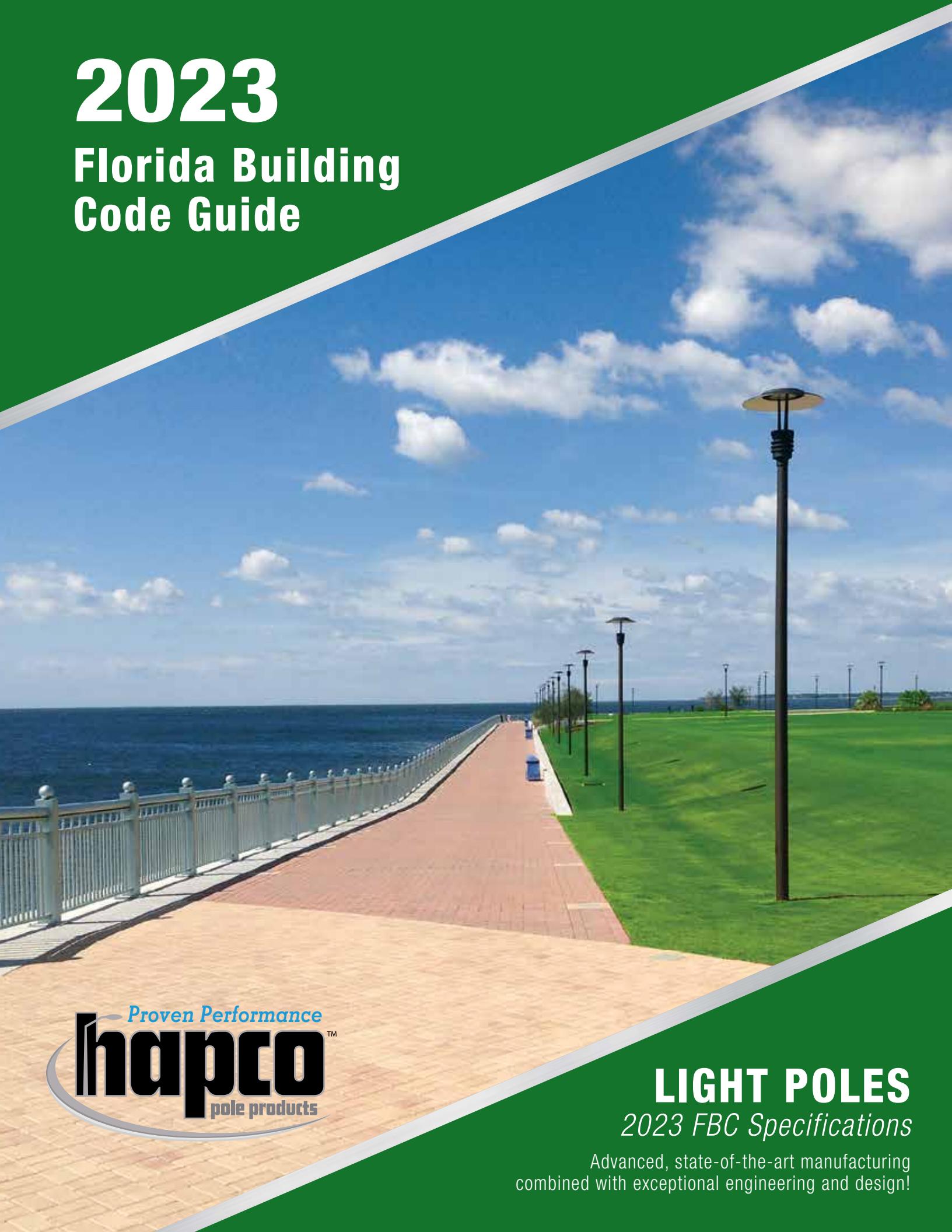


2023

Florida Building Code Guide



LIGHT POLES
2023 FBC Specifications

Advanced, state-of-the-art manufacturing
combined with exceptional engineering and design!

A 70+ year history of providing quality pole products to Lighting Professionals worldwide.



With an industry-recognized reputation for excellence in Engineering, Research and Development, and Manufacturing, Hapco is proud of our long history of producing the highest quality products for the Commercial, Utility, Municipality, and DOT lighting markets.



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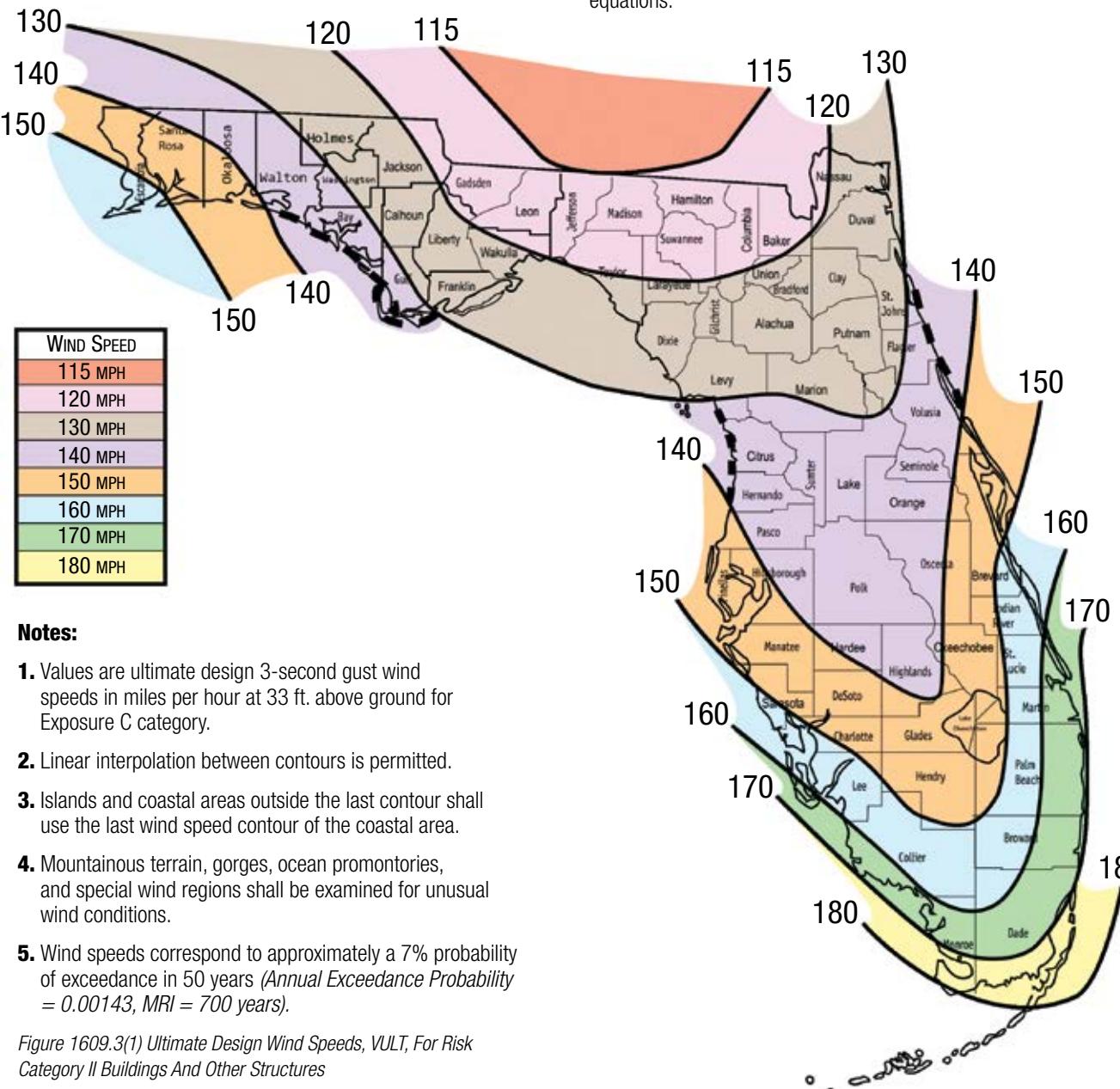


For Hapco Terms and Conditions of Sale, visit
<http://www.Hapco.com/resources/terms-and-conditions/>

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.



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"
- $K_{st} = 1.0$, $K_d = 1.0$, $G = 1.14$, $V_{ASD} = \sqrt{0.6} * V_{LT}$ (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)

FLORIDA BUILDING CODE GUIDE 2023 FBC EPA's

Advantages of Aluminum Poles

Why Aluminum?

The superior properties of aluminum make it both the perfect choice and best value for outdoor lighting poles and brackets.

Corrosion Resistant

On contact with air, aluminum forms a protective layer of aluminum oxide that guards against corrosion. This natural resistance to corrosion ensures that your aluminum lighting pole will resist the ravages of time, temperature and humidity while providing years of low maintenance care.

Lightweight

Aluminum provides the perfect combination of lightweight material with high strength-to-weight ratios. At one-third the weight of steel, aluminum poles are much easier to handle and install, providing substantial installation savings in both labor and equipment.

Proven Performance

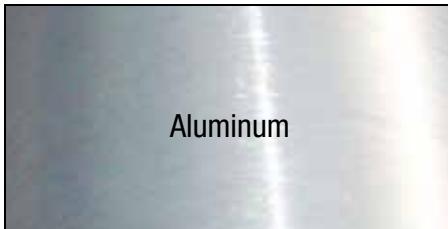
Hapco has been manufacturing quality Aluminum Pole Products for more than 60 years, with many of the original installations still in service with no structural issues or noticeable differences in appearance. The longevity and durability of our products can be validated with our industry-leading **Lifetime Warranty** on aluminum pole assemblies (see Page 5).

Lower Overall Cost of Ownership

The properties of aluminum make it a tremendous value when the overall cost of ownership is considered. Higher installation and maintenance costs for aluminum alternatives, combined with guaranteed replacement costs of shorter lifecycle materials, contribute to aluminum having the lowest cost of ownership of any lighting pole option.

The “Green” Choice

Aluminum provides an environmentally responsible choice of material and approach within the burgeoning green movement. Aluminum is the most abundant mineral in the earth's crust, reduces material replacement energy by its incredibly long life cycle, and is 100% recyclable.



Aluminum



Steel

Composite

Concrete



Venetian Causeway
Miami, FL
Installed Circa 1951



The Aluminum Advantage

When compared to alternative materials, the advantages of aluminum are substantial.

Steel

- Steel is not corrosion resistant and will begin to deteriorate as soon as it is installed, allowing visible rust and corrosion which lead to higher maintenance costs.
- Inherently shorter lifecycles contribute to an overall higher cost of ownership when compared to aluminum.
- Weighs three times as much as aluminum.
- Limited recycle value.
- Should not be Direct Buried.

Composite

- Composite poles are affected by ultraviolet fading and fiber blooming, quickly leading to poor aesthetics in many environments.
- Can be damaged by mowing or trimming. Round aluminum poles are heat treated after base weld to a full T6 temper, giving superior resistance to cuts and abrasions from trimmer and mowers.
- No recycle value, making them difficult and expensive to dispose of in case of pole knockdowns.
- Expensive maintenance costs associated with repainting and replacement.
- Excessive deflection of the top of poles with many arm/luminaire combinations.
- Limited breakaway designs.

Concrete

- Concrete is much heavier than Aluminum, resulting in significantly higher shipping and labor costs.
- Product Weight Comparison -
 - 25' Mounting Height
Aluminum pole = 140 lbs.
Concrete Pole = 1100 lbs.
- Slower, less efficient installations translate into extended job completion times.
- Difficult to install, requiring expensive installation equipment and larger installation crews.
- No breakaway performance, making concrete more hazardous in regards to highway safety than other pole materials.
- Susceptible to spalling (crumbling), staining and fading.
- No recycle value.

Lifetime Aluminum Pole Assembly Warranty

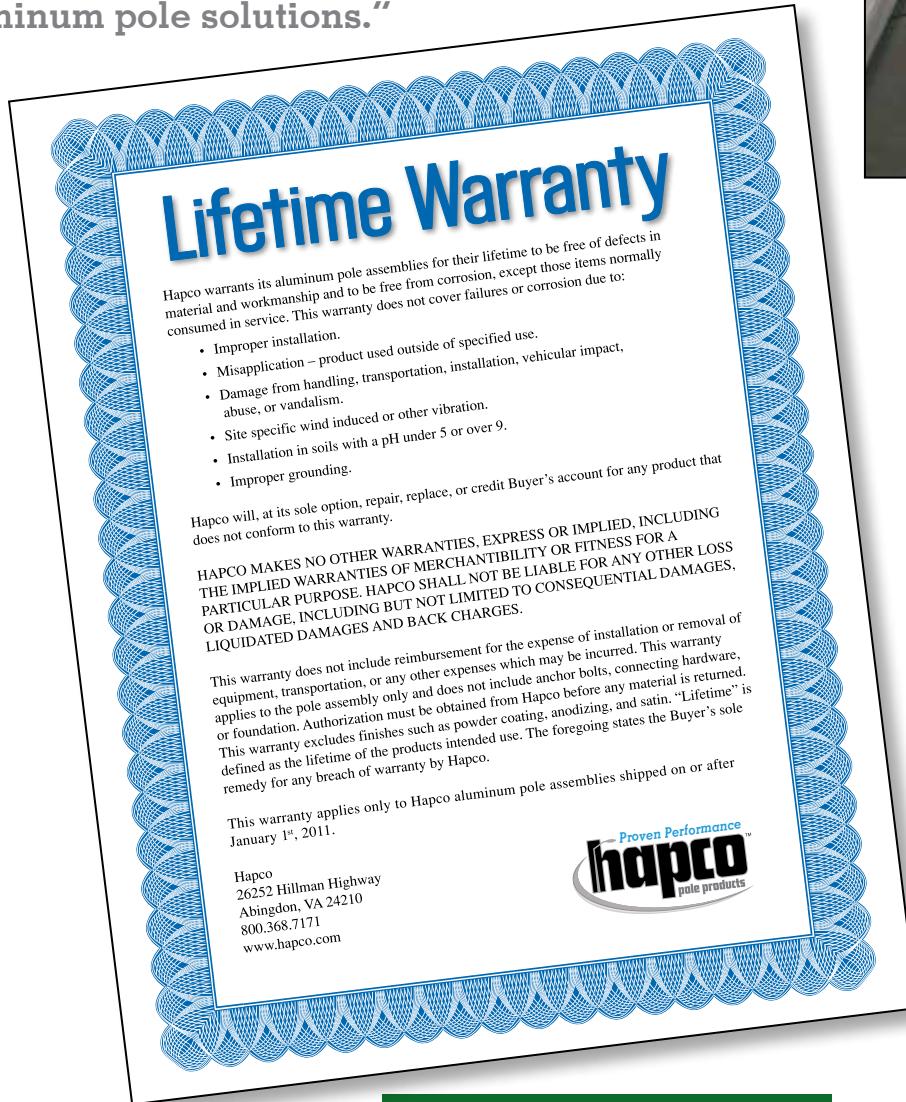
Lifetime Quality...Guaranteed

At Hapco, it is our mission to create lasting customer relationships by providing the very best quality products. We do this by combining the most advanced, industry-leading manufacturing technologies with exceptional engineering and design.

Because we stand behind our products and truly believe in their longevity and durability, our aluminum pole assemblies are covered by a Lifetime Warranty.



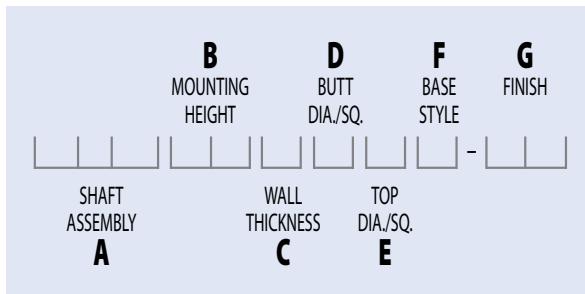
"As a leader in the manufacture of aluminum lighting poles for more than 70 years, we are proud to be the first in the metal pole industry to offer this guarantee. We have the facilities, the products, the people, the experience and the desire to become and stay your FIRST choice for aluminum pole solutions."



Catalog Part Number Description



Aluminum Catalog Part Number -
No Arm



A General Shaft Assembly

RSA = Round Straight Aluminum
RTA = Round Tapered Aluminum
SSA = Square Straight Aluminum

B Mounting Heights

08 = 8'	16 = 16'	35 = 35'
10 = 10'	18 = 18'	40 = 40'
12 = 12'	20 = 20'	45 = 45'
14 = 14'	25 = 25'	50 = 50'
30 = 30'		

C Wall Thickness

B = 0.125"	F = 0.250"
C = 0.156"	G = 0.312"
D = 0.188"	H = 0.375"
E = 0.219"	

Example:

RTA30D8B4-01

Round Tapered Aluminum, 30'
Mounting Height, .188" Wall
Thickness, 8" Butt Diameter,
4.5" Top Diameter,
4-Bolt Base,
Satin Aluminum Finish

D Butt Diameter/Square

1 = 10"	5 = 5"	7 = 7"
2 = 12"	6 = 6"	8 = 8"
4 = 4"	J = 6.625"	9 = 9"

E Top Diameter/Square

A = 3"	C = 6"
B = 4.5"	- = No Taper

F Base Style

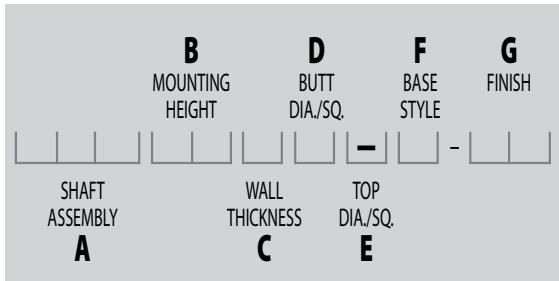
3 = 3-Bolt Anchor Base
4 = 4-Bolt Anchor Base
A = FBC Direct Buried Breakaway
D = FBC Direct Buried (<i>Embed</i>)
F = Breakaway Transformer Base
H = Hinged Anchor Base
V = Bee Hive Base

G Finish

01 = Satin Aluminum (<i>RTA and RSA</i>)
BA = Black Powder Coat
BH = White Powder Coat
BM = Dark Bronze Powder Coat
BV = Dark Green Powder Coat
GC = Gray Powder Coat
** = Specify Finish



Steel Catalog Part Number -
No Arm



A General Shaft Assembly

SSS = Square Straight Steel

B Mounting Heights

10 = 10'	16 = 16'	25 = 25'
12 = 12'	18 = 18'	30 = 30'
14 = 14'	20 = 20'	35 = 35'

C Wall Thickness

B = 11 Gauge
D = 7 Gauge

D Butt Diameter/Square

3 = 3"	G = 4.5"	5 = 5"	6 = 6"
--------	----------	--------	--------

E Top Diameter/Square

3 = 3"	4 = 4"	G = 4.5"
5 = 5"	6 = 6"	- = No Taper

F Base Style

4 = 4-Bolt Anchor Base

G Finish

POWDER COAT COLORS
BA - Black Powder Coat
BH - White Powder Coat
BM - Dark Bronze Powder Coat
BV - Dark Green Powder Coat
GC - Gray Powder Coat
XX - Special Colors*

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

Finishes

Satin Aluminum Finish

Hapco's Satin Aluminum is a polished aluminum finish achieved in a multi-pass, mechanical rotary sanding operation. No alternative finish option offers a lower overall cost of ownership or longer aesthetic beauty, making it the industry's first choice for low-maintenance and enduring finishes.



01 – Satin Aluminum Finish – Round Poles

Hapco's RTA and RSA round aluminum poles are constructed of Aluminum Alloy 6063. This marine grade alloy is composed primarily of Aluminum, Magnesium and Silicon and is chosen because of its superior attributes and extremely high resistance to corrosion. On contact with air, these aluminum alloys naturally oxidize, creating a layer of aluminum oxide on the surface of the pole that effectively and permanently guards against corrosion.

Thermoset Powder Coat Finishes

Hapco's on-site, state-of-the-art powder coating operations utilize weather resistant triglycidyl isocyanurate (*TGIC*) polyester thermoset powders that are electrostatically applied, oven cured and bonded to a minimum dry film thickness of 2.0 mils. The National Association of Architectural Metal Manufacturers, *Metal Finishes Manual*, rate the outdoor life of these powders at 15 plus years.

AAMA 2604

All polyester thermoset powders are not created equal. The American Architectural Manufacturers Association (*AAMA*) provides classifications for powder coatings which are industry recognized standards for testing and performance. AAMA 2604 coatings, known as Super Durable, are formulated with advanced polyester resin technology that utilizes higher performance pigments. Qualities include superior gloss, color retention and weathering capabilities, better exterior durability and UV resistance, and highly resistant scratching, chipping and peeling characteristics.

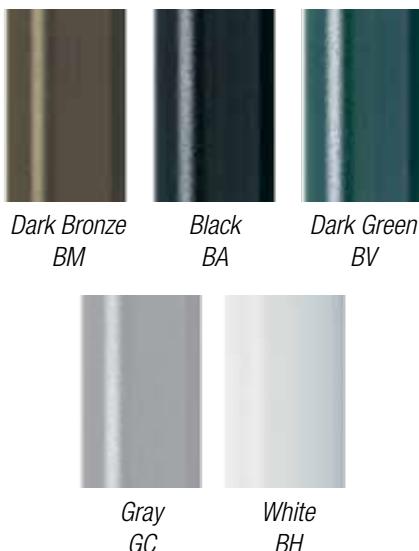
AAMA specifications for the testing and evaluation of coatings use a South Florida (*27° Latitude*) benchmark due to its extreme weather conditions. Testing categories for AAMA 2604 acceptance include a 5-year 45° Sun Exposure, 3000 Hour Humidity Resistance, and 3000 Hour Salt Spray. AAMA 2604 powders are rated to withstand outdoor exposure for five (5) years in this worst case environment. In comparison, some competitors use AAMA 2603 coatings. AAMA 2603 products are rated for only one (1) year.

Hapco only uses AAMA 2604 powders, assuring project owners the longest lasting, lowest maintenance powder painted products available in the market today.

Hapco's use of AAMA 2604 Powders Reduces Overall Ownership Cost By Providing Longer Lasting Aesthetics.

Standard Colors

Hapco standard powder coat colors are provided in a textured design for improved mar resistance.



RAL and Custom Colors

Along with our standard colors, Hapco can provide both RAL and custom colors. Options are unlimited. Simply provide any RAL Color Number or Color Chip Sample and Hapco will provide the perfect AAMA 2604 Powder Paint Color for your next project.



RAL Colors

Powder Coat 5-Year Finish Warranty

Hapco warrants its factory-applied powder coatings against cracking, peeling or excessive fading due to normal climatic exposure for a period of five (5) years from the date of shipment. Damage to the finish coating caused by mechanical abuse, such as rough handling during installation or by vandalism, is not covered by this warranty. This warranty is limited to, at the seller's option, the repair or replacement of the material involved and shall not include reimbursement of consequential expenses such as installation, removal of equipment, or transportation costs.

Anodized Finish

Aluminum pole anodized colors are limited to clear, black and various shades of bronze.

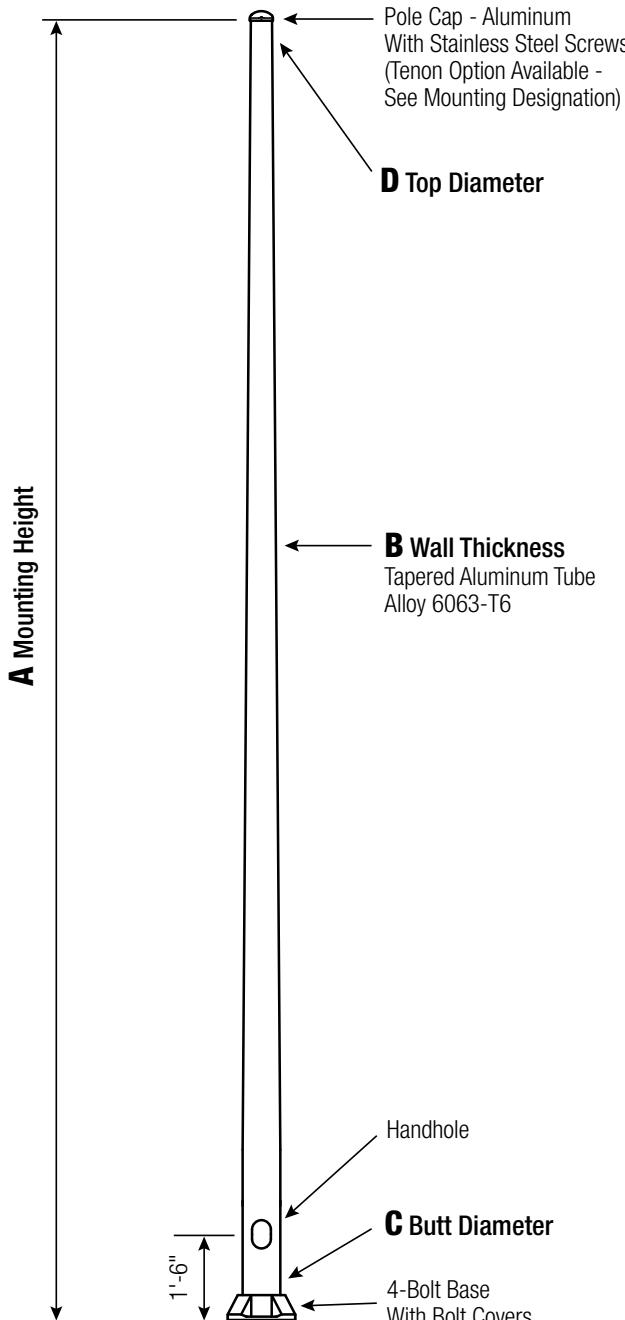
Color Uniformity

While a color finish on aluminum poles can be obtained by either anodizing or powder painting, anodizing of pole assemblies will inherently result in color variations and color uniformity is not guaranteed. Variations in the physical or chemical composition of the metals contained in the base flange, pole shaft, welds, and pole accessories create color variations in anodized finishes that are unavoidable. Color variations in anodized finishes are not covered under Hapco warranty.

Powder Coat finishes offer a more attractive price and lead time compared to anodized products and are recommended for guaranteed uniformity of color.

Galvanized Finish

In addition to our standard Powder Paint finish, Hapco Steel poles are offered in both Galvanized and Powder Paint over Galvanized options. All galvanized steel poles are hot dip galvanized to meet ASTM-A-123 specifications.



Satin Aluminum or Powder Coated Finish per Customer Specification.

C BUTT DIA.	D TOP DIA.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4	3	6.5 - 8	7.5	2	.75 x 17 x 3
5	3	7.5 - 8	7.5	2	.75 x 17 x 3
6	4.5	9 - 10	9.75	2.75	.75 x 30 x 3*
7	4.5	10 - 11	10.5	2.75	1 x 36 x 4
8	4.5	11 - 12	11.25	2.75	1 x 36 x 4
9	4.5	12.5 - 14	12.75	2.75	1 x 36 x 4
10 Up To .250"	6	14 - 15	14	3.25	1 x 48 x 4
10 .312"	6	14 - 15	14	3.25	1.25 x 48 x 6

*1" x 36" x 4" Anchor Bolts can be specified for 6" butt diameter poles.

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

4-Bolt Cast Aluminum
Base Flange of Alloy
356-T6 with Aluminum
Bolt Covers (Alloy 356-F)
and Stainless Steel Hex
Head Attaching Screws.



Handhole

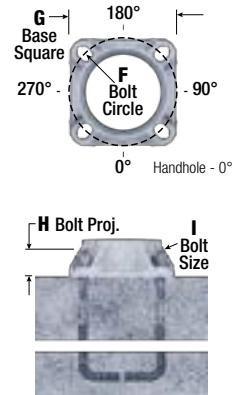
4"-5" Butt Diameters - 2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC hole is provided.

6" Butt Diameter - Reinforced, 3" x 5" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. A Grounding Provision incorporating a 3/8" diameter hole is provided opposite the Handhole.

7"+ Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

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.



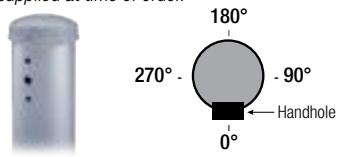
Vibration Damper

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

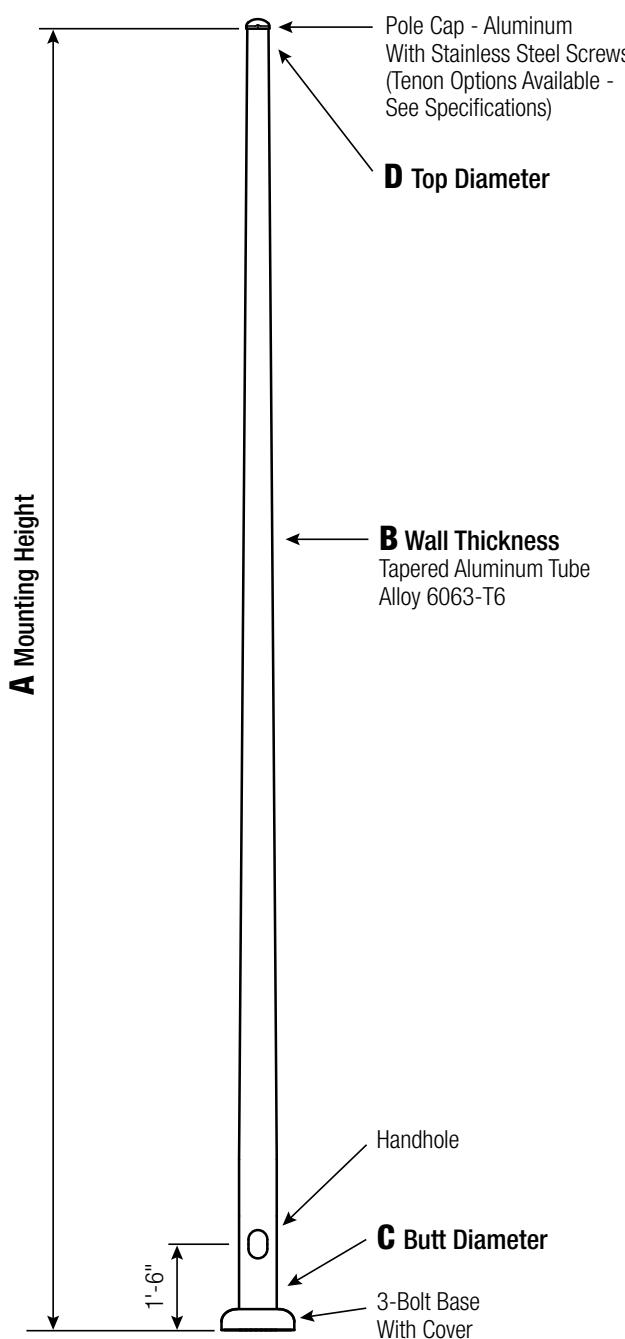
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.



Tenon Mount - Welded or Spun

For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.). Tenon style is factory option. Welded Tenon can be specified.





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	3	7	9.0625	2	.75 x 17 x 3
5	3	8	10.375	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

3-Bolt Cast Aluminum
Base Flange of Alloy
356-T6 with Spun
Aluminum Base Cover
and Stainless Steel Hex
Head Attaching Screw.



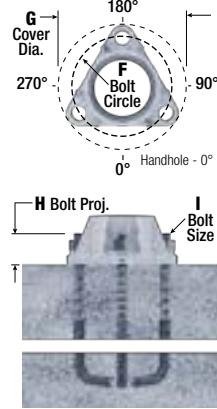
Handhole

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 1/4"-20NC hole is
provided opposite
the Handhole.



Anchorage

Anchorage Kit will
include three (3)
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 three
(3) Hex Nuts, three (3)
Lock Washers, and
three (3) Flat Washers
(all components
Galvanized Steel).
A bolt circle template
will be provided.



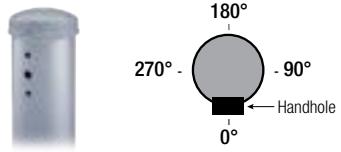
Vibration Damper

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 - Welded or Spun

For Tenon Mount applications
specify both Tenon diameter
(2.375", 2.875", 3.5", etc.) and
length (3", 4", etc.). Tenon style
is factory option. Welded Tenon
can be specified.

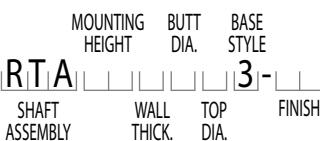




A Mtc. Hgt.	B WALL THICKNESS	C BUtT DIA.	TOTAL LUM. WEIGHT	MAXIMUM EPA						OLD CATALOG NUMBER	CATALOG NUMBER	
				120	130	140	150	160	170	180		
06	0.125	4	300	8.3	7.0	5.9	5.1	4.4	3.8	3.4	76-001	RTA06B4A3-**
08	0.125	4	212	5.8	4.8	4.0	3.4	2.8	2.4	2.1	76-002	RTA08B4A3-**
10	0.125	4	131	4.1	3.3	2.7	2.2	1.8	1.5	1.2	76-003	RTA10B4A3-**
10	0.125	5	234	9.4	7.8	6.6	5.6	4.8	4.1	3.6	76-017	RTA10B5A3-**
12	0.125	4	89	2.9	2.3	1.7	1.3	1.0	0.7	-	76-004	RTA12B4A3-**
12	0.125	5	156	7.3	5.9	4.9	4.1	3.4	2.9	2.5	76-009	RTA12B5A3-**
12	0.156	5	191	9.3	7.7	6.4	5.4	4.6	4.0	3.4	76-009W3	RTA12C5A3-**
12	0.188	5	225	11.4	9.4	7.9	6.7	5.8	5.0	4.3	76-009W4	RTA12D5A3-**
14	0.125	4	67	1.9	1.4	0.9	0.6	-	-	-	76-005	RTA14B4A3-**
14	0.125	5	112	5.6	4.5	3.6	2.9	2.4	2.0	1.6	76-010	RTA14B5A3-**
14	0.156	5	136	7.4	6.0	4.9	4.1	3.4	2.8	2.4	76-021	RTA14C5A3-**
14	0.188	5	161	9.1	7.5	6.2	5.2	4.4	3.7	3.2	76-022	RTA14D5A3-**
16	0.125	4	53	1.1	0.6	-	-	-	-	-	76-006	RTA16B4A3-**
16	0.125	5	88	4.2	3.2	2.5	1.9	1.5	1.2	0.9	76-011	RTA16B5A3-**
16	0.156	5	108	5.7	4.5	3.6	2.9	2.3	1.9	1.6	76-029	RTA16C5A3-**
16	0.188	5	127	7.2	5.8	4.7	3.9	3.2	2.7	2.2	76-030	RTA16D5A3-**
18	0.125	5	74	2.9	2.1	1.5	1.0	0.7	-	-	76-007	RTA18B5A3-**
18	0.156	5	91	4.2	3.2	2.5	1.9	1.4	1.1	0.8	76-031	RTA18C5A3-**
18	0.188	5	107	5.5	4.3	3.4	2.7	2.2	1.7	1.4	76-032	RTA18D5A3-**
20	0.125	5	63	1.9	1.2	0.7	-	-	-	-	76-008	RTA20B5A3-**
20	0.156	5	77	3.0	2.1	1.5	1.0	0.7	-	-	76-033	RTA20C5A3-**
20	0.188	5	91	4.1	3.1	2.3	1.7	1.3	1.0	0.7	76-034	RTA20D5A3-**

Catalog Number System

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



Catalog Number Example -

RTA 20 C 5 A 3 – 01

Round Tapered Aluminum, 20' Mounting Height, .156" Wall Thickness, 5" Butt Diameter, 3" Top Diameter, 3-Bolt Base, Satin Aluminum Finish.

Wall Thickness

B = .125"

C = .156"

D = .188"

Butt Diameter

4 = 4"

5 = 5"

Top Diameter

A = 3"

Base Style

3 = 3-Bolt Base

Finish

01 = Satin Aluminum

BA = Black Powder Coat

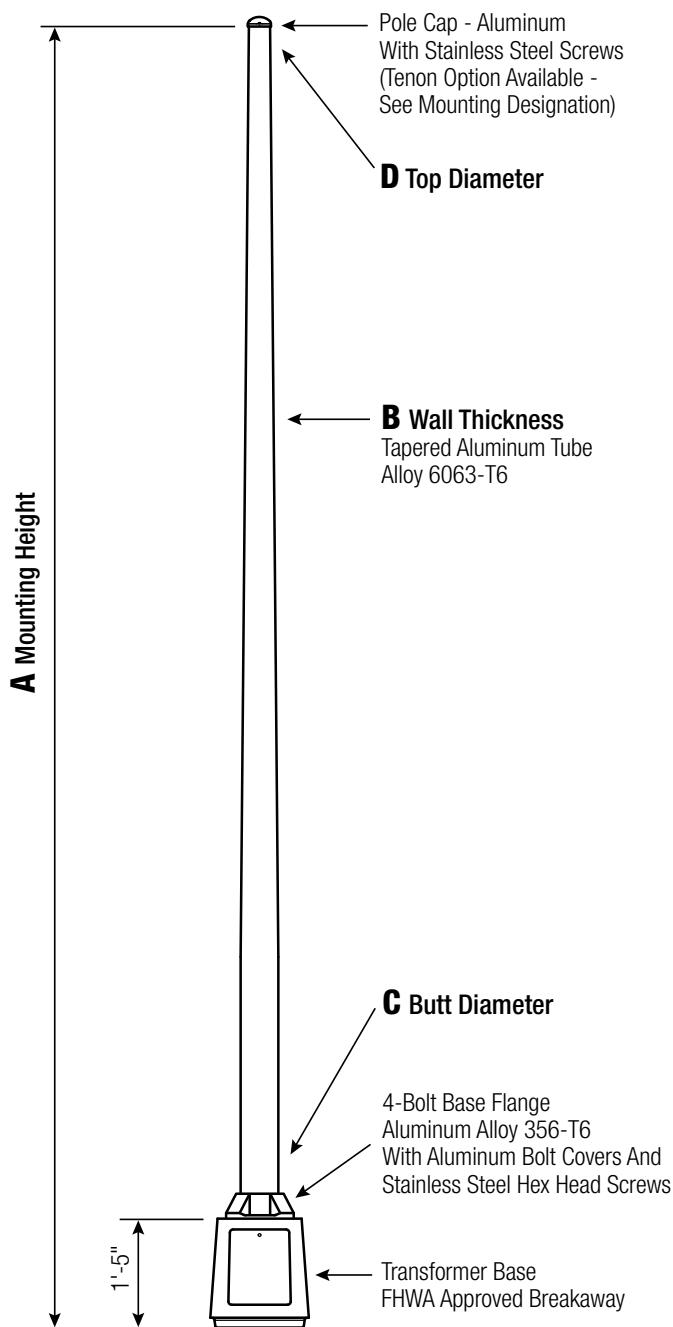
BH = White Powder Coat

BM = Dark Bronze Powder Coat

BV = Dark Green Powder Coat

GC = Gray Powder Coat

** = Specify Finish



Satin Aluminum or Powder Coated Finish per Customer Specification.

C BUTT DIA.	D TOP DIA.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
6	4.5	12	13.0625	3.5	1 x 36 x 4
7	4.5	12	13.0625	3.5	1 x 36 x 4
8	4.5	15	15.375	3.5	1 x 36 x 4
9	4.5	15	15.375	3.5	1 x 36 x 4
10 Up To .250"	6	15	15.375	3.5	1 x 48 x 4
10 .312"	6	17.25	17.4375	3.5	1 x 48 x 4

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

Cast Aluminum Transformer Base (T-Base) of Alloy 356-T6 with Aluminum Door and Stainless Steel Hex Head Screw. FHWA Approved Breakaway.



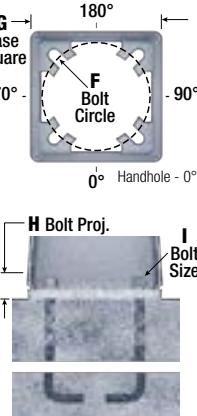
Handhole

6"-10" Butt Diameters - Tapered Door Opening (9-3/4" W Base x 9-1/4" W Top x 11-3/4" H) with Flush Mount Aluminum Cover and Stainless Steel Hex Head Screw. Grounding Provisions tapped 1/4"-20NC and 1/2"-13NC are provided.



Anchorage

Base Anchorage includes four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55, four (4) each Heavy-Duty Flat Washers, Lock Washers, and Hex Nuts (all components Galv. Steel). Ten inches (10") of threaded end will be galvanized per ASTM A153. Top Connecting Hardware includes four (4) each 1"-8NC x 3-3/4" Hex Head Bolts, Flat Washers, Heavy-Duty Flat Washers, Lock Washers, and Hex Nuts (all components Galv. Steel). A bolt circle template will be provided.



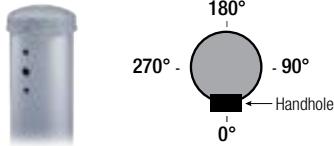
Vibration Damper

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

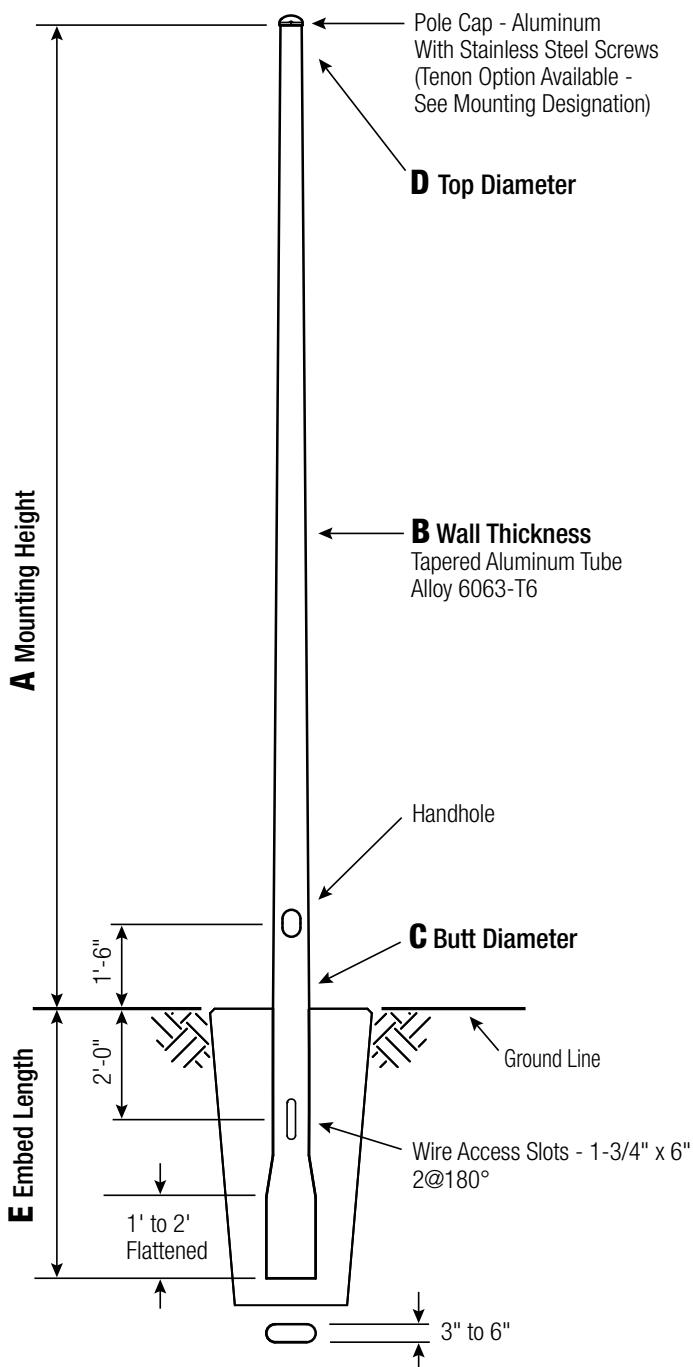
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.



Tenon Mount - Welded or Spun

For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.). Tenon style is factory option. Welded Tenon can be specified.





C BUTT DIA.	D TOP DIA.
5	3
6	4.5
7	4.5
8	4.5
9	4.5
10	6

C and D 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 to produce a T6 temper.

Handhole

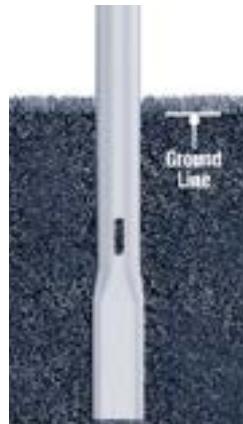
5" Butt Diameter - 2-1/2" x 5" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision is provided as part of the handhole.

6" Butt Diameter - Reinforced, 3" x 5" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. A Grounding Provision incorporating a 3/8" diameter hole is provided opposite the Handhole.

7"+ Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

Embed Detail

Direct Buried Pole bottom section on 6"+ butt diameter poles will be partially flattened into an anti-rotational, oval cross section. Wire access will be provided 24" below ground line. Soil conditions vary by site. Foundation requirements should be determined by a qualified Structural Engineer with knowledge of jobsite soil conditions.



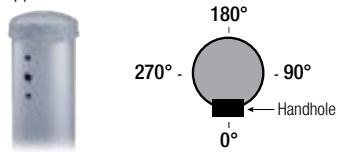
Vibration Damper

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

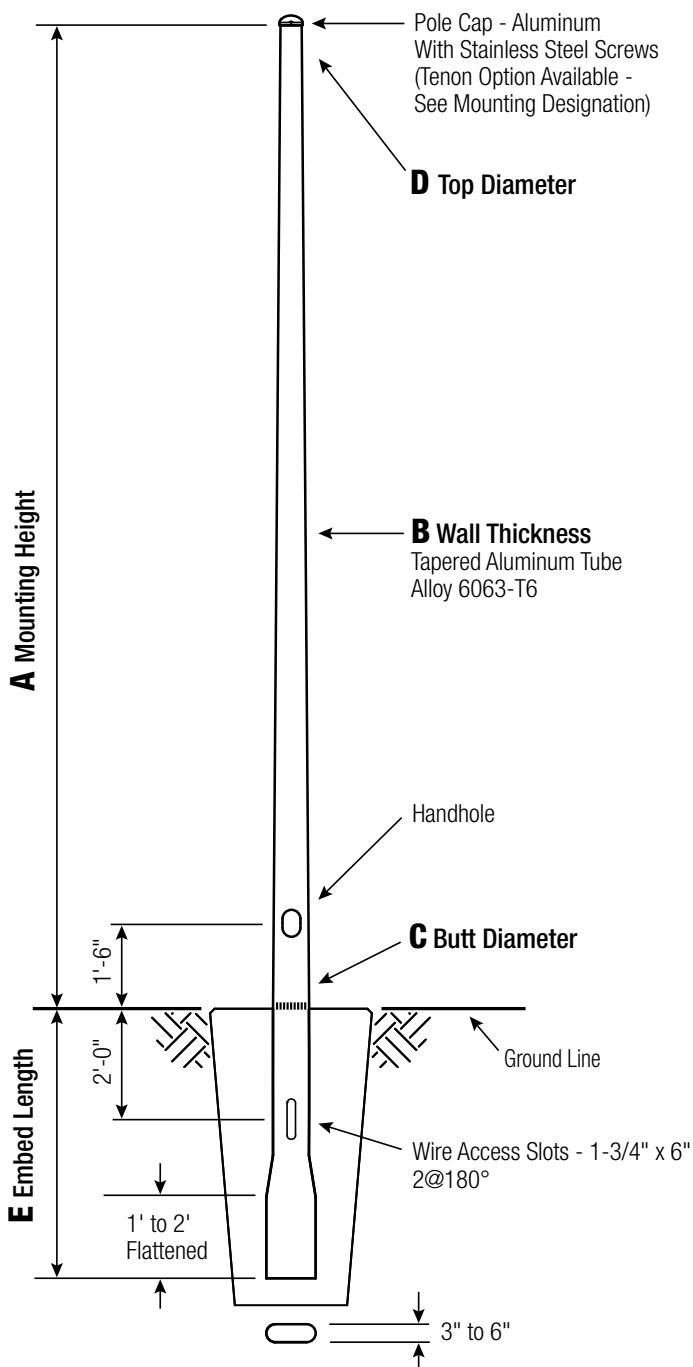
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.



Tenon Mount - Welded or Spun

For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.). Tenon style is factory option. Welded Tenon can be specified.





C BUTT DIA.	D TOP DIA.
8	4.5
9	4.5
10	6

C and D Dimensions in Inches

Pole

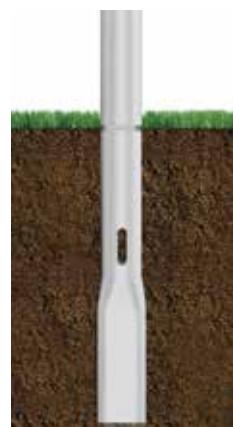
The pole shaft will be constructed of seamless extruded tube of 6063 Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated to produce a T6 temper.

Handhole

8"+ Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

Embed Detail

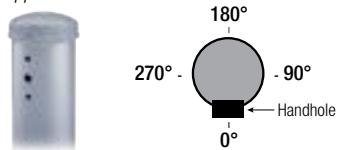
Direct Buried Pole bottom section on 8"+ butt diameter poles will be partially flattened into an anti-rotational, oval cross section. Wire access will be provided 24" below ground line. Soil conditions vary by site. Foundation requirements should be determined by a qualified Structural Engineer with knowledge of jobsite soil conditions.

**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**

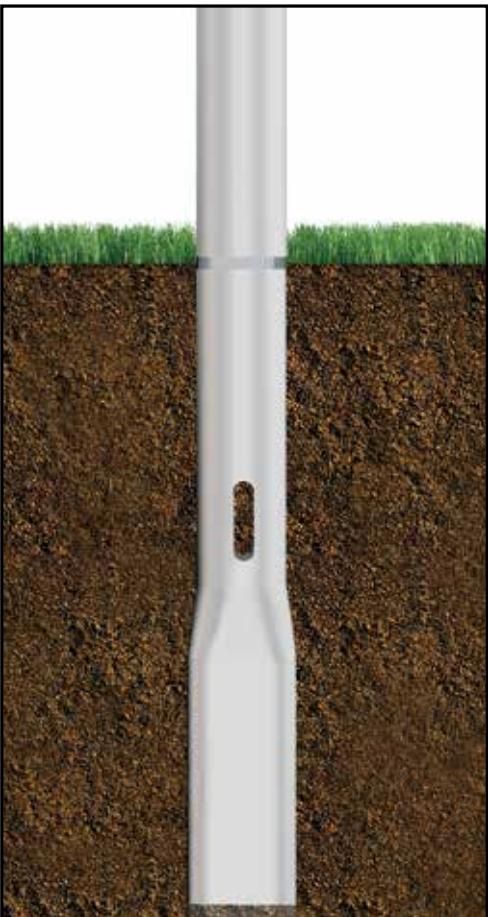
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.

**Tenon Mount - Welded or Spun**

For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.). Tenon style is factory option. Welded Tenon can be specified.

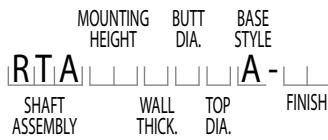


Mtg. Hgt.	WALL THK.	B UTT DIA.	C EMBED DEPTH	E TOTAL LUM. Wt.	MAXIMUM EPA						CATALOG NUMBER	
					120	130	140	150	160	170	180	
20	0.156	8	7	216	15.6	12.9	11.0	9.4	8.1	7.1	6.2	RTA20C8BA-**
25	0.156	8	7	134	10.2	8.3	6.9	5.8	4.9	4.2	3.6	RTA25C8BA-**
25	0.156	9	7	190	14.4	11.9	10.0	8.6	7.3	6.3	5.5	RTA25C9BA-**
30	0.156	8	7	91	6.4	4.9	3.9	3.2	2.6	2.1	1.7	RTA30C8BA-**
30	0.156	9	7	129	9.8	7.9	6.5	5.5	4.6	3.8	3.2	RTA30C9BA-**
30	0.156	10	7	195	13.7	11.4	9.5	8.0	6.8	5.8	4.9	RTA30C1CA-**
35	0.156	8	7	66	3.3	2.2	1.6	1.1	0.7	-	-	RTA35C8BA-**
35	0.156	9	7	93	6.2	4.8	3.8	3.0	2.4	1.9	1.5	RTA35C9BA-**
35	0.156	10	7	141	9.6	7.8	6.4	5.3	4.3	3.6	2.9	RTA35C1CA-**
40	0.156	8	7	50	0.8	-	-	-	-	-	-	RTA40C8BA-**
40	0.156	9	7	70	3.3	2.2	1.6	1.0	0.6	-	-	RTA40C9BA-**
40	0.156	10	7	107	6.2	4.9	3.9	3.0	2.3	1.7	1.2	RTA40C1CA-**



Catalog Number System

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



Catalog Number Example -

RTA 30 C 8 B A – 01

Round Tapered Aluminum, 30" Mounting Height, .156" Wall Thickness, 8" Butt Diameter, 4.5" Top Diameter, FBC Direct Buried Breakaway, Satin Aluminum Finish.

Wall Thickness

C = .156"

Butt Diameter

B = 8"

9 = 9"

1 = 10"

Top Diameter

B = 4.5"

C = 6"

Base Style

A = FBC Direct Buried

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

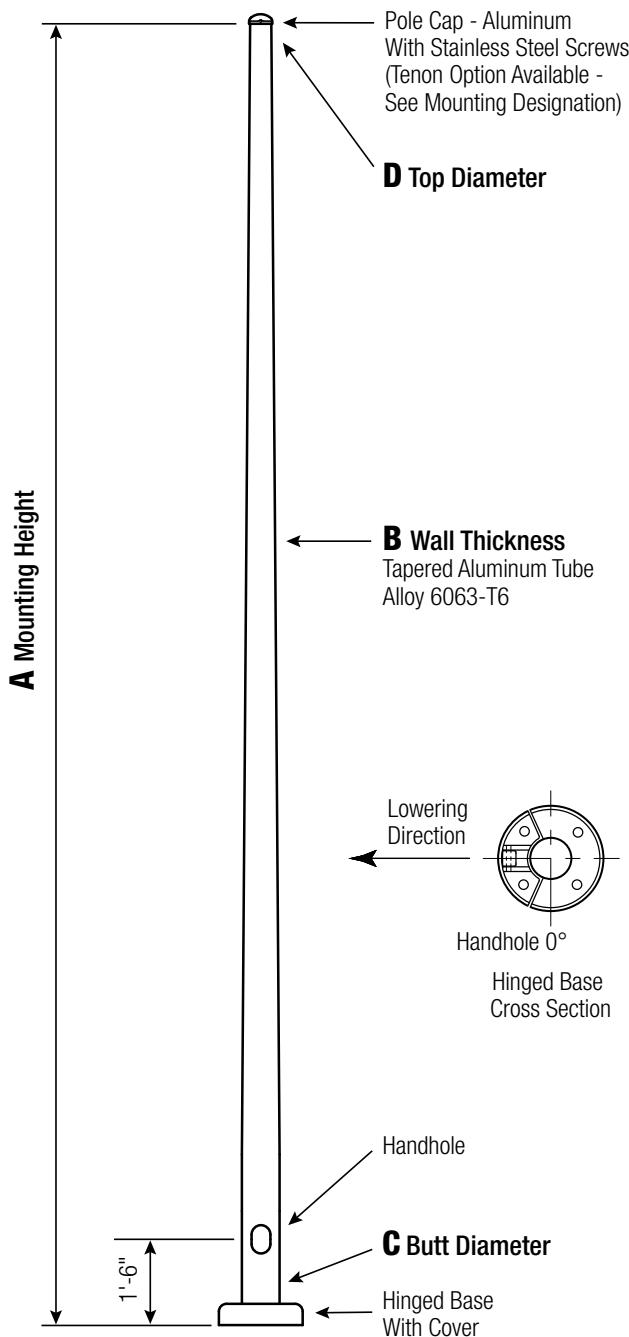
** = Specify Finish

EPA Note:

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

Embed Note:

Embed depths shown are calculated using the weight, EPA, and wind speed combination corresponding to the maximum loads for each pole. The calculation is in accordance with Chapter 18 of the 2023 FBC. The calculation uses an assumed Class 3 Soil Type per Table 1806.2 of the 2023 FBC and assumes that backfill is done in accordance with 1807.3.3 of the 2023 FBC. Embed depths are subject to change if the weight, EPA, or wind speed changes. Please contact Hapco for help in determining the appropriate embed depth.



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	3	7	9.75	2	.75 x 17 x 3
5	3	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.



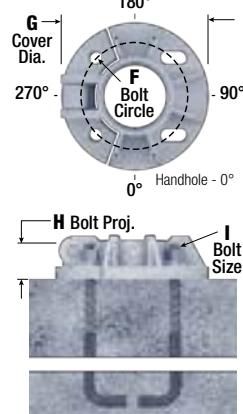
Handhole

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
1/4"-20NC hole
is provided.



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.



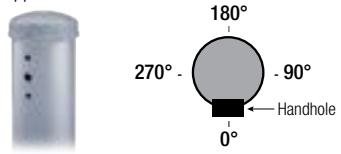
Vibration Damper

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 - Welded or Spun

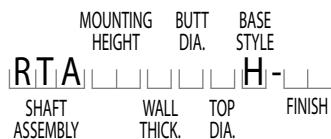
For Tenon Mount applications
specify both Tenon diameter
(2.375", 2.875", 3.5", etc.) and
length (3", 4", etc.). Tenon style
is factory option. Welded Tenon
can be specified.



A Mfg. Hgt.	B WALL THICKNESS	C BUtT DIA.	TOTAL LUM. WEIGHT	MAXIMUM EPA							OLD CATALOG NUMBER	CATALOG NUMBER
				120	130	140	150	160	170	180		
06	0.125	4	300	8.3	7.0	5.9	5.1	4.4	3.8	3.4	73142-001	RTA06B4AH-**
08	0.125	4	209	5.8	4.8	4.0	3.4	2.8	2.4	2.1	73142-002	RTA08B4AH-**
08	0.156	4	254	7.3	6.1	5.1	4.3	3.7	3.2	2.8		RTA08C4AH-**
08	0.188	4	299	8.8	7.3	6.2	5.3	4.5	3.9	3.4		RTA08D4AH-**
10	0.125	4	130	4.1	3.3	2.7	2.2	1.8	1.5	1.2	73142-003	RTA10B4AH-**
10	0.156	4	158	5.3	4.4	3.6	3.0	2.5	2.1	1.7		RTA10C4AH-**
10	0.188	4	185	6.5	5.4	4.5	3.7	3.1	2.7	2.3		RTA10D4AH-**
10	0.125	5	231	9.4	7.8	6.6	5.6	4.8	4.1	3.6	73142-011	RTA10B5AH-**
10	0.156	5	282	11.9	9.9	8.4	7.1	6.2	5.4	4.7		RTA10C5AH-**
12	0.125	4	88	2.9	2.3	1.7	1.3	1.0	0.7	-	73142-004	RTA12B4AH-**
12	0.156	4	107	3.9	3.1	2.5	2.0	1.5	1.2	0.9		RTA12C4AH-**
12	0.188	4	126	4.9	4.0	3.2	2.6	2.1	1.7	1.4		RTA12D4AH-**
12	0.125	5	155	7.3	5.9	4.9	4.1	3.4	2.9	2.5	73142-008	RTA12B5AH-**
12	0.156	5	189	9.3	7.7	6.4	5.4	4.6	4.0	3.4		RTA12C5AH-**
14	0.125	4	66	1.9	1.4	0.9	0.6	-	-	-	73142-005	RTA14B4AH-**
14	0.156	4	80	2.8	2.1	1.5	1.1	0.8	-	-		RTA14C4AH-**
14	0.188	4	94	3.6	2.8	2.2	1.6	1.2	0.9	0.7		RTA14D4AH-**
14	0.125	5	111	5.6	4.5	3.6	2.9	2.4	2.0	1.6	73142-009	RTA14B5AH-**
14	0.156	5	135	7.4	6.0	4.9	4.1	3.4	2.8	2.4		RTA14C5AH-**
16	0.156	4	64	1.8	1.2	0.7	-	-	-	-		RTA16C4AH-**
16	0.188	4	75	2.5	1.8	1.3	0.8	-	-	-		RTA16D4AH-**
16	0.125	5	87	4.2	3.2	2.5	1.9	1.5	1.2	0.9	73142-010	RTA16B5AH-**
16	0.156	5	107	5.7	4.5	3.6	2.9	2.3	1.9	1.6		RTA16C5AH-**
18	0.125	5	74	2.9	2.1	1.5	1.0	0.7	-	-	73142-006	RTA18B5AH-**
18	0.156	5	90	4.2	3.2	2.5	1.9	1.4	1.1	0.8		RTA18C5AH-**
20	0.125	5	63	1.9	1.2	0.7	-	-	-	-	73142-007	RTA20B5AH-**
20	0.156	5	77	3.0	2.1	1.5	1.0	0.7	-	-		RTA20C5AH-**

Catalog Number System

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

**Catalog Number Example -**

RTA 20 C 5 A H – 01

Round Tapered Aluminum, 20' Mounting Height, .156" Wall Thickness, 5" Butt Diameter, 3" Top Diameter, Hinged Base, Satin Aluminum Finish.

Wall Thickness

B = .125"

C = .156"

D = .188"

Butt Diameter

4 = 4"

5 = 5"

Top Diameter

A = 3"

Base Style

H = Hinged Base

Finish

01 = Satin Aluminum

BA = Black Powder Coat

BH = White Powder Coat

BM = Dark Bronze Powder Coat

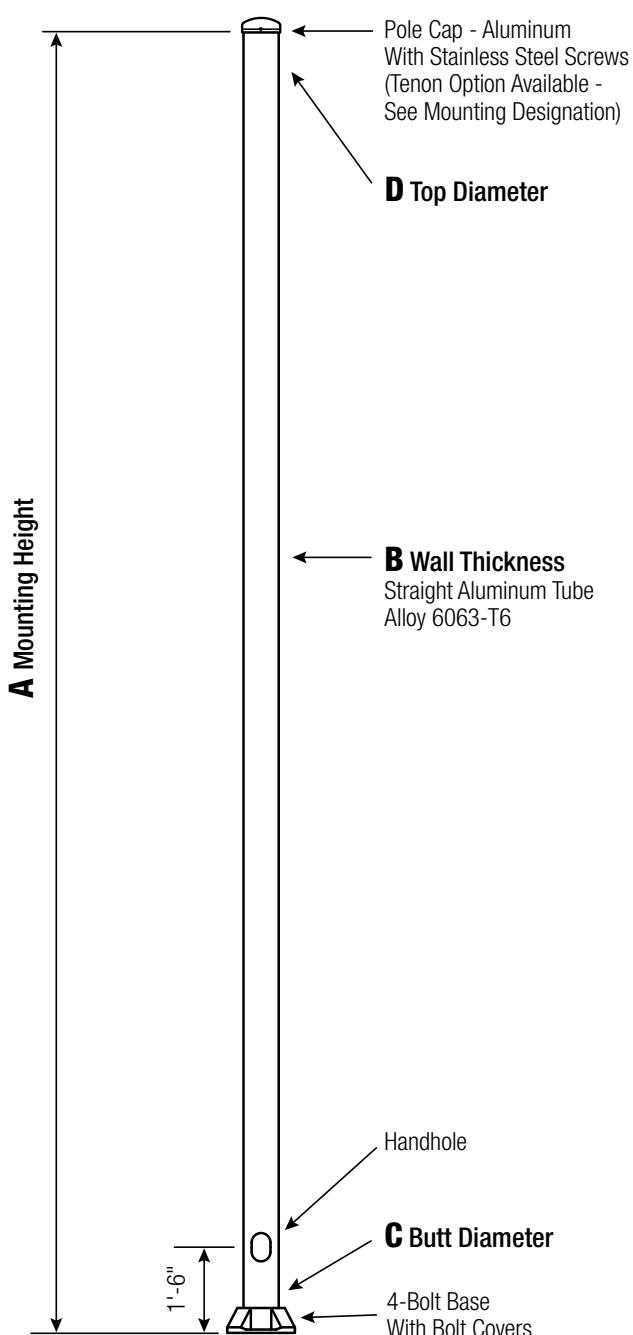
BV = Dark Green Powder Coat

GC = Gray Powder Coat

** = Specify Finish

**EPA Note:**

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



Satin Aluminum or Powder Coated Finish per Customer Specification.

C BUTT DIA.	D TOP DIA.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4	4	6.5 - 8	7.5	2	.75 x 17 x 3
5	5	7.5 - 8	7.5	2	.75 x 17 x 3
6	6	9 - 10	9.75	2.75	.75 x 30 x 3*
7	7	10 - 11	10.5	2.75	1 x 36 x 4
8	8	11 - 12	11.25	2.75	1 x 36 x 4
9	9	12.5 - 14	12.75	2.75	1 x 36 x 4
10 Up To .250"	10	14 - 15	14	3.25	1 x 48 x 4
10 .312"	10	14 - 15	14	3.25	1.25 x 48 x 6

*1" x 36" x 4" Anchor Bolts can be specified for 6" butt diameter poles.

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

4-Bolt Cast Aluminum
Base Flange of Alloy
356-T6 with Aluminum
Bolt Covers (Alloy 356-F)
and Stainless Steel Hex
Head Attaching Screws.

**Handhole**

4"-5" Butt Diameters - 2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC hole is provided opposite the Handhole.

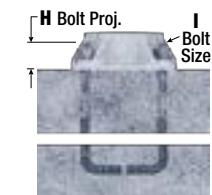
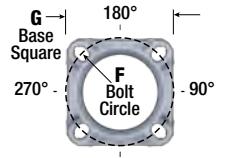
6" Butt Diameter - Reinforced, 3" x 5" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. A Grounding Provision incorporating a 3/8" diameter hole is provided opposite the Handhole.

7"+ Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

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.

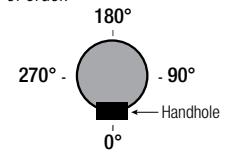
Kits will contain four (4) Hex Nuts, four (4) Lock Washers, and four (4) Flat Washers (all components Galvanized Steel). A bolt circle template will be provided.

**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.

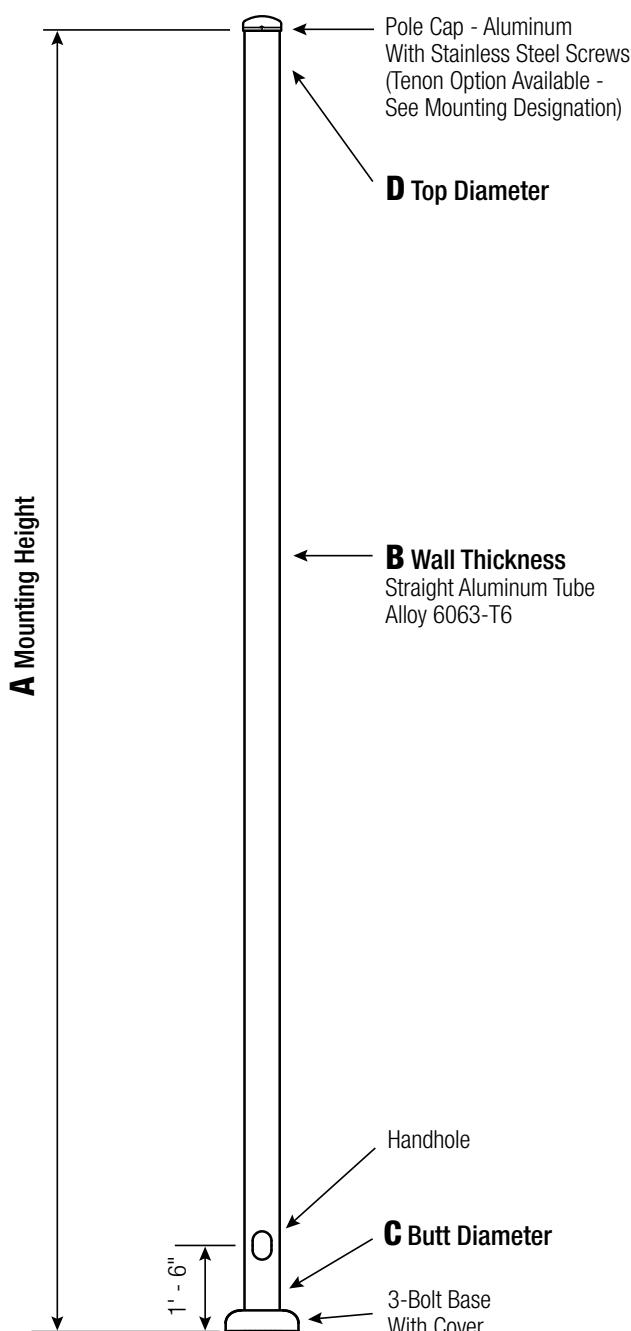
Mounting Designation*Side Drill Mount*

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.).





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	9.0625	2	.75 x 17 x 3
5	5	8	10.375	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

3-Bolt Cast Aluminum
Base Flange of Alloy
356-T6 with Spun
Aluminum Base Cover
and Stainless Steel Hex
Head Attaching Screw.



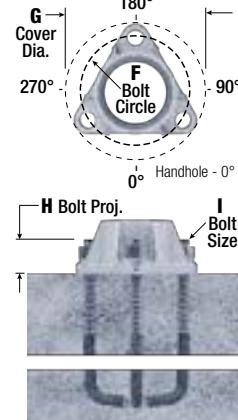
Handhole

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 1/4"-20NC hole is
provided opposite
the Handhole.



Anchorage

Anchorage Kit will
include three (3)
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 three
(3) Hex Nuts, three (3)
Lock Washers, and
three (3) Flat Washers
(all components
Galvanized Steel).
A bolt circle template
will be provided.



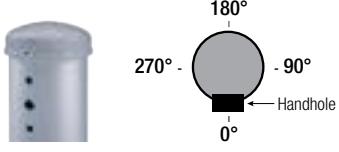
Vibration Damper

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.).



A Mtg. Hgt.	B Wall Thickness	C Butt Dia.	Total Lum. Weight	Maximum EPA						Old Catalog Number	Catalog Number	
				120	130	140	150	160	170	180		
06	0.125	4	300	8.3	7.0	5.9	5.0	4.4	3.9	3.4	76S-001	RSA06B4-3-**
08	0.125	4	238	5.6	4.6	3.8	3.2	2.8	2.4	2.1	76S-002	RSA08B4-3-**
10	0.125	4	151	3.9	3.1	2.5	2.0	1.7	1.4	1.2	76S-003	RSA10B4-3-**
10	0.125	5	300	9.0	7.6	6.4	5.5	4.8	4.2	3.7	76S-017	RSA10B5-3-**
12	0.125	4	105	2.6	2.0	1.5	1.0	0.8	0.6	-	76S-004	RSA12B4-3-**
12	0.125	5	210	6.7	5.6	4.7	4.0	3.5	3.0	2.6	76S-009	RSA12B5-3-**
12	0.156	5	258	8.8	7.4	6.2	5.4	4.6	4.0	3.5		RSA12C5-3-**
12	0.188	5	300	10.9	9.1	7.8	6.7	5.8	5.1	4.5		RSA12D5-3-**
14	0.125	4	77	1.6	1.1	0.6	-	-	-	-	76S-005	RSA14B4-3-**
14	0.125	5	154	5.0	4.1	3.4	2.8	2.4	2.1	1.8	76S-010	RSA14B5-3-**
14	0.156	5	188	6.7	5.6	4.7	4.0	3.4	2.9	2.6		RSA14C5-3-**
14	0.188	5	223	8.5	7.1	6.0	5.1	4.4	3.8	3.3		RSA14D5-3-**
16	0.125	5	117	3.5	2.8	2.3	1.8	1.5	1.3	1.0	76S-011	RSA16B5-3-**
16	0.125	5	144	5.0	4.1	3.4	2.8	2.4	2.0	1.7	76S-029	RSA16C5-3-**
16	0.188	5	170	6.5	5.4	4.5	3.8	3.2	2.8	2.4	76S-030	RSA16D5-3-**
18	0.125	5	92	2.2	1.7	1.3	1.0	0.7	0.6	-	76S-007	RSA18B5-3-**
18	0.156	5	113	3.5	2.8	2.2	1.8	1.5	1.2	1.0	76S-031	RSA18C5-3-**
18	0.188	5	134	4.8	3.9	3.2	2.7	2.2	1.9	1.6	76S-032	RSA18D5-3-**
20	0.125	5	75	1.1	0.7	-	-	-	-	-	76S-008	RSA20B5-3-**
20	0.156	5	91	2.2	1.7	1.3	1.0	0.7	-	-	76S-033	RSA20C5-3-**
20	0.188	5	108	3.4	2.7	2.1	1.7	1.4	1.1	0.9	76S-034	RSA20D5-3-**

Catalog Number System

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

MOUNTING HEIGHT	SHFT. ASMBLY	WALL THICK.	BTTF. DIA.	BASE STYLE
RSA [] - 3 - []				
	SHAFT ASMBLY	WALL THICK.	TOP DIA.	FINISH

Catalog Number Example -

RSA 20 D 5 - 3 - 01

Round Straight Aluminum, 20' Mounting Height, .188" Wall Thickness, 5" Butt Diameter, No Taper, 3-Bolt Base, Satin Aluminum Finish.

Wall Thickness

B = .125"

C = .156"

D = .188"

Butt Diameter

4 = 4"

5 = 5"

Top Diameter

- = No Taper

Base Style

3 = 3-Bolt Base

Finish

01 = Satin Aluminum

BA = Black Powder Coat

BH = White Powder Coat

BM = Dark Bronze Powder Coat

BV = Dark Green Powder Coat

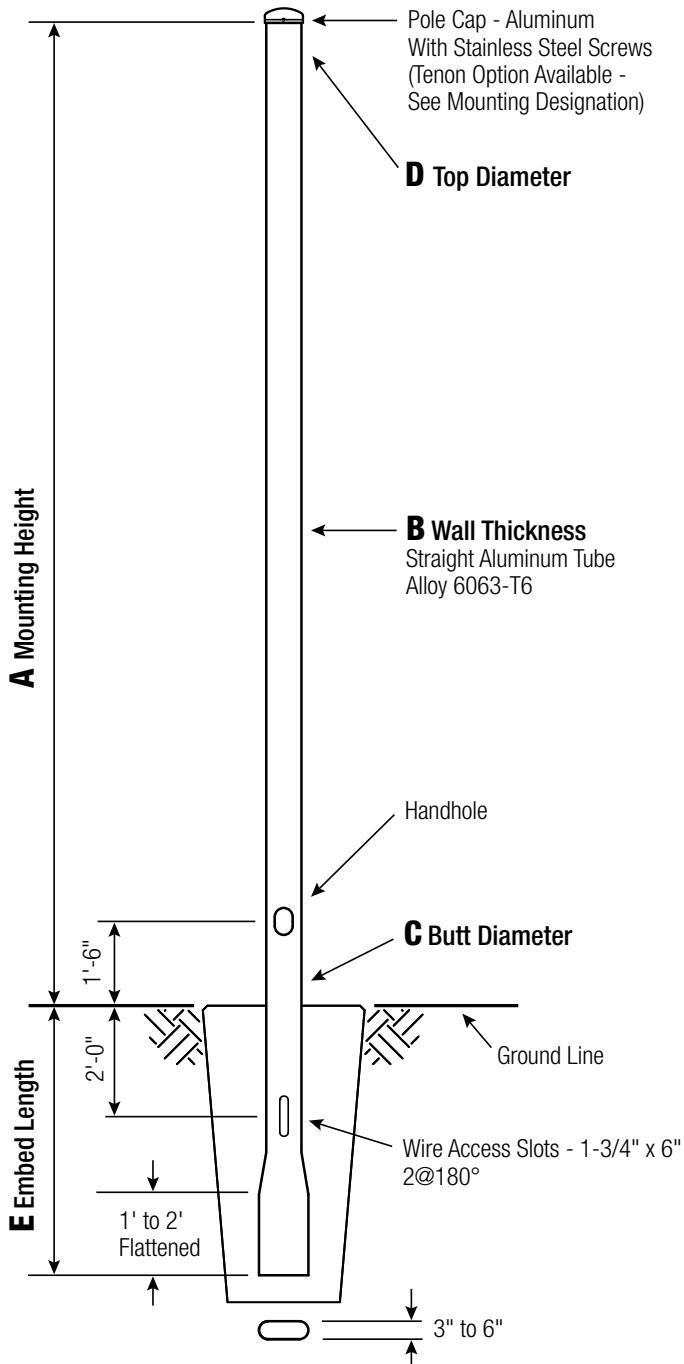
GC = Gray Powder Coat

** = Specify Finish



EPA Note:

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



Satin Aluminum or Powder Coated Finish per Customer Specification.

C BUTT DIA.	D TOP DIA.
4	4
5	5
6	6
7	7
8	8
9	9
10	10

C and D 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 to produce a T6 temper.

Handhole

4" Butt Diameter - 2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision is provided as part of the handhole.

5" Butt Diameter - 2-1/2" x 5" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision is provided as part of the handhole.

6" Butt Diameter - Reinforced, 3" x 5" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. A Grounding Provision incorporating a 3/8" diameter hole is provided opposite the Handhole.

7"+ Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

Embed Detail

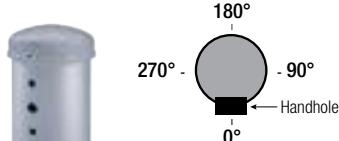
Direct Buried Pole bottom section on 6"+ butt diameter poles will be partially flattened into an anti-rotational, oval cross section. Wire access will be provided 24" below ground line. Soil conditions vary by site. Foundation requirements should be determined by a qualified Structural Engineer with knowledge of jobsite soil conditions.

**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*

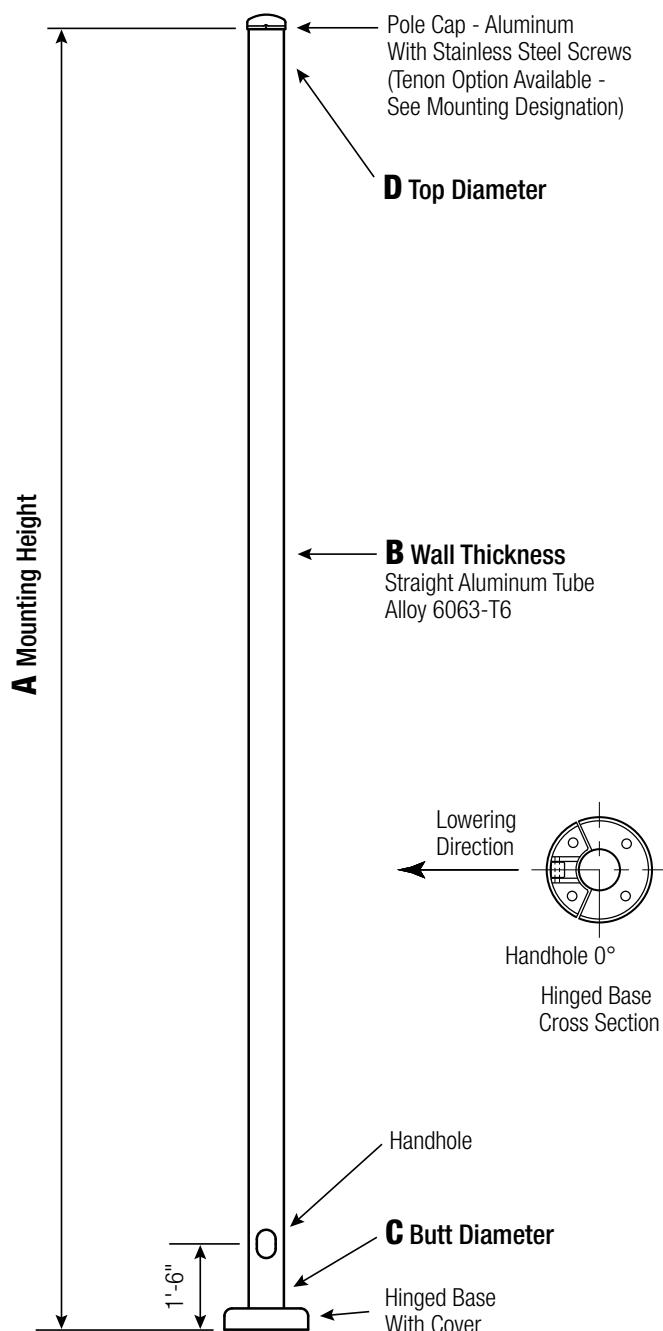
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.

*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.



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.



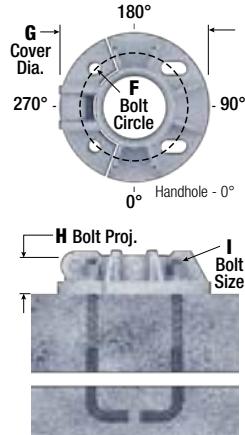
Handhole

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 1 1/4"-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.



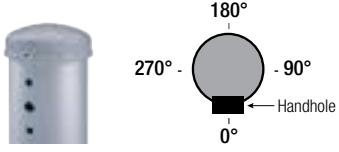
Vibration Damper

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

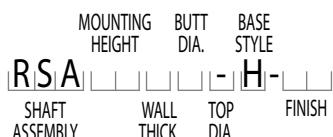
For Tenon Mount applications
specify both Tenon diameter
(2.375", 2.875", 3.5", etc.) and
length (3", 4", etc.).



A Mtc. Hgt.	B WALL THICKNESS	C BUtT DIA.	TOTAL LUM. WEIGHT	MAXIMUM EPA						OLD CATALOG NUMBER	CATALOG NUMBER
				120	130	140	150	160	170		
06	0.125	4	300	8.3	7.0	5.9	5.0	4.4	3.9	3.4	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	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	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	-	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	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	-	-	-	-	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	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	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	-	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	-	-	-	-	-	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

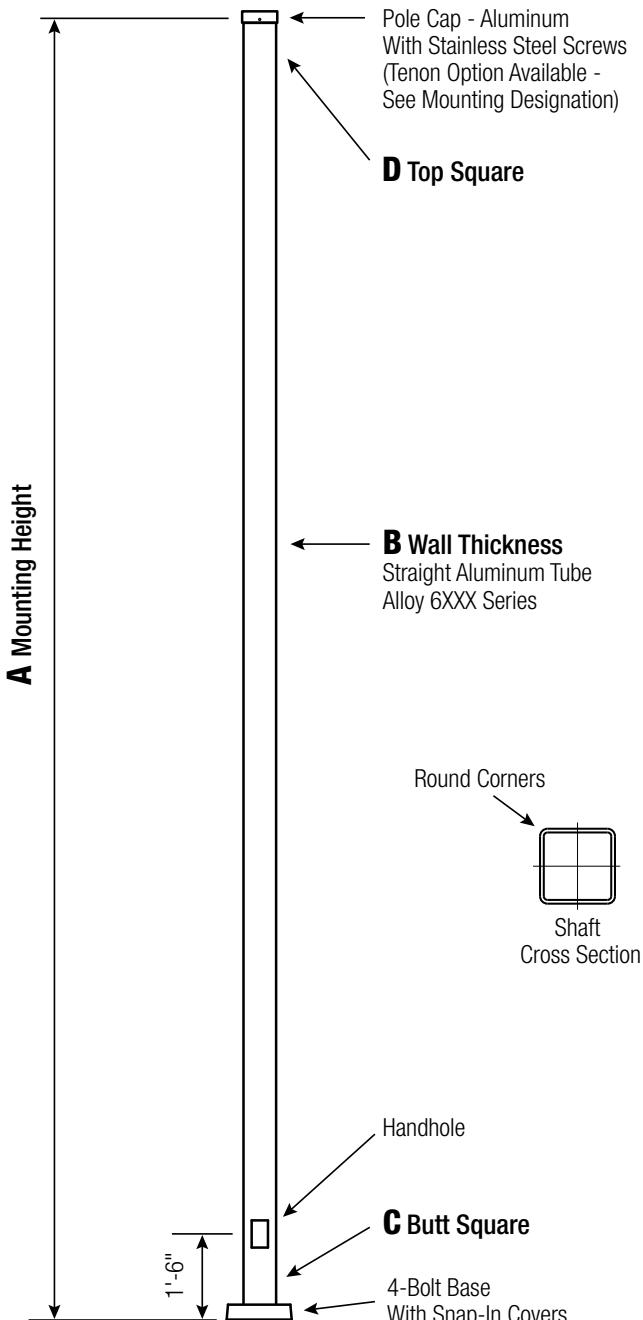
BV = Dark Green Powder Coat

GC = Gray Powder Coat

** = Specify Finish

**EPA Note:**

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



Satin Aluminum or Powder Coated Finish per Customer Specification.

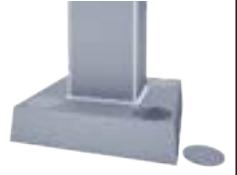
C BUTT SQ.	D TOP SQ.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4	4	8.5 - 9.5	9.875	1.5	.75 x 17 x 3
5	5	10.5 - 11.5	11.25	2	.75 x 30 x 3
6	6	12 - 13	12.75	2.25	1 x 36 x 4
6.625	6.625	13 - 14	13.5	2.25	1 x 36 x 4

Dimensions in Inches

Pole
The pole shaft will be constructed of seamless extruded tube of 6XXX Series Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld.

Base Style

4-Bolt Cast Aluminum Base Flange of Alloy 356-T6 with Aluminum Snap-In Bolt Covers.



Handhole

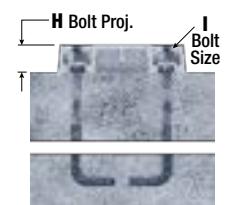
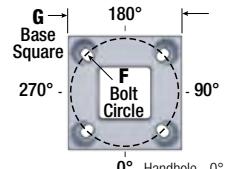
4"-5" Butt Squares -
2" x 4" Handhole with square Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC Grounding Provision is provided opposite the Handhole.



6"+ Butt Square -
3" x 5" Handhole with square Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC Grounding Provision 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.



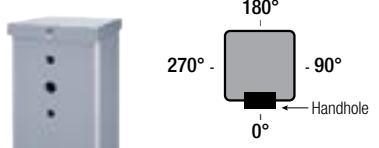
Vibration Damper

If determined necessary by Hapco, a top-mount, field installed First Mode Vibration Damper will be provided. 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

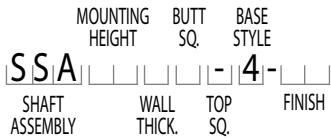
For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.).



A Mtc. Hgt.	B WALL THICKNESS	C BUtT DIA.	TOTAL LUM. WEIGHT	MAXIMUM EPA						OLD CATALOG NUMBER	CATALOG NUMBER	
				120	130	140	150	160	170	180		
08	0.125	4	300	14.9	12.5	10.6	9.0	7.8	6.7	5.9	11-043	SSA08B4-4-**
10	0.125	4	251	11.2	9.3	7.8	6.5	5.5	4.7	4.0	11-063	SSA10B4-4-**
10	0.188	4	300	17.5	14.6	12.4	10.5	9.0	7.8	6.7	11-064	SSA10D4-4-**
12	0.125	4	174	8.8	7.2	5.8	4.8	3.9	3.2	2.6	11-083	SSA12B4-4-**
12	0.188	4	249	13.8	11.4	9.5	8.0	6.7	5.7	4.8	11-084	SSA12D4-4-**
12	0.188	5	300	26.7	22.2	18.7	15.9	13.6	11.7	10.1	11-087	SSA12D5-4-**
14	0.125	4	127	6.8	5.4	4.3	3.4	2.6	2.0	1.5	11-103	SSA14B4-4-**
14	0.188	4	182	11.1	9.1	7.4	6.1	5.0	4.1	3.4	11-104	SSA14D4-4-**
14	0.188	5	300	21.4	17.7	14.7	12.3	10.3	8.7	7.3	11-107	SSA14D5-4-**
15	0.125	4	111	6.0	4.6	3.6	2.7	2.0	1.5	1.0	11-123	SSA15B4-4-**
15	0.188	4	158	10.0	8.1	6.5	5.3	4.3	3.5	2.8	11-124	SSA15D4-4-**
15	0.188	5	300	19.2	15.7	13.0	10.8	9.0	7.4	6.2	11-127	SSA15D5-4-**
16	0.125	4	97	5.1	3.9	2.9	2.1	1.5	0.9	-	11-143	SSA16B4-4-**
16	0.188	4	139	8.9	7.1	5.7	4.5	3.6	2.8	2.2	11-144	SSA16D4-4-**
16	0.188	5	284	17.2	14.0	11.4	9.4	7.7	6.3	5.1	11-147	SSA16D5-4-**
18	0.125	4	76	3.6	2.6	1.7	1.0	-	-	-	11-163	SSA18B4-4-**
18	0.188	4	110	6.9	5.3	4.1	3.1	2.3	1.6	1.0	11-164	SSA18D4-4-**
18	0.250	4	139	9.8	7.8	6.3	5.0	3.9	3.1	2.3	11-165	SSA18F4-4-**
18	0.188	5	224	13.8	11.0	8.8	7.0	5.6	4.3	3.3	11-167	SSA18D5-4-**
20	0.125	4	62	2.4	1.4	0.7	-	-	-	-	11-183	SSA20B4-4-**
20	0.188	4	89	5.2	3.8	2.8	1.9	1.2	0.6	-	11-184	SSA20D4-4-**
20	0.250	4	112	7.8	6.0	4.7	3.5	2.6	1.9	1.2	11-185	SSA20F4-4-**
20	0.188	5	181	11.0	8.6	6.6	5.0	3.7	2.7	1.8	11-187	SSA20D5-4-**
20	0.250	5	232	15.9	12.7	10.2	8.1	6.5	5.1	3.9	11-188	SSA20F5-4-**
20	0.188	6	300	14.8	11.5	8.9	6.8	5.1	3.7	2.6	11-190	SSA20D6-4-**
20	0.250	6	300	21.7	17.4	14.0	11.3	9.0	7.2	5.6	11-191	SSA20F6-4-**
25	0.188	5	115	5.6	3.7	2.2	1.0	-	-	-	11-247	SSA25D5-4-**
25	0.250	5	147	9.3	6.8	4.9	3.4	2.1	1.1	-	11-248	SSA25F5-4-**
25	0.188	6	203	7.7	5.2	3.2	1.7	-	-	-	11-250	SSA25D6-4-**
25	0.250	6	262	12.6	9.4	6.9	4.8	3.2	1.8	0.6	11-251	SSA25F6-4-**
25	0.250	6.625	300	18.2	14.0	10.6	7.9	5.7	3.9	2.3	11-254	SSA25FJ-4-**
30	0.250	6	181	6.4	3.8	1.8	-	-	-	-	11-291	SSA30F6-4-**
30	0.250	6.625	248	10.1	6.8	4.1	2.0	-	-	-	11-294	SSA30FJ-4-**

Catalog Number System

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

**Catalog Number Example -****SSA 20 D 5 - 4 – BA**

Square Straight Aluminum, 20' Mounting Height, .188" Wall Thickness, 5" Butt Square, No Taper, 4-Bolt Base, Black Powder Coat Finish.

Wall Thickness

B = .125"

D = .188"

F = .250"

Butt Square

4 = 4"

5 = 5"

6 = 6"

J = 6-5/8"

Top Square

- = No Taper

Base Style

4 = 4-Bolt Base

Finish

BA = Black Powder Coat

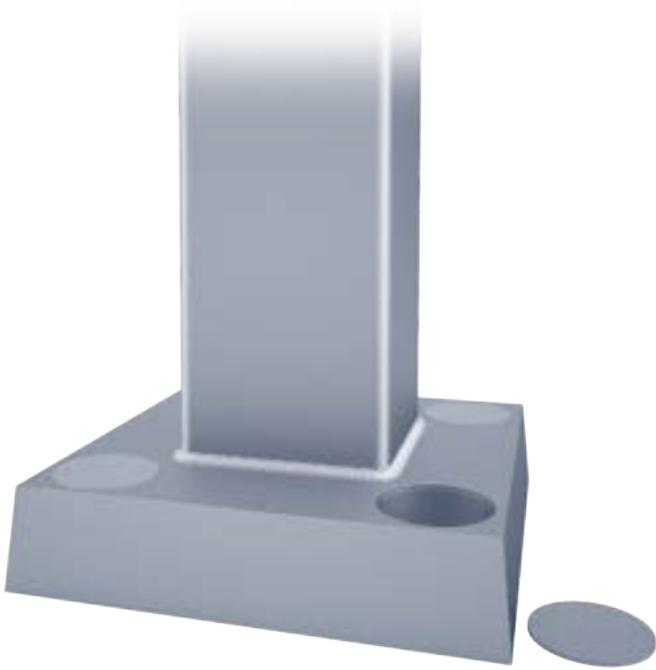
BH = White Powder Coat

BM = Dark Bronze Powder Coat

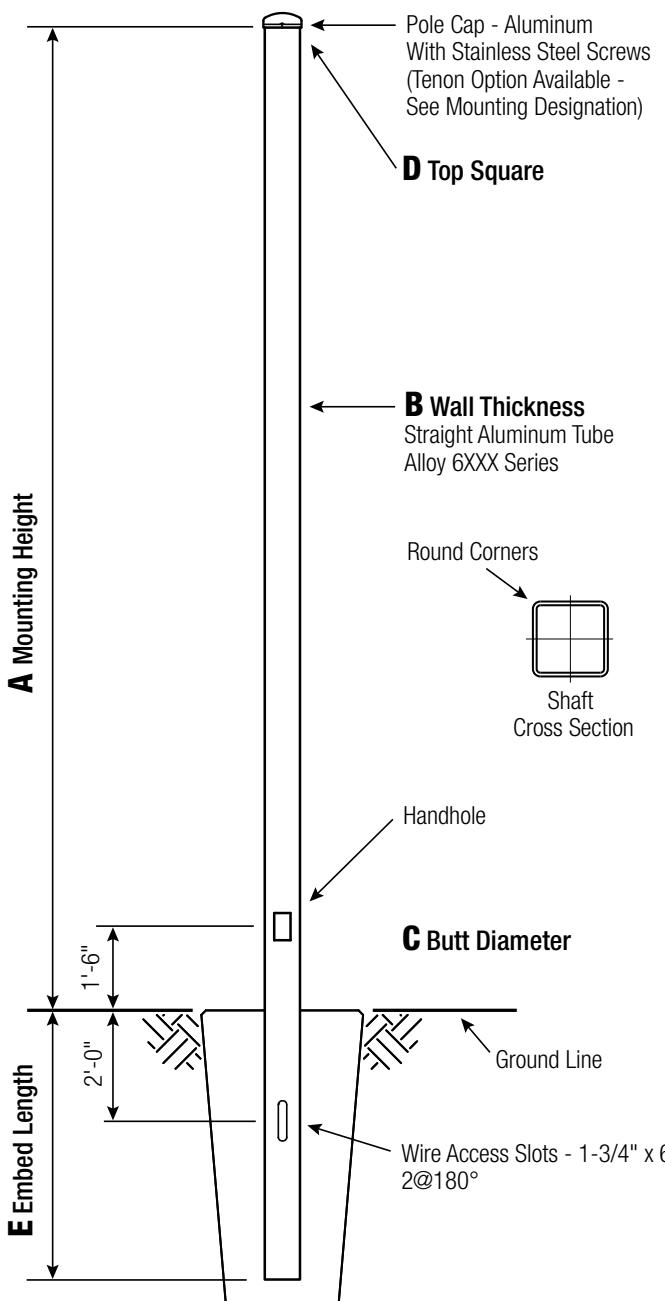
BV = Dark Green Powder Coat

GC = Gray Powder Coat

** = Specify Finish

**EPA Note:**

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



Satin Aluminum or Powder Coated Finish per Customer Specification.

C BUTT Sq.	D Top Sq.
4	4
5	5
6	6
6.625	6.625

C and D Dimensions in Inches

Pole
The pole shaft will be constructed of seamless extruded tube of 6XXX Series Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld.

Handhole

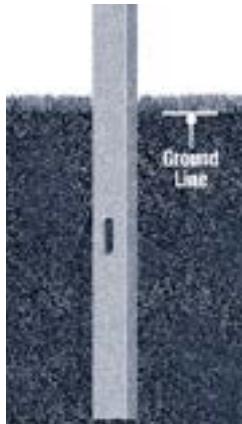
4"-5" Butt Squares -
2" x 4" Handhole with square Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC Grounding Provision is provided opposite the Handhole.



6"+ Butt Square -
3" x 5" Handhole with square Lap Style Aluminum Door and two (2) Stainless Steel Self-Tapping Attaching Screws. A Grounding Provision incorporating a tapped 1/4"-20NC Grounding Provision is provided opposite the Handhole.

Embed Detail

Direct Buried Pole wire access will be provided 24" below ground line. Soil conditions vary by site. Foundation requirements should be determined by a qualified Structural Engineer with knowledge of jobsite soil conditions.



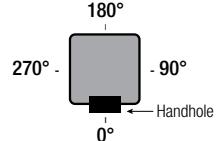
Vibration Damper

If determined necessary by Hapco, a top-mount, field installed First Mode Vibration Damper will be provided. 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

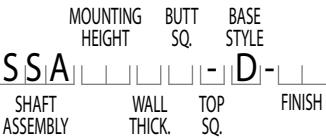
For Tenon Mount applications specify both Tenon diameter (2.375", 2.875", 3.5", etc.) and length (3", 4", etc.).



MtG. Hgt.	WALL THK.	B	C	E	TOTAL LUM. Wt.	MAXIMUM EPA						CATALOG NUMBER
						120	130	140	150	160	170	180
8	0.125	4	4	300	14.9	12.5	10.6	9.0	7.8	6.7	5.9	SSA08B4-D-**
10	0.125	4	4	243	11.3	9.3	7.8	6.5	5.5	4.7	4.0	SSA10B4-D-**
10	0.188	4	5	300	17.5	14.6	12.4	10.5	9.0	7.8	6.7	SSA10D4-D-**
12	0.125	4	4	169	8.8	7.2	5.9	4.8	4.0	3.2	2.6	SSA12B4-D-**
12	0.188	4	5	242	13.8	11.4	9.5	8.0	6.8	5.7	4.9	SSA12D4-D-**
12	0.188	5	5	300	26.7	22.2	18.7	15.9	13.6	11.7	10.1	SSA12D5-D-**
14	0.125	4	4	124	6.8	5.4	4.3	3.4	2.6	2.0	1.5	SSA14B4-D-**
14	0.188	4	4	178	11.2	9.1	7.5	6.1	5.1	4.2	3.4	SSA14D4-D-**
14	0.188	5	5	300	21.4	17.7	14.7	12.3	10.3	8.7	7.3	SSA14D5-D-**
15	0.125	4	4	108	6.0	4.7	3.6	2.7	2.0	1.5	1.0	SSA15B4-D-**
15	0.188	4	4	155	10.0	8.1	6.6	5.3	4.3	3.5	2.8	SSA15D4-D-**
15	0.188	5	5	300	19.2	15.7	13.0	10.8	9.0	7.4	6.2	SSA15D5-D-**
16	0.125	4	4	95	5.2	3.9	2.9	2.1	1.5	0.9	-	SSA16B4-D-**
16	0.188	4	4	136	8.9	7.1	5.7	4.5	3.6	2.8	2.2	SSA16D4-D-**
16	0.188	5	5	277	17.3	14.0	11.5	9.4	7.7	6.3	5.1	SSA16D5-D-**
18	0.125	4	4	75	3.7	2.6	1.7	1.0	-	-	-	SSA18B4-D-**
18	0.188	4	4	108	6.9	5.3	4.1	3.1	2.3	1.6	1.1	SSA18D4-D-**
18	0.250	4	5	136	9.8	7.8	6.3	5.0	3.9	3.1	2.4	SSA18F4-D-**
18	0.188	5	5	219	13.9	11.1	8.8	7.0	5.6	4.4	3.3	SSA18D5-D-**
20	0.125	4	4	61	2.4	1.4	0.7	-	-	-	-	SSA20B4-D-**
20	0.188	4	4	87	5.2	3.9	2.8	1.9	1.2	0.6	-	SSA20D4-D-**
20	0.250	4	5	110	7.8	6.0	4.7	3.5	2.6	1.9	1.2	SSA20F4-D-**
20	0.188	5	5	177	11.1	8.6	6.6	5.0	3.7	2.7	1.8	SSA20D5-D-**
20	0.250	5	5	227	15.9	12.7	10.2	8.2	6.5	5.1	3.9	SSA20F5-D-**
20	0.188	6	5	300	14.8	11.5	8.9	6.8	5.1	3.7	2.6	SSA20D6-D-**
20	0.250	6	5	300	21.7	17.4	14.0	11.3	9.0	7.2	5.6	SSA20F6-D-**
25	0.188	5	5	113	5.6	3.7	2.2	1.0	-	-	-	SSA25D5-D-**
25	0.250	5	5	145	9.3	6.9	4.9	3.4	2.1	1.1	-	SSA25F5-D-**
25	0.188	6	5	200	7.7	5.2	3.3	1.7	-	-	-	SSA25D6-D-**
25	0.250	6	5	257	12.7	9.4	6.9	4.8	3.2	1.8	0.6	SSA25F6-D-**
25	0.250	6.625	6	300	18.2	14.0	10.6	7.9	5.7	3.9	2.3	SSA25FJ-D-**
30	0.250	6	6	178	6.4	3.8	1.8	-	-	-	-	SSA30F6-D-**
30	0.250	6.625	6	244	10.1	6.8	4.1	2.0	-	-	-	SSA30FJ-D-**

Catalog Number System

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

**Catalog Number Example -****SSA 20 D 5 - D - BA**

Square Straight Aluminum, 20' Mounting Height, .188" Wall Thickness, 5" Butt Square, No Taper, Direct Buried, Black Powder Coat Finish.

Wall Thickness

B = .125"

D = .188"

F = .250"

Butt Square

4 = 4"

5 = 5"

6 = 6"

J = 6-5/8"

Top Square

- = No Taper

Base Style

D = FBC Direct Buried

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

EPA Note:

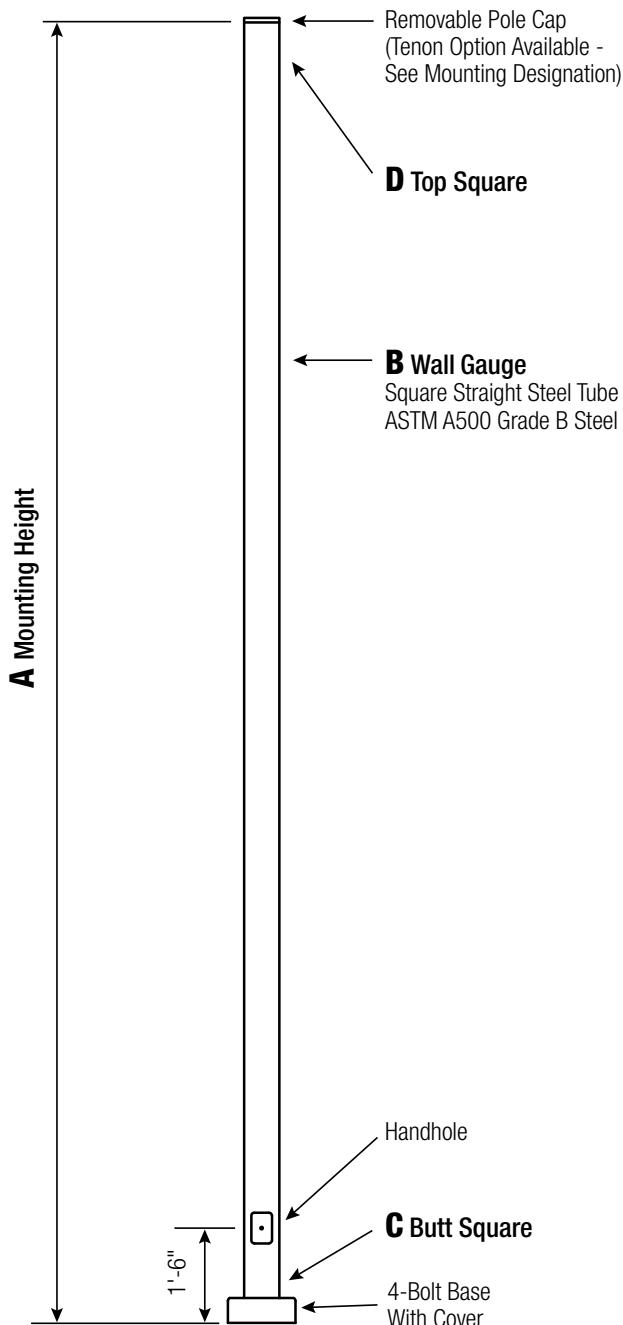
EPAs based on side mounted fixture(s) not exceeding the height of the pole.

Embed Note:

Embed depths shown are calculated using the weight, EPA, and wind speed combination corresponding to the maximum loads for each pole. The calculation is in accordance with Chapter 18 of the 2023 FBC. The calculation uses an assumed Class 3 Soil Type per Table 1806.2 of the 2023 FBC and assumes that backfill is done in accordance with 1807.3.3 of the 2023 FBC. Embed depths are subject to change if the weight, EPA, or wind speed changes. Please contact Hapco for help in determining the appropriate embed depth.

SSS

**Square Straight Steel Pole
No Arm — 4-Bolt Base**



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

C BUTT SQ.	D TOP SQ.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4 (11 Gauge)	4	8 - 9	8	3.75	.75 x 17 x 3
4 (7 Gauge)	4	8 - 9	8	3.75	.75 x 30 x 3
	5	10 - 12	11	4.875	1 x 36 x 4
	6	11 - 13	12.5	4.875	1 x 36 x 4

Dimensions in Inches

Pole
Pole shaft shall be weldable-grade, cold-rolled, commercial quality carbon steel tubing conforming to ASTM A500 Grade B. Options include 11 gauge and 7 gauge. All Welds shall conform to AWS D1.1 using ER70S-6 electrodes.

Base Style

4-Bolt Steel Plate Base
Flange 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 ABS plastic or metal materials.



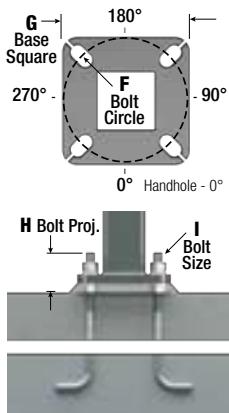
Handhole

Reinforced, 3" x 5"
Handhole with Cover,
Stainless Steel Screw and Backbar. A Grounding Provision incorporating a tapped 1/2"-13NC hole will be welded to the handhole frame.



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 bolt circle template will be provided.



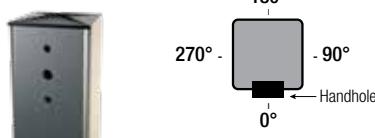
Vibration Damper

If determined necessary by Hapco, a top-mount, field installed First Mode Vibration Damper will be provided. 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", 4", etc.) and length (3", 4", 5", 6", etc.).



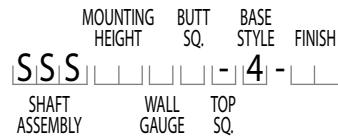
A MTC. HGT.	B WALL THICKNESS	C BUCKT DIA.	TOTAL LUM. WEIGHT	MAXIMUM EPA								CATALOG NUMBER
				120	130	140	150	160	170	180		
10	11	4	300	21.4	17.9	15.0	12.8	10.9	9.3	8.1		SSS10B4-4-**
12	11	4	300	17.1	14.1	11.7	9.8	8.2	6.9	5.8		SSS12B4-4-**
14	11	4	300	13.7	11.1	9.0	7.4	6.0	4.9	4.0		SSS14B4-4-**
15	11	4	295	12.3	9.8	7.9	6.4	5.1	4.0	3.2		SSS15B4-4-**
15	7	4	300	19.9	16.4	13.7	11.5	9.7	8.2	6.9		SSS15D4-4-**
16	11	4	259	11.1	8.8	7.0	5.5	4.3	3.3	2.5		SSS16B4-4-**
16	7	4	300	18.1	14.8	12.3	10.2	8.5	7.1	6.0		SSS16D4-4-**
18	11	4	204	8.8	6.8	5.2	3.9	2.9	2.0	1.2		SSS18B4-4-**
18	7	4	284	14.8	12.0	9.8	8.0	6.5	5.3	4.3		SSS18D4-4-**
20	11	4	165	6.9	5.1	3.7	2.5	1.6	0.8	-		SSS20B4-4-**
20	11	5	300	10.5	7.9	5.8	4.2	2.8	1.7	0.7		SSS20B5-4-**
20	7	4	229	12.4	9.9	7.9	6.3	5.0	3.9	3.0		SSS20D4-4-**
20	7	5	300	22.3	18.1	14.8	12.1	9.9	8.0	6.5		SSS20D5-4-**
22	11	4	136	5.2	3.6	2.3	1.2	-	-	-		SSS22B4-4-**
22	11	5	275	8.0	5.7	3.8	2.3	1.1	-	-		SSS22B5-4-**
22	7	4	189	10.3	8.0	6.2	4.8	3.6	2.6	1.8		SSS22D4-4-**
22	7	5	300	18.6	14.9	11.9	9.5	7.5	5.9	4.5		SSS22D5-4-**
25	11	5	212	4.9	2.9	1.3	-	-	-	-		SSS25B5-4-**
25	7	4	146	7.6	5.6	4.1	2.8	1.8	1.0	-		SSS25D4-4-**
25	7	5	300	14.0	10.8	8.3	6.2	4.6	3.2	2.0		SSS25D5-4-**
28	7	5	238	10.5	7.7	5.5	3.7	2.2	1.0	-		SSS28D5-4-**
30	7	5	207	8.5	5.9	3.8	2.2	0.8	-	-		SSS30D5-4-**
30	7	6	300	14.6	10.7	7.6	5.1	3.1	1.4	-		SSS30D6-4-**
35	7	5	150	4.0	1.8	-	-	-	-	-		SSS35D5-4-**
35	7	6	270	8.1	4.8	2.3	-	-	-	-		SSS35D6-4-**



ABS plastic base covers are standard in all SSS poles specified in BA-Black, BM-Dark Bronze, and BH-White. SSS poles specified in all other colors will be manufactured of metal materials. Metal Base Covers for poles in BA, BM and BH can be specified.

Catalog Number System

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



Catalog Number Example -

SSS 20 D 5 - 4 - BA

Square Straight Steel, 20' Mounting Height, 7 Gauge, 5" Butt Square, No Taper, 4-Bolt Base, Black Powder Coat Finish.

Wall Gauge

B = 11 Gauge

D = 7 Gauge

Butt Square

4 = 4"

5 = 5"

6 = 6"

Top Square

- = No Taper

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.

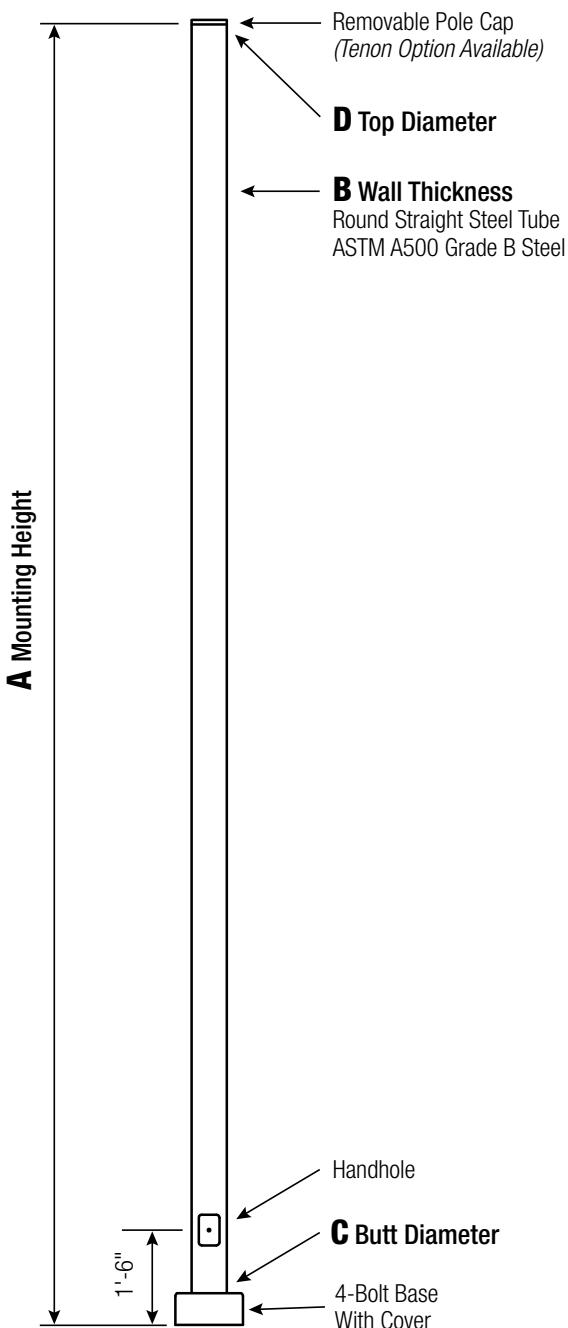
* Provide RAL # or Sample Color Chip

EPA Note:

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

RSS

Round Straight Steel Pole No Arm — 4-Bolt Base



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

C BUTT DIA.	D TOP DIA.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
3	3	7.5-8.5	8	3.75	.75 x 17 x 3
4	4	7.5-8.5	8	3.75	.75 x 17 x 3
4.5	4.5	7.5-8.5	8	3.75	.75 x 17 x 3
5 (11 Gauge)	5	7.5-8.5	8	3.75	.75 x 17 x 3
5 (7 Gauge)	5	8-9	8.75	4.875	1 x 36 x 4

Dimensions in Inches

Pole

Pole shaft shall be weldable-grade, cold-rolled, commercial quality carbon steel tubing conforming to ASTM A500 Grade B. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

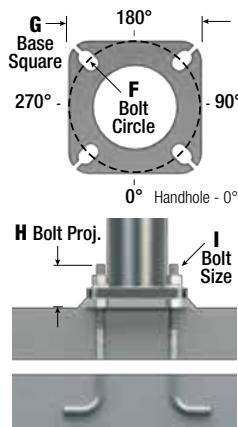
Base Style

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.



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

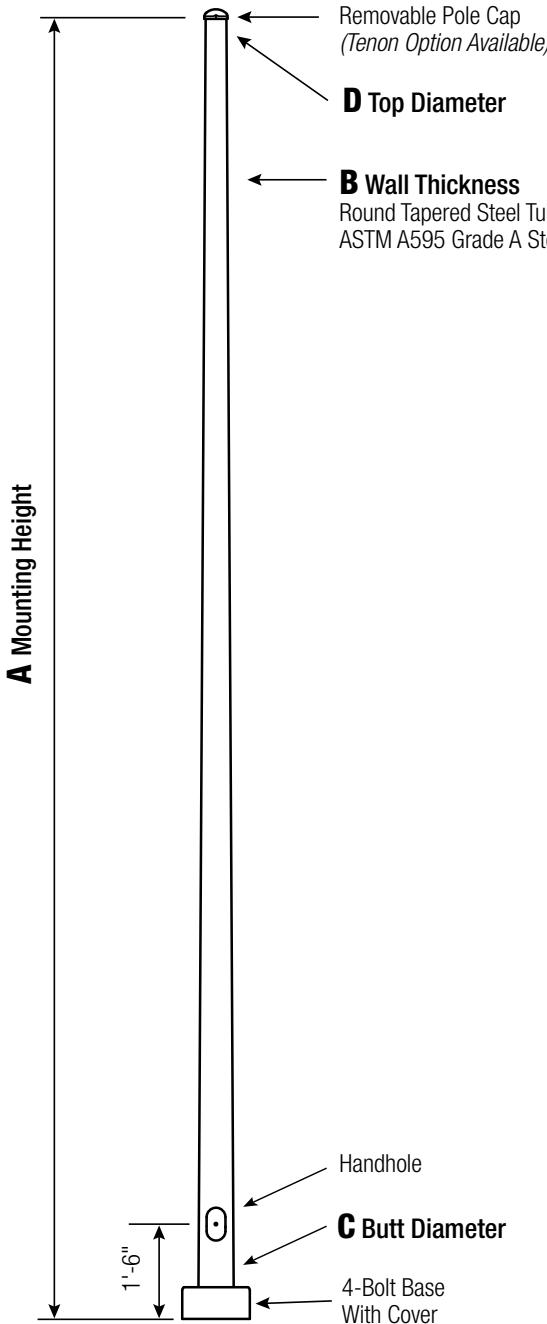
3" Butt Diameter - Reinforced, 2" x 4" Handhole with cover and stainless steel screws. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.



4"+ 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.

Vibration Damper

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

RTS
**Round Tapered Steel Pole
No Arm — 4-Bolt Base**

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

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

Pole

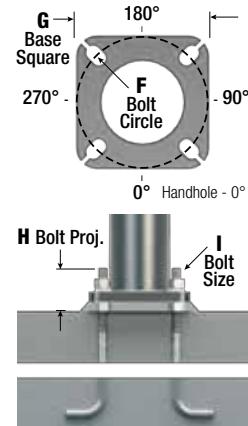
Pole shaft shall be weldable-grade, hot-rolled, commercial quality carbon steel tubing conforming to ASTM A595 Grade A. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

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.

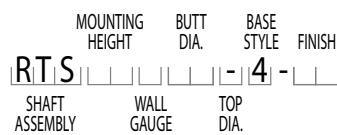
**Vibration Damper**

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

Mtg. Hgt.	A WALL THK.	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

Proven Performance

Hapco standard and decorative aluminum products are used in various applications in the Commercial, Utility, Municipality, and Department of Transportation markets. For over 70 years, Hapco has been considered a leader in the light pole industry and has products in every state of the US, Puerto Rico, and several international countries. Our history of proven performance, coupled with our exclusive Lifetime Warranty on aluminum pole assemblies, make Hapco the trusted industry source.

A partial listing of our customers is shown below:



*Venetian Causeway
Miami, FL
Installed Circa 1951*

Utility

Alabama Power
Alliant Energy
American Electric Power
Austin Energy
Baltimore Gas & Electric
Bristol Tennessee Essential Services
Bristol Virginia Utilities
Brownstown Electric
Chattanooga Power Board
Colorado Springs Utility
Consumers Energy
Dayton Power & Light
Detroit Energy
Dominion Power
Duke Energy
Electric Services
Entergy
First Energy
Harrisonburg Electric Commission
Huntsville Utilities
Indianapolis Power & Light
Jackson Electric Authority
Johnson City Power Board
Kentucky Utilities
Knoxville Utility Board
Louisville Gas & Electric
Mississippi Power Company
Nashville Electric Commission
National Grid
Niagara Mohawk
Northeast Utilities
Ocala Utilities Board
Orlando Utilities Commission
Pacific Gas & Electric
Progress Energy
PSE & G
Public Services of New Mexico
Puget Sound Energy
South Carolina Electric & Gas
Southern Company
Tampa Electric Company
Virginia Tech Electric
Xcel Energy

Light Fixture Manufacturers

GE Lighting
Holophane
Hubbell
Lithonia

Department of Transportation

Alabama
Arizona
California
Colorado
Connecticut
Florida
Georgia
Hawaii
Illinois
Indiana
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Nevada
New Jersey
New Mexico
New York
North Carolina
Ohio
Oregon
Pennsylvania
Rhode Island
South Carolina
Tennessee
Texas
Virginia
Washington
Wisconsin

Municipalities

Albuquerque, New Mexico
Atlanta, Georgia
Austin, Texas
Baltimore, Maryland
Birmingham, Alabama
Champaign, Illinois
Charleston, South Carolina
Chattanooga, Tennessee
Chicago, Illinois
College Station, Texas
Colorado Springs, Colorado
Columbus, Ohio
Dayton, Ohio
Des Moines, Iowa
Eau Claire, Wisconsin
Fargo, North Dakota
Fort Wayne, Indiana
Grand Forks, North Dakota
Greenville, South Carolina
Gulfport, Mississippi
Huntsville, Alabama
Indianapolis, Indiana
Jacksonville, Florida
Kansas City, Kansas/Missouri
Knoxville, Tennessee
Las Cruces, New Mexico
Lexington, Kentucky
Louisville, Kentucky
Madison, Wisconsin
Milwaukee, Wisconsin
Minneapolis, Minnesota
Mobile, Alabama
Nashville, Tennessee
New York, New York
Ocala, Florida
Ogden, Utah
Orlando, Florida
Park City, Utah
Pensacola, Florida
Philadelphia, Pennsylvania
Savannah, Georgia
Seattle, Washington
Tacoma, Washington
Tampa, Florida
Numerous Co-Ops and
Metered Municipalities

Military Bases

Brookley AFB
Camp Lejeune
Elgin AFB
Fort Benning
Fort Bliss
Fort Bragg
Fort Campbell
Fort Carson
Fort Drum
Fort Gordon
Fort Huachuca
Fort Jackson
Fort Lee
Fort Riley
Fort Rucker
Fort Sill
Fort Stewart
Grand Forks AFB
Kings Bay Naval Base
MacDill AFB
White Sands Missile Base



Hapco Aluminum, a sustainable material for now and the future!

Hapco Aluminum - The Green Choice

Hapco Aluminum provides an environmentally responsible choice of material and approach with the burgeoning green movement, allowing specifiers to aggressively pursue a design based upon sustainable principles.

Hapco Aluminum resists the ravages of time, temperature, corrosion, humidity, and warping, creating an incredibly long life cycle when compared to alternative materials. This results in a far lower environmental impact through reduced material replacement energy.

Our products are engineered to be efficiently and durably built using materials and processes that are kind to our environment. Aluminum production, unlike the galvanization process of steel which emits zinc chloride and ammonium chloride into the atmosphere, has a low impact on the environment, making it especially appealing when both environmental and economic criteria are considered.

The longevity and durability of aluminum pole products manufactured by Hapco can be validated by our industry-leading **Lifetime Warranty on Aluminum Pole Assemblies**, making Hapco Aluminum **“The Green Choice”** for today's environmentally-conscious designer.

- *Aluminum is 100% recyclable. In fact, 70% of aluminum produced since the year 1886 is still in use today.*
- *Recycling aluminum saves 95% of the energy it would take to produce new material from Bauxite Ore.*
- *Every ton of recycled aluminum saves 4 tons of the raw Bauxite required to produce new aluminum.*
- *Using recycled aluminum in place of raw materials reduces air pollution by 95% and water consumption by 97%.*
- *Aluminum is naturally corrosion-resistant, eliminating the use of toxic chemicals to maintain its appearance.*
- *Aluminum recycling benefits present and future generations by conserving energy and other natural resources.*



LIGHT POLES

2023 FBC Specifications

Advanced, state-of-the-art manufacturing combined with exceptional engineering and design!



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Accredited Standards Committee

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