) (washers as required)
t Thickness = 1/4"



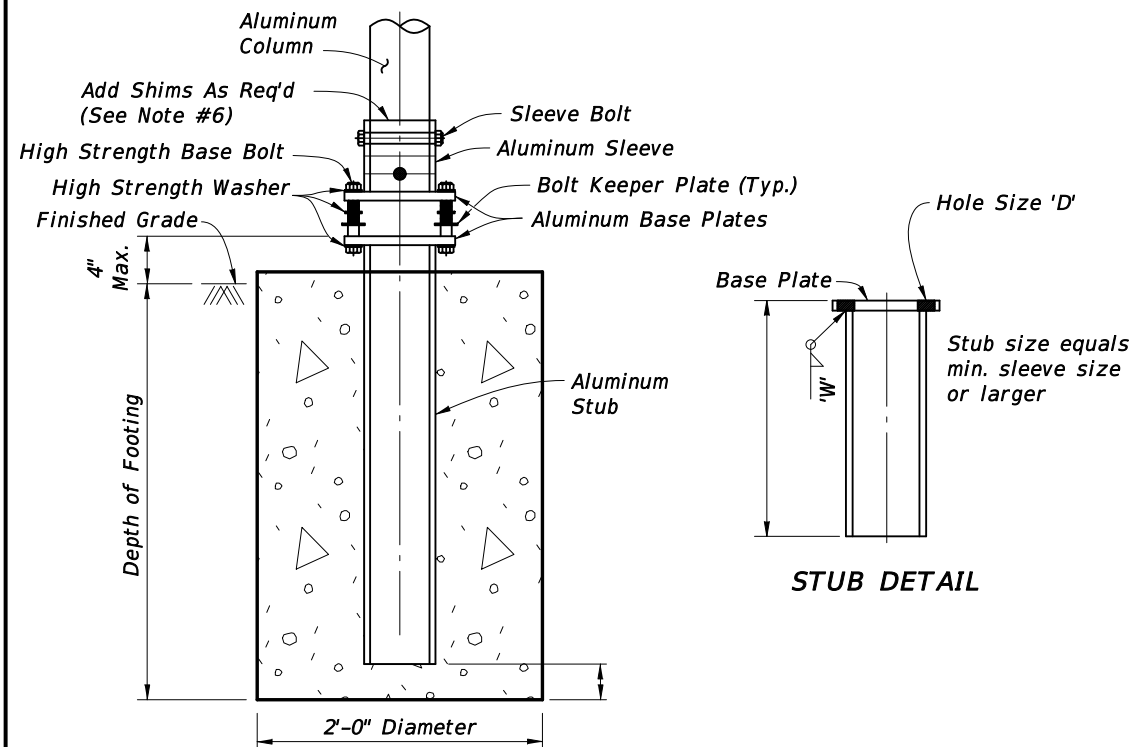
ALUMINUM SOIL PLATE DETAILS

- NOTES:
1. Align Soil Plate bottom at 2/3 of foundation depth.
 2. Slot up to 1" long is allowed to accommodate various post sizes.
 3. Rectangular soil plate of size 1'-2" x 1'-0" may be used as an alternative.

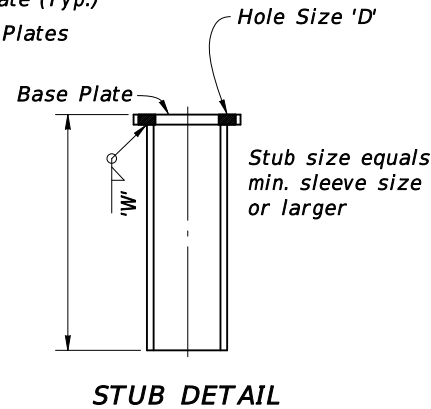
POST AND FOUNDATION TABLES

REVISIONS DATE BY DESCRIPTION 01/01/11 DYW Added Stub Length to POST AND FOUNDATION TABLE and Note 3.						2010 Interim Design Standard SINGLE COLUMN GROUND SIGNS		Interim Date 01/01/11	Sheet No. 3 of 8
Index No. 11860									

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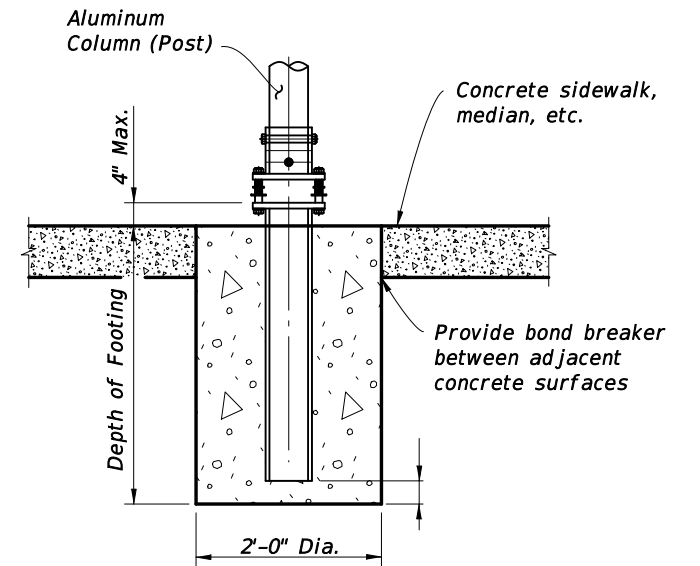
**SLIP BASE AND FOOTING DETAIL
(non-frangible post)**



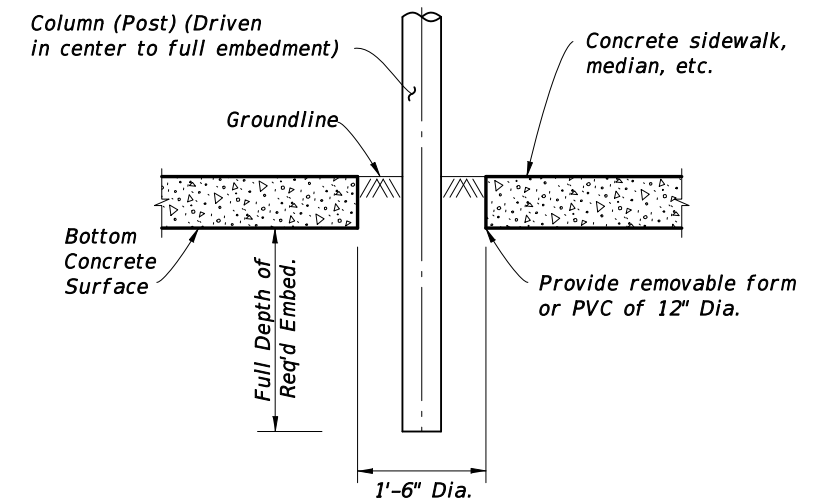
STUB DETAIL

SLIP BASE NOTES:

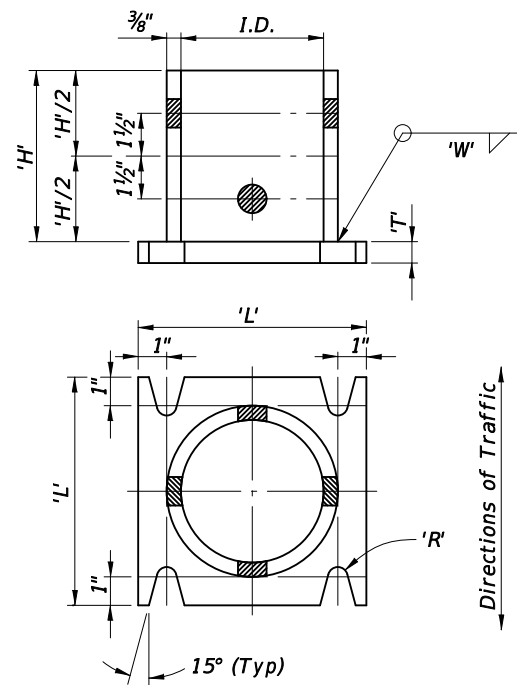
1. Use sleeves with an inside diameter (I.D.) no more than $\frac{1}{16}$ " larger than the outside diameter (O.D.) of the column.
2. Sleeve Bolts: ASTM A-307, $\frac{1}{2}$ " \varnothing galvanized steel bolt (with lock nuts) or Alloy 2024-T4 or 6061-T6 (ASTM B-211).
3. Base bolts, Nuts, and Washers: high strength ASTM A-325 with ASTM B633 SC3, Type II electroplated zinc coating.
4. Base plates may have either single or double beveled slots.
5. An alternate cast base plate of aluminum alloy 356 and T6 temper in lieu of the fabricated base plate may be submitted for approval. If a cast base plate is used, the stub will be the same size as the column and will be bolted to the casting.
6. Assemble the slip base connection in the following manner:
 - a. Connect column to sleeve using two $\frac{1}{2}$ " \varnothing machine bolts.
 - b. Assemble top base plate to stub base plate using high strength bolts with three hardened washers per bolt. One of the three washers per bolt and two bolt keeper plates go between the base plates. Orient the bolt keeper plates in the Directions of Traffic.
 - c. Use shim stock as required to plumb the column.
 - d. Tighten all bolts to the maximum possible with a 12" to 15" wrench. (This will bed the washers and shims and clear the bolt threads.)
 - e. Loosen each bolt one turn and using a calibrated wrench retighten to the prescribed torque (see table) under the supervision of the Project Engineer.
 - f. Burr threads at junction with nut using a center punch to prevent nut loosening.
7. Use galvanized steel shims to obtain a tight fit between the column face and the sleeve. Place shims in all quadrants between the $\frac{1}{2}$ " \varnothing sleeve bolts. Use shims that are 1" shorter than the height of the sleeve.
8. Both f



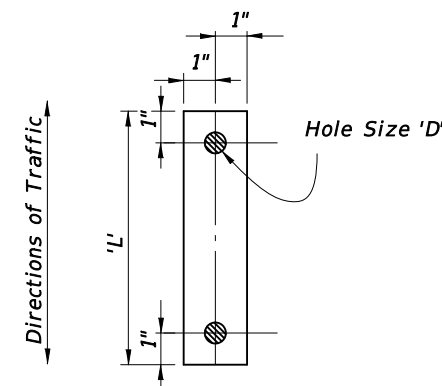
**SLIP BASE AND FOOTING DETAIL IN CONCRETE
(non-frangible post in crossovers, medians, & sidewalks)**



**DRIVEN POST DETAIL IN CONCRETE
(frangible post in crossovers, medians, & sidewalks)**



**ALUMINUM SLEEVE & BASE PLATE DETAILS
(DOUBLE BEVELED SLOTS)**



BOLT KEEPER PLATE DETAIL

SLIP BASE DETAILS

Column Size	Sleeve I.D. (Max)	Sleeve Height 'H'	Weld 'W'	Base Plate		Radius 'R'	Base Bolt Size	Base Bolt Length	Base Plate Torque ft-lbs	Hole Size 'D'	
				'L'	'T'						
4 x 1/4	4 1/16	6	5/8	8	3/4	1 1/32	5/8	3	29	345	1 1/16
4 1/2 x 1/4	4 9/16	6	5/8	8	7/8	1 1/32	5/8	3 1/4	29	345	1 1/16
5 x 1/4	5 1/16	7	5/8	8	7/8	1 1/32	5/8	3 1/4	29	345	1 1/16
6 x 1/4	6 1/16	8	1 1/16	9	1	1 3/32	3/4	3 1/2	46	554	1 3/16
8 x 5/16	8 1/16	10	3/4	11	1	1 5/32	7/8	3 3/4	53	640	1 5/16

Note: Unless noted otherwise, all dimensions are in inches.

BASE AND FOUNDATION DETAILS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/10	DYW	Changed Note 6.b.			
07/01/10	DYW	Added 8" column to SLIP BASE DETAILS table.			

