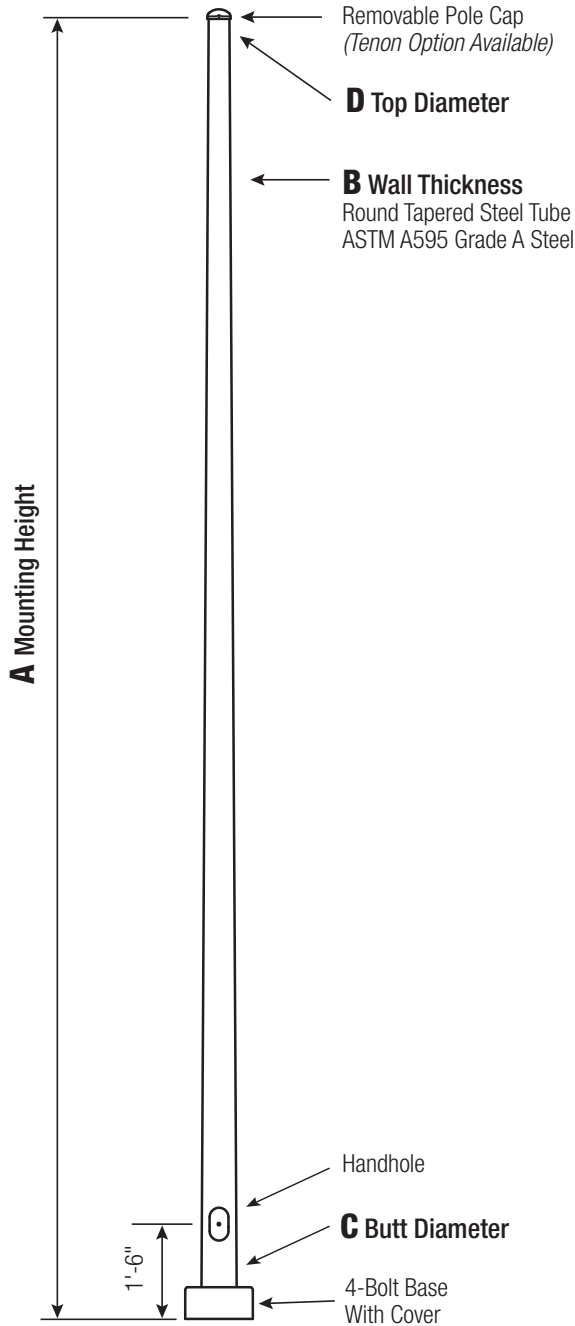


# RTS

## Round Tapered Steel Pole No Arm — 4-Bolt Base



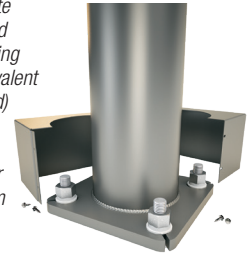
Powder Coated, Galvanized or Powder Coated over Galvanized Finish Per Customer Specification.

### Pole

Pole shaft shall be weldable-grade, hot-rolled, commercial quality carbon steel tubing conforming to ASTM A595 Grade A. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

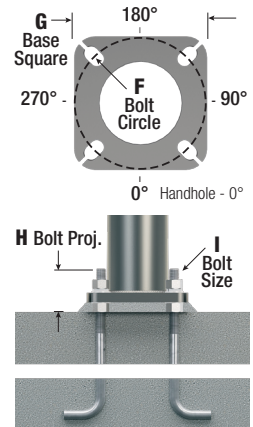
### Base Style

4-Bolt Steel Base Plate of fabricated hot rolled carbon steel conforming to ASTM A36 or equivalent (36 ksi minimum yield) with 2-piece Base Cover and attaching hardware. Base Cover will be fabricated from metal materials.



### Anchorage

Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55. Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain eight (8) Hex Nuts, four (4) Lock Washers, and eight (8) Flat Washers (all components Galvanized Steel). A paper bolt circle template will be provided.



### Handhole

Up To 5.9" Butt Diameters - Reinforced, 3" x 5" Handhole with cover, stainless steel screw and backbar. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.



6"+ Butt Diameters - Reinforced, 4" x 6-1/2" Handhole with cover, stainless steel screw and backbar. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.



### Base Cover

Square metal powder coated Base Covers are standard on all RTS poles.



### Vibration Damper

If determined necessary by Hapco, or if specified by the customer, a first and/or second mode vibration damper will be provided.

C BUTT DIA.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4.5	7.5-8.5	8	3.75	.75 x 17 x 3
5.2	8 - 9	8.5	3.75	.75 x 17 x 3
6.1 - 6.6	9.5 - 10.5	10	3.75	.75 x 30 x 3
6.8	10 - 11	10	3.75	.75 x 30 x 3
7.0* - 7.5	10.5 - 11.5	10.5	4.875	1 x 36 x 4
8.0	11 - 12	11	4.875	1 x 36 x 4
8.5	11.5-12.5	12	4.875	1 x 36 x 4
9.0 (11 Gauge)	12 - 13	12.375	4.875	1 x 36 x 4
9.0 (7 Gauge)	13 - 14	12.75	5.875	1.25 x 48 x 6
10	13.5 - 14.5	13	4.875	1 x 48 x 4
11	15 - 16	14	5.875	1.25 x 48 x 6
12	16 - 17	15.5	6.75	1.5 x 54 x 6

\*Nominal

Dimensions in Inches



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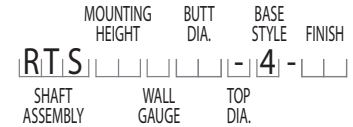
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WARNING: Do not install light pole without luminaire.

A MTG. HGT.	B WALL THK.	C BUTT DIA.	D TOP DIA.	TOTAL LUM. WT.	MAXIMUM EPA							CATALOG NUMBER
					120	130	140	150	160	170	180	
10	11	4.5	3.1	300	25.1	21.1	18.0	15.5	13.5	11.8	10.4	RTS10B45-4-**-
14	11	5.2	3.1	300	24.0	20.1	17.0	14.6	12.6	11.0	9.7	RTS14B52-4-**-
20	11	6.1	3.3	215	21.4	17.8	15.0	12.8	11.0	9.6	8.4	RTS20B61-4-**-
20	11	6.6	3.7	290	23.5	19.6	16.5	14.1	12.2	10.7	9.4	RTS20B66-4-**-
25	11	6.1	2.6	110	15.4	12.6	10.4	8.7	7.3	6.2	5.3	RTS25B61-4-**-
25	11	6.8	3.3	173	17.9	14.6	12.1	10.2	8.6	7.4	6.4	RTS25B68-4-**-
30	11	6.8	2.6	96	13.2	10.6	8.5	6.9	5.7	4.7	3.9	RTS30B68-4-**-
30	11	7.5	3.3	149	18.4	15.1	12.6	10.6	9.0	7.7	6.7	RTS30B75-4-**-
30	11	8	3.8	194	21.5	17.8	14.9	12.7	10.9	9.5	8.3	RTS30B80-4-**-
30	11	8.5	4.3	248	24.5	20.4	17.3	14.9	12.9	11.2	9.8	RTS30B85-4-**-
30	11	9	4.8	300	27.5	23.1	19.7	16.9	14.7	12.8	11.2	RTS30B90-4-**-
30	7	9	4.8	300	45.6	38.5	33.0	28.5	24.8	21.8	19.2	RTS30D90-4-**-
35	11	7.5	2.6	87	13.9	11.3	9.2	7.6	6.3	5.2	4.4	RTS35B75-4-**-
35	11	8	3.1	118	16.4	13.4	11.0	9.1	7.7	6.5	5.6	RTS35B80-4-**-
35	11	8.5	3.6	154	18.8	15.4	12.8	10.8	9.2	7.9	6.8	RTS35B85-4-**-
35	11	9	4.1	197	21.1	17.4	14.6	12.5	10.7	9.3	8.0	RTS35B90-4-**-
35	7	9	4.1	287	35.6	29.8	25.3	21.8	18.9	16.5	14.5	RTS35D90-4-**-
39	11	8	2.5	79	13.0	10.6	8.7	7.0	5.8	4.7	3.9	RTS39B80-4-**-
39	11	9	3.5	138	17.2	14.0	11.5	9.6	8.1	6.9	5.9	RTS39B90-4-**-
39	7	9	3.5	201	29.4	24.5	20.7	17.7	15.3	13.3	11.6	RTS39D90-4-**-
39	11	10	4.5	217	21.6	17.9	15.1	12.8	11.0	9.4	8.1	RTS39B10-4-**-
39	7	11	5.5	300	49.7	42.0	35.8	30.8	26.7	23.3	20.3	RTS39D11-4-**-

### Catalog Number System

The catalog number for Hapco poles utilizes the following identification system.



### Catalog Number Example -

## RTS 25 B 61 - 4 - BA

Round Tapered Steel, 25' Mounting Height, 11 Gauge, 6.1" Butt Diameter, 3.3" Top Diameter, 4-Bolt Base, Black Powder Coat Finish.

### Wall Gauge

B = 11 Gauge  
D = 7 Gauge

### Butt Diameter

3 = 3"  
G = 4.5"

### Top Diameter

Dia. Varies - See Column D.

### Base Style

4 = 4-Bolt Anchor Base

### Finish

BA = Black Powder Coat  
BH = White Powder Coat  
BM = Dark Bronze Powder Coat  
BV = Dark Green Powder Coat  
GC = Gray Powder Coat  
\*\*- = Specify Finish

### Galvanized

1Q = Galvanized Only  
1C = Black PC Over Galv.  
1D = White PC Over Galv.  
1B = D. Bronze PC Over Galv.  
1Y = D. Green PC Over Galv.  
1J = Gray PC Over Galv.  
XX = Special PC Over Galv.\*

\* Provide RAL # or Sample Color Chip

RTS- ROUND TAPERED STEEL POLE

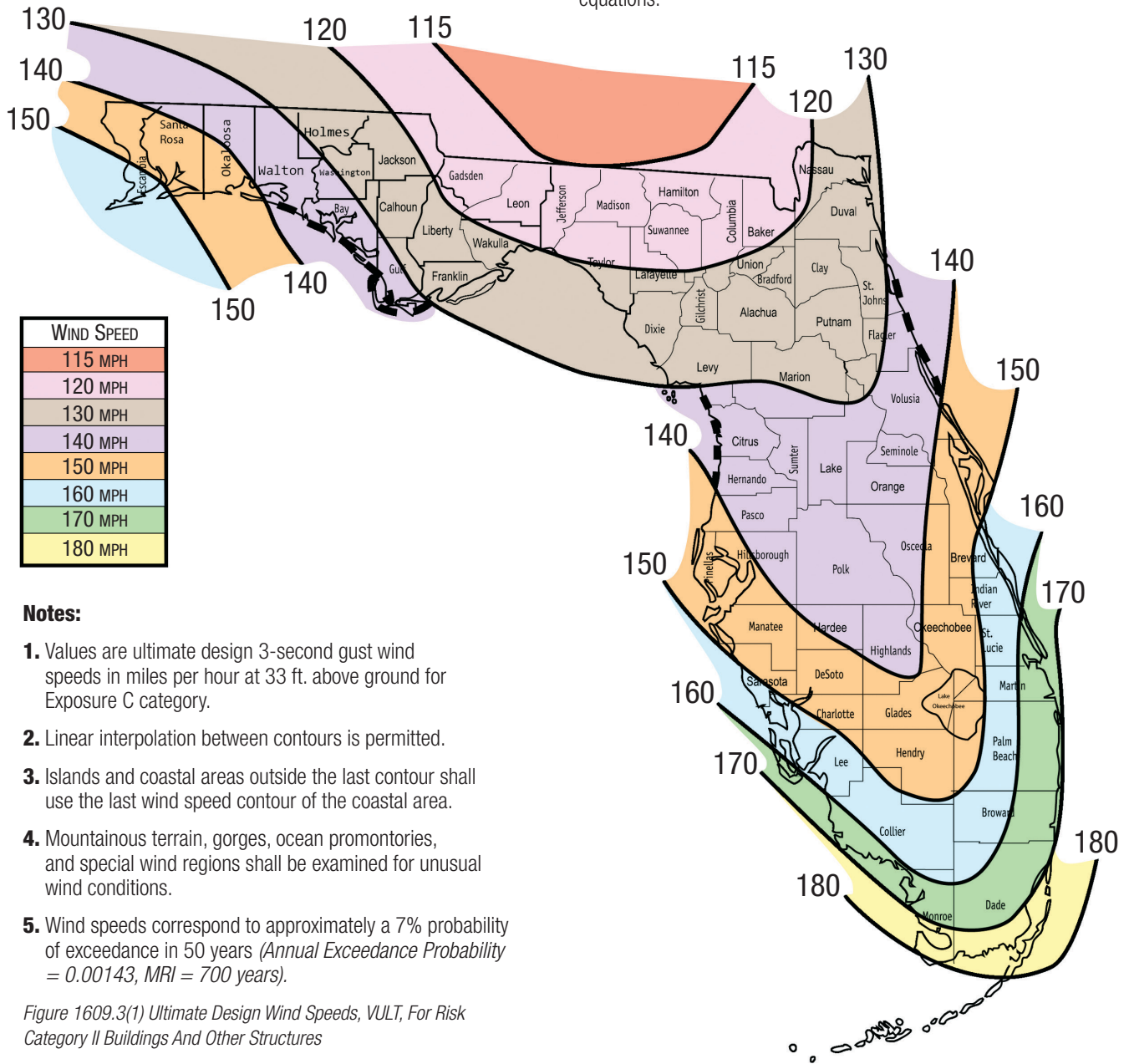
NO ARM

4-BOLT BASE

# This Hapco Florida Building Code Guide has been developed to provide a quick reference for EPAs (Effective Projected Areas) meeting the 2023 FBC.

The EPAs in this publication are based on the 3-second gust wind map taken from the 2023 Florida Building Code (Figure 1609.3(1); Wind map shown below). These EPAs cannot be used with older or newer maps.

This wind map is to be used in conjunction with ASCE 7 Wind Pressure and AASHTO LTS-6 Design Equations. Wind regions from maps other than the one shown below may not represent the EPA values listed in this catalog. Please contact Hapco for more detailed information about EPA equations.



**Notes:**

1. Values are ultimate design 3-second gust wind speeds in miles per hour at 33 ft. above ground for Exposure C category.
2. Linear interpolation between contours is permitted.
3. Islands and coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
4. Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
5. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00143, MRI = 700 years).

Figure 1609.3(1) Ultimate Design Wind Speeds, VULT, For Risk Category II Buildings And Other Structures

**Shielding Factor**

The table shown at right will assist you in calculating the total EPA for many of the popular luminaire configurations. Using the shielding factor to calculate total EPA prevents an over-designed pole being used, resulting in cost savings.

LUMINAIRE CONFIGURATION	EPA	SHIELDING FACTOR	TOTAL EPA
2 @ 180°	1.5	X 2.0	= 3.0
3 @ 180°	1.5	X 3.0	= 4.5
4 @ 180°	1.5	X 4.0	= 6.0
3 @ 120°	1.5	X 2.3	= 3.45 (Shielded)
4 @ 90°	1.5	X 3.2	= 4.8 (Shielded)

Example assumes a single luminaire EPA of 1.5.

ASCE 7 Wind Load Design Assumptions:

- Risk Cat. II, MRI = 700 yrs., Exp. And Surface Roughness Cat. "C"
- $K_{zt} = 1.0, K_d = 1.0, G = 1.14, V_{ASD} = \sqrt{0.6} \cdot V_{ULT}$  (2024 FBC 1609.3.1)
- $C_f$  = Drag Coefficients calculated per AASHTO LTS-6 (ASCE 7-16 C29.4)
- Strength Equations per AASHTO LTS-6 Allowable Stress Increase = 1.33 (ASCE 7-16 C29.4)

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