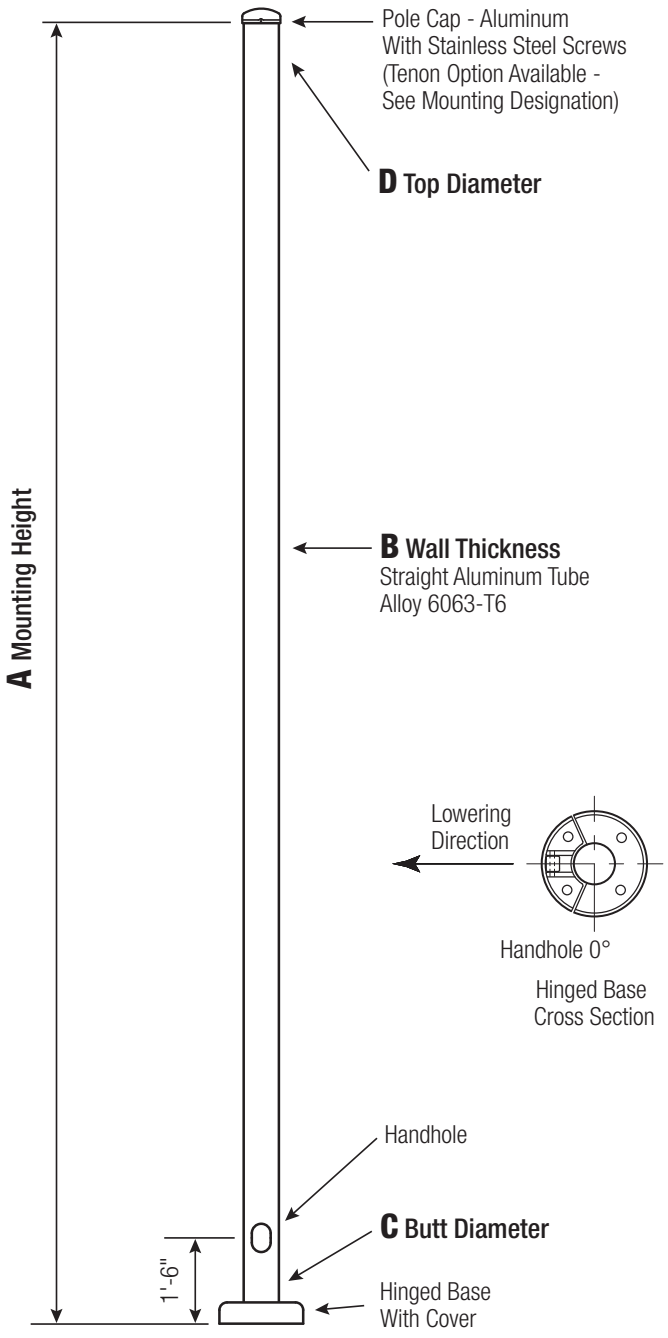
RSA

Round Straight Aluminum Pole
No Arm — Hinged Base



Satin Aluminum or Powder Coated Finish per Customer Specification.

C Butt Dia.	D Top Dia.	F Bolt Cir. Dia.	G Cover Dia.	H Bolt Proj.	I Bolt Size
4	4	7	9.75	2	.75 x 17 x 3
5	5	8.5	11.25	2	.75 x 17 x 3

Dimensions in Inches

Pole

The pole shaft will be constructed of seamless extruded tube of 6063 Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld to produce a T6 temper.

Base Style

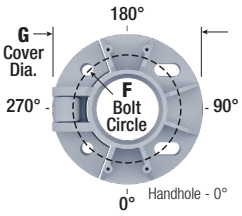
Hinged Cast Aluminum Base Flange of Alloy 356-T6 with 2-Piece Cast Aluminum Base Cover and Stainless Steel Tamper-Resistant Attaching Screws.

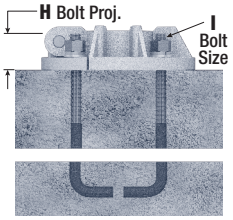
Handhole

2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 11/4"-20NC hole is provided opposite the Handhole.

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 four (4) Hex Nuts, four (4) Lock Washers, and four (4) Flat Washers (all components Galvanized Steel). A bolt circle template will be provided.





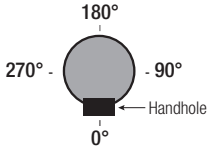
Vibration Damper

When determined necessary by Hapco, a Vibration Damper will be factory-installed inside the pole shaft. Customer specification of the damper is available.

Mounting Designation

Side Drill Mount

For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.



Tenon Mount

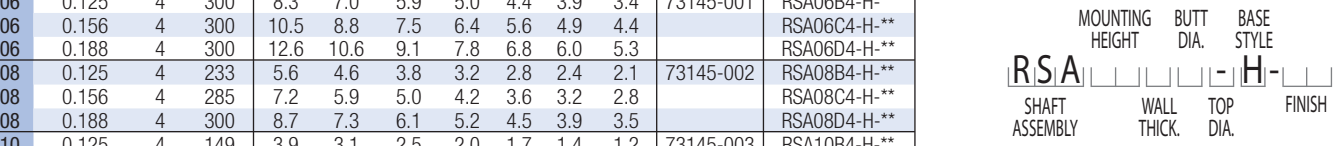
For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.).

WARNING: *Do not install light pole without luminaire.*

A Mtg. Hgt.	B Wall Thickness	C Butt Dia.	Total Lum. Weight	Maximum EPA 120	130	140	150	160	170	180	Old Catalog Number	Catalog Number
06	0.125	4	300	8.3	7.0	5.9	5.0	4.4	3.9	3.4	73145-001	RSA06B4-H-**
06	0.156	4	300	10.5	8.8	7.5	6.4	5.6	4.9	4.4		RSA06C4-H-**
06	0.188	4	300	12.6	10.6	9.1	7.8	6.8	6.0	5.3		RSA06D4-H-**
08	0.125	4	233	5.6	4.6	3.8	3.2	2.8	2.4	2.1	73145-002	RSA08B4-H-**
08	0.156	4	285	7.2	5.9	5.0	4.2	3.6	3.2	2.8		RSA08C4-H-**
08	0.188	4	300	8.7	7.3	6.1	5.2	4.5	3.9	3.5		RSA08D4-H-**
10	0.125	4	149	3.9	3.1	2.5	2.0	1.7	1.4	1.2	73145-003	RSA10B4-H-**
10	0.156	4	182	5.2	4.2	3.4	2.8	2.4	2.0	1.8		RSA10C4-H-**
10	0.188	4	214	6.4	5.2	4.3	3.5	3.0	2.6	2.3		RSA10D4-H-**
10	0.125	5	300	9.0	7.6	6.4	5.5	4.8	4.2	3.7		RSA10B5-H-**
10	0.156	5	300	11.6	9.8	8.4	7.2	6.3	5.5	4.9		RSA10C5-H-**
12	0.125	4	103	2.7	2.0	1.5	1.0	0.8	0.7	-	73145-004	RSA12B4-H-**
12	0.156	4	126	3.7	2.8	2.2	1.7	1.4	1.2	1.0		RSA12C4-H-**
12	0.188	4	148	4.7	3.7	2.9	2.3	1.9	1.7	1.4		RSA12D4-H-**
12	0.125	5	208	6.7	5.6	4.7	4.0	3.5	3.0	2.6	73145-006	RSA12B5-H-**
12	0.156	5	254	8.8	7.4	6.3	5.4	4.6	4.0	3.5		RSA12C5-H-**
14	0.125	4	76	1.6	1.1	0.6	-	-	-	-	73145-005	RSA14B4-H-**
14	0.156	4	92	2.5	1.8	1.2	0.8	0.6	-	-		RSA14C4-H-**
14	0.188	4	109	3.3	2.5	1.9	1.3	1.1	0.9	0.7		RSA14D4-H-**
14	0.125	5	152	5.0	4.1	3.4	2.8	2.4	2.1	1.8	73145-007	RSA14B5-H-**
14	0.156	5	186	6.7	5.6	4.7	4.0	3.4	2.9	2.6		RSA14C5-H-**
16	0.156	4	71	1.5	0.9	-	-	-	-	-		RSA16C4-H-**
16	0.188	4	83	2.2	1.5	1.0	-	-	-	-		RSA16D4-H-**
16	0.125	5	116	3.5	2.8	2.3	1.8	1.5	1.3	1.0	73145-008	RSA16B5-H-**
16	0.156	5	142	5.0	4.1	3.4	2.8	2.4	2.0	1.7		RSA16C5-H-**
18	0.125	5	92	2.2	1.7	1.3	1.0	0.7	0.6	-	73145-009	RSA18B5-H-**
18	0.156	5	112	3.5	2.8	2.2	1.8	1.5	1.2	1.0		RSA18C5-H-**
20	0.125	5	74	1.1	0.7	-	-	-	-	-	73145-010	RSA20B5-H-**
20	0.156	5	91	2.2	1.7	1.3	1.0	0.7	-	-		RSA20C5-H-**

Catalog Number System

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



Catalog Number Example -

RSA 20 C 5 - H – 01

Round Straight Aluminum, 20' Mounting Height, .156" Wall Thickness, 5" Butt Diameter, No Taper, Hinged Base, Satin Aluminum Finish.

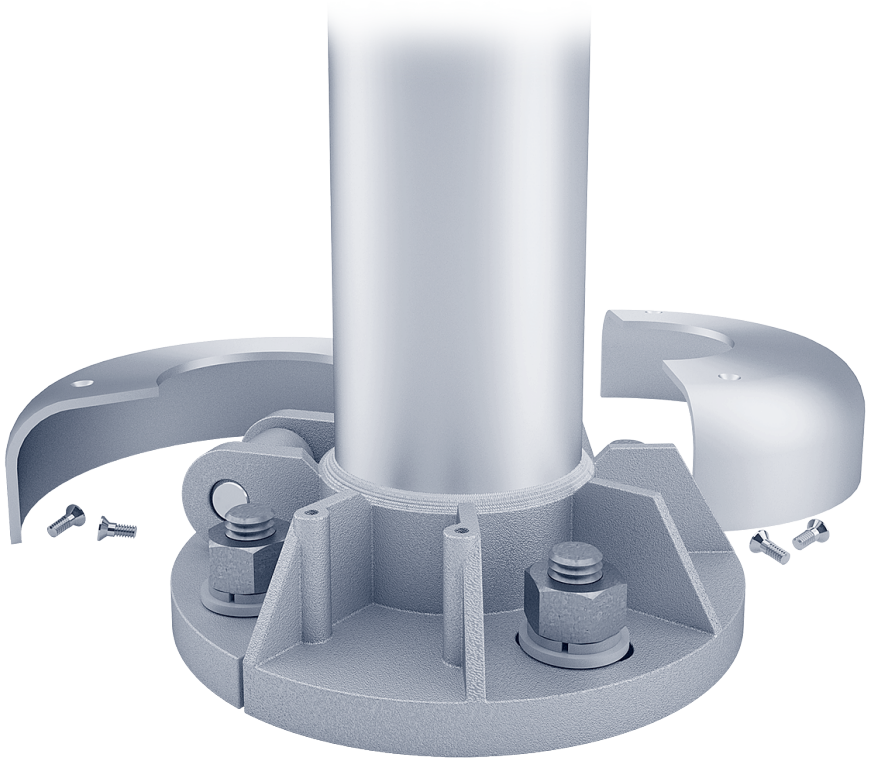
Wall Thickness
B = .125"
C = .156"
D = .188"

Butt Diameter
4 = 4"
5 = 5"

Top Diameter
- = No Taper

Base Style
H = Hinged Base

Finish
01 = Satin Aluminum
BA = Black Powder Coat
BH = White Powder Coat
BM = Dark Bronze Powder Coat
BV = Dark Green Powder Coat
GC = Gray Powder Coat
** = Specify Finish



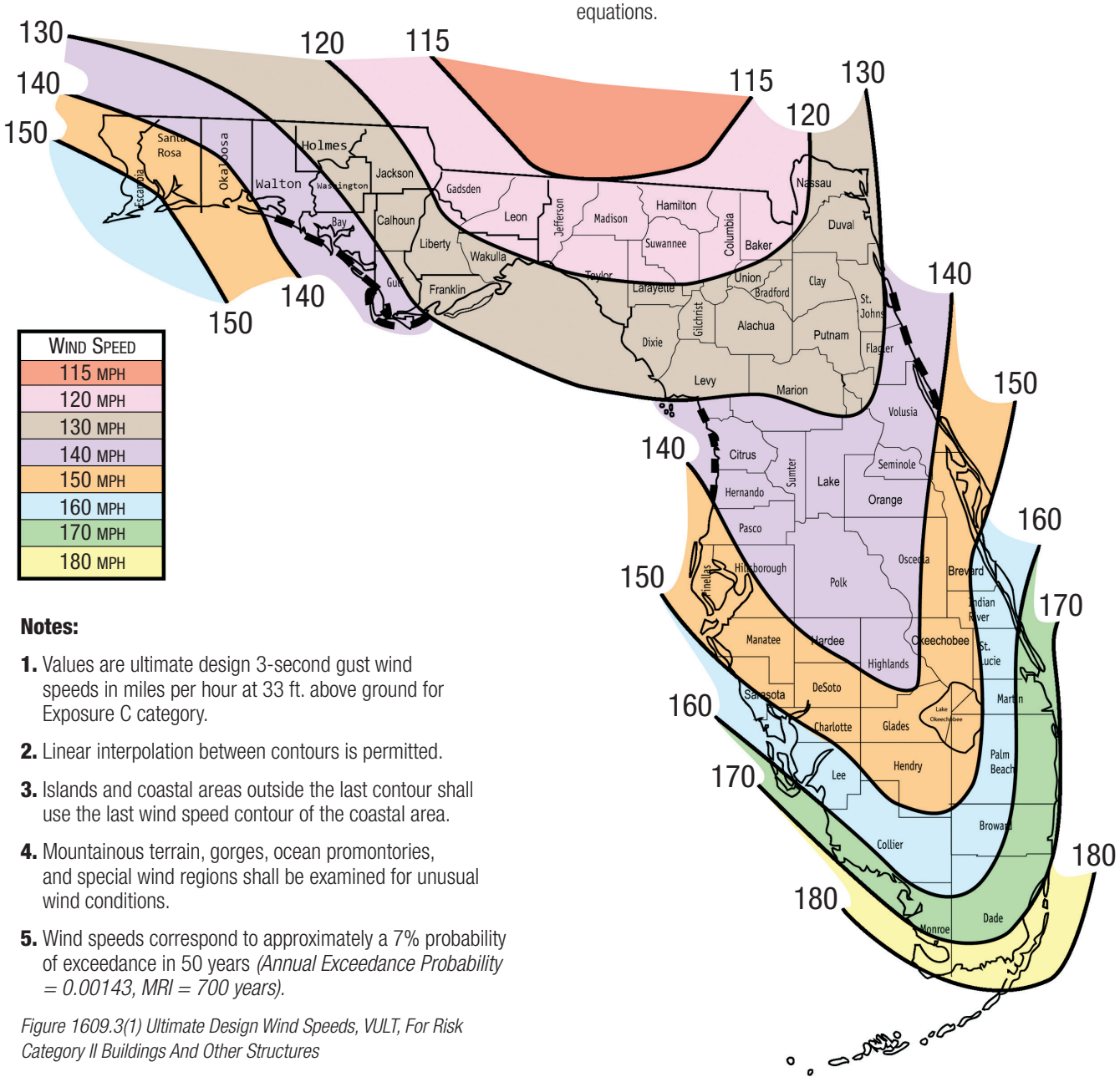
EPA Note:
EPAs based on side mounted fixture(s) not exceeding the height of the pole.

Florida Building Code Guide
2023 FBC EPA's

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"
- $K_{zt} = 1.0$, $K_d = 1.0$, $G = 1.14$, $V_{ASD} = \sqrt{0.6}*V_{ULT}$ *(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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