

# ○ ROUND TAPERED ALUMINUM POLE

## RTA

### Shaft

Spun tapered from 6063 alloy aluminum tubing. Heat treated to produce a T6 temper. Shaft is furnished with ground lugs located on cast aluminum base plate.

### Drilling Side Mount

A removable pole cap is included. Pole will be drilled to match U.S. Architectural fixtures. For other Drilling required, please specify DP after specified drill pattern. (example: 2-180DP)

### Pole Top Mount

Standard pole top mount - PT27, fabricated from 2.5" (2.875" O.D.) aluminum pipe - tenon options available for pole tops please see Mounting column. For other pole top configurations please consult factory.

### Hand Hole Cover

Rectangular 3" x 5" stamped heavy gauge aluminum material Hand Hole Cover, 2¼" x 4¼" access opening. Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

### Base Plate

Cast aluminum constructed of A-356 aluminum alloy heat treated to produce a T6 temper. Structurally engineered base includes eight heavy wall reinforcing vertical gussets. Base telescopes and is circumferentially welded to shaft at both the outside top and inside bottom of the base.

### Anchorage

(4) anchor bolts fabricated from hot rolled steel bar. Minimum yield strength of 50,000 P.S.I. Bolts have "L" bend on one end and are threaded on the other. Bolts are fully galvanized and are furnished with two nuts and two washers.

### Base Cover

Fabricated from heavy wall aluminum construction. Two piece cover conceals base.

### Finish

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.



**Pole Top Mounting**  
PT27 - 2 7/8" X 3" Tenon  
(standard)  
PT23 - 2 3/8" X 3" Tenon



**Drilling Side Mount**



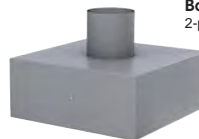
**Hand Hole Cover**  
w/ Locking Bar



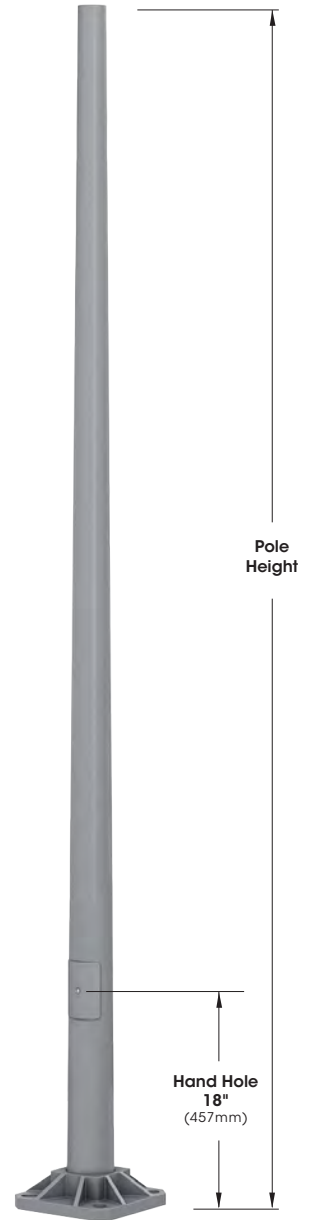
**Base Plate**



**Anchorage**



**Base Cover**  
2-pc Assembly



Pole Model	Pole Dia.		Pole Height
	Bottom	Top	
RTA	4" - 8"	3" - 4"	14' - 30'

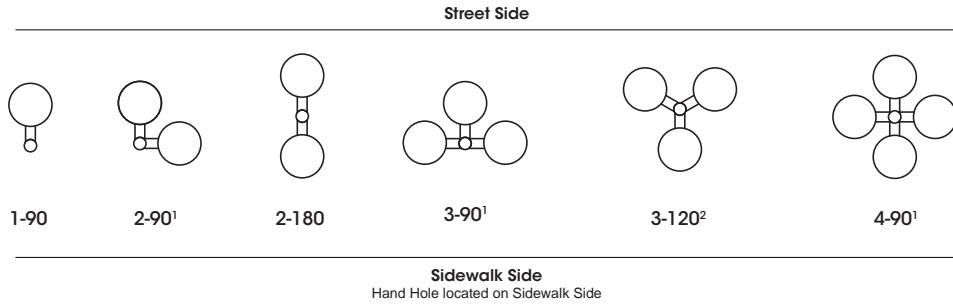
## DRILLING SIDE MOUNT

### Notes

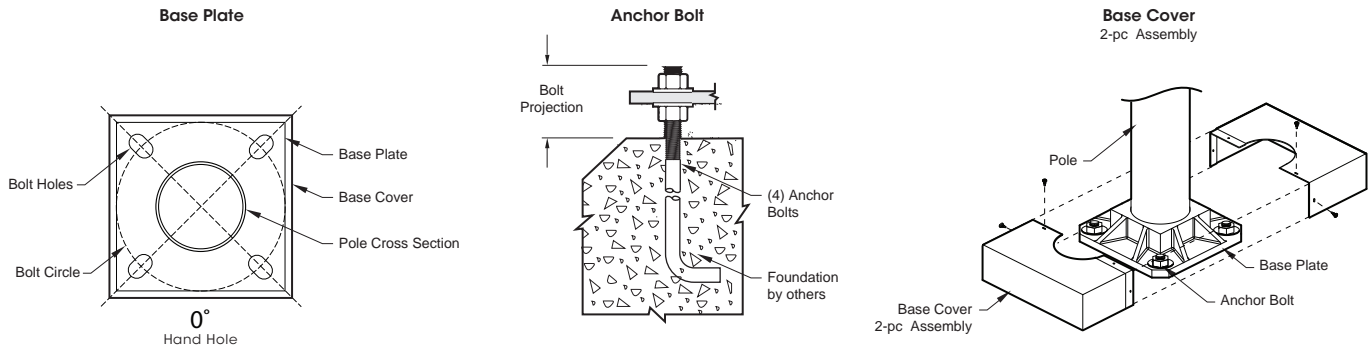
- 1- Poles smaller than 5" Dia. at top, or Non Linear Drilling requires PT27 and T490 Adapter. (Adaptor is rotatable)
- 2- Poles smaller than 5" Dia. at top, or Non Linear Drilling requires PT27 and T3120 Adapter. (Adaptor is rotatable)

When drilling pattern from other manufacturer's fixture is required, add "DP" to drill specifications. (Example: 2-180DP) **Drilling template must be provided.**

In the case of other manufacturer's drilling pattern, customer must provide drilling pattern.



## BOLT CIRCLE



Catalog Number	POLE								ANCHOR BOLTS				ANCHOR PLATE		
	Height		Bottom - Top				Wall Thickness (In/Ga)	Weight (Lbs)	Bolt Size	Bolt Projection above grade <sup>2,3</sup>	Bolt Circle Dia Range <sup>1</sup>	Bolt Circle Dia (In) (Rec.) <sup>1</sup>	Template	Base Plate	Cover
	Ft	M	In		Cm										
RTA 1443-125	14	4.27	4.00	3.00	10.16	7.62	0.125	31	¾" x 18" x 3"	3¼" - 3¾"	9½" - 10½"	10"	US10	¾" x 10" x 10"	5" x 12" x 12"
RTA 1643-125	16	4.88	4.00	3.00	10.16	7.62	0.125	34	¾" x 18" x 3"	3¼" - 3¾"	9½" - 10½"	10"	US10	¾" x 10" x 10"	5" x 12" x 12"
RTA 1853-188	18	5.49	5.00	3.00	12.70	7.62	0.188	56	1" x 36" x 4"	4" - 4½"	11" - 12"	12"	US12	1" x 11" x 11"	5" x 12" x 12"
RTA 2064-188	20	6.10	6.00	4.00	15.24	10.16	0.188	81	1" x 36" x 4"	4" - 4½"	12" - 13"	13"	US13	1" x 12" x 12"	5" x 14" x 14"
RTA 2574-188	25	7.62	7.00	4.00	17.78	10.16	0.188	106	1" x 36" x 4"	4" - 4½"	11"-13"	13"	US13	1" x 13" x 13"	5" x 14" x 14"
RTA 3084-188	30	9.15	8.00	4.00	20.32	10.16	0.188	136	1" x 36" x 4"	4" - 4½"	11½"-13½"	13"	US13	1" x 13" x 13"	5" x 14" x 14"

1 - Not using correct bolt size or "(REC.) Recommended" Bolt Circle could result in Pole's failure.

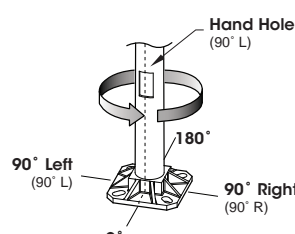
2 - Bolt Projection is calculated for slopes with 3 degrees or less.

3 - For slopes greater than 3 degrees, please add Bolt Length Projection as necessary.

4 - With 5" poles, max allowable bolt for 11" circle is ¾".

## ORDERING INFORMATION

Spec/Order Example: RTA2064-188/1-90/RAL-6005-T

Pole Model Number					Mounting	Finish	Options
Pole Model Number					Mounting	Finish	Options
Pole Height	Pole Bottom	Pole Top	Wall Thickness				
<input type="checkbox"/> RTA 1443-125	14'	4.00"	3.00"	0.125	<input type="checkbox"/> 27/8" X 3" Tenon <b>PT27</b> (Standard)	<input type="checkbox"/> Black <b>RAL-9005-S</b>	<input type="checkbox"/> Vibration Dampener 2nd Mode Field Install <b>VBDS-M2</b>
<input type="checkbox"/> RTA 1643-125	16'	4.00"	3.00"	0.125	<input type="checkbox"/> 23/8" X 3" Tenon <b>PT23</b>	<input type="checkbox"/> White <b>RAL-9003-S</b>	<b>Receptacle</b>
<input type="checkbox"/> RTA 1853-188	18'	5.00"	3.00"	0.188	<input type="checkbox"/> 27/8" X 6" Tenon <b>PT276</b>	<input type="checkbox"/> Grey <b>RAL-7004-S</b>	<input type="checkbox"/> G.F.I. Receptacle w/ Cover <b>GFI</b>
<input type="checkbox"/> RTA 2064-188	20'	6.00"	4.00"	0.188	<input type="checkbox"/> Other Tenon Mt _____	<input type="checkbox"/> Dark Bronze <b>RAL-8019-S</b>	<input type="checkbox"/> G.F.I. Receptacle w/ In-Use Cover <b>GFI-U</b>
<input type="checkbox"/> RTA 2574-188	25'	7.00"	4.00"	0.188		<input type="checkbox"/> Green <b>RAL-6005-S</b>	[Specify GFI location: Height and Direction] See Location Diagram below
<input type="checkbox"/> RTA 3084-188	30'	8.00"	4.00"	0.188			<input type="checkbox"/> 3 Way Adapter <b>T3120</b>
Other heights available Please consult factory					<b>Drill Mount</b>	<b>Premium Finishes</b>	<input type="checkbox"/> 4 Way Adapter <b>T490</b>
					<input type="checkbox"/> 1-90 .....	<input type="checkbox"/> Rust	<b>Coupling</b>
					<input type="checkbox"/> 2-180 .....	<input type="checkbox"/> Patina Copper <b>PC</b>	<input type="checkbox"/> 1/2" Coupling <b>CPLN12</b>
					<input type="checkbox"/> 2-90 .....	<input type="checkbox"/> Custom Specify RAL# _____	<input type="checkbox"/> 3/4" Coupling <b>CPLN34</b>
					<input type="checkbox"/> 3-90 .....	<input type="checkbox"/> Anodized <b>AZ</b>	<input type="checkbox"/> 1 1/4" Coupling <b>CPLN114</b>
					<input type="checkbox"/> 4-90 .....		<input type="checkbox"/> 1 1/2" Coupling <b>CPLN112</b>
					<input type="checkbox"/> 3-120 .....		<input type="checkbox"/> 2" Coupling <b>CPLN2</b>
						For Smooth Finish replace suffix "T" with suffix "T" Example: RAL-9005-S	[Specify Coupling location: Height and Direction] See Location Diagram below
					3-120 requires PT27 and T3120 Adapter	See USALTG.COM for additional colors	<b>Nipple</b>
					2-90, 3-90, 4-90 requires PT27 and T490 Adapter		<input type="checkbox"/> 1/2" Nipple <b>NPLE12</b>
					When Drilling Pattern from other manufacturer is required, add "DP" to drill specifications (Example: 2-180DP) <b>Drilling template must be provided.</b>		<input type="checkbox"/> 3/4" Nipple <b>NPLE34</b>
							<input type="checkbox"/> 1 1/4" Nipple <b>NPLE114</b>
							<input type="checkbox"/> 1 1/2" Nipple <b>NPLE112</b>
							<input type="checkbox"/> 2" Nipple <b>NPLE2</b>
							[Specify Coupling location: Height and Direction] See Location Diagram below
							<b>Location Diagram</b>
							Please use this diagram to indicate placement location
							
							Refer to the Accessories Section for other options

## OPTIONS



**GFI**  
Duplex GFI  
w/ Cover



**GFI-U**  
Duplex GFI  
w/ In-Use Cover



**T3120**  
3 Way Adapter



**T490**  
4 Way Adapter



**FRBC**  
Flat Round Base Cover



**RBC**  
Round Base Cover

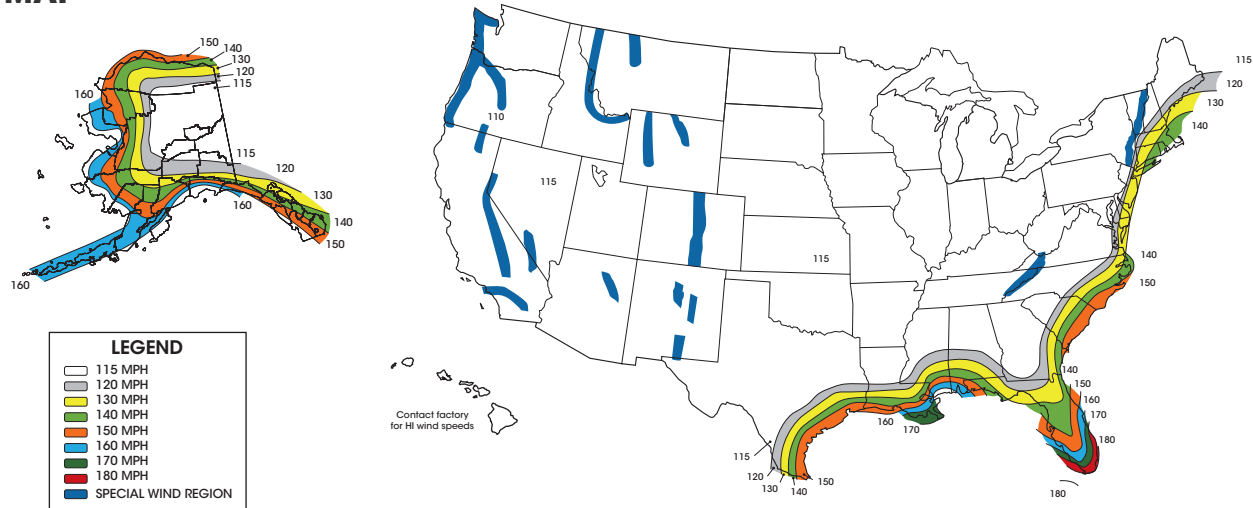


**CPLN**  
1/2", 3/4", 1 1/4", 1 1/2",  
or 2" Coupling



**NPLE**  
1/2", 3/4", 1 1/4", 1 1/2",  
or 2" Nipple

## WIND MAP



## EPA INFORMATION (ft<sup>2</sup>) (per AASHTO LRFDLTS-1 revised 2022)

Cat. No.	Weight Capacity Maximum (Lbs.)	100 MPH	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
RTA 1443-125	214 - 60*	6.1	4.6	4.0	3.5	2.6	1.9	1.3	1.0	0.8	0.7
RTA 1643-125	143.5 - 60*	4.1	3.1	2.6	2.2	2.5	0.9	0.7	0.4	0.0	0.0
RTA 1853-188	283.5 - 98*	8.1	7.1	6.7	6.2	5.7	4.8	4.2	3.7	3.2	2.8
RTA 2064-188	300 - 136.5*	14.0	12.4	11.1	10.1	8.5	7.2	6.0	5.3	4.6	3.9
RTA 2574-188	300 - 70*	14.3	11.7	10.8	9.9	8.2	7.1	5.0	3.7	2.5	2.0
RTA 3084-188	300 - 60*	13.4	10.9	9.7	8.8	7.3	6.3	5.5	5.0	3.1	1.3

## EPA INFORMATION (ft<sup>2</sup>) (per 2020 FL Building Code)

Cat. No.	Weight Capacity Maximum (Lbs.)	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
RTA 1443-125	115.5 - 60*	3.3	2.4	1.8	1.2	0.9	0.7	0.6
RTA 1643-125	73.5 - 60*	2.1	1.4	0.8	0.7	0.4	0.0	0.0
RTA 1853-188	206.5 - 87.5*	5.9	5.0	4.5	3.8	3.5	2.9	2.5
RTA 2064-188	300 - 119*	9.4	7.7	6.7	5.4	4.8	4.1	3.4
RTA 2574-188	300 - 63*	9.2	7.7	6.8	4.4	3.5	2.2	1.8
RTA 3084-188	273 - 60*	7.8	6.7	5.9	5.2	4.5	2.7	1.2

\* Please use the following to obtain the proper weight capacity: The maximum fixture weight equals 60 lbs. or the product of 35 lbs. x the EPA value, whichever is greater, not to exceed 300 lbs. Example, EPA = 2.2 , weight = 35 lbs. x 2.2 EPA = 77 lbs.

### Notes

- Specifier is responsible for correct pole selection. For proper pole choice, the specifier must consider the total EPA of fixtures, banners, arms, and any other accessories attached to pole assembly.
- U.S. Architectural discourages the attachment of unauthorized accessories; any such attachments will void the manufacturer's warranty.
- ALL EPAs are calculated for ground installations. For installations on bridges, buildings or other structures, the specifier must contact the factory or consult with a structural Engineer
- Unpredictable aerodynamic forces such as wind-induced vibrations are not included in wind velocity ratings or EPA ratings.
- Wind gust factors are considered in developing all EPA chart data.

### To mitigate 2nd Mode (Aeolian) Vibration please read the following Recommendations:

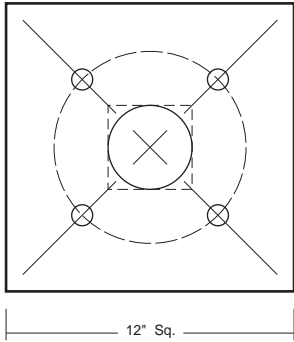
- We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
- Pole installations with a combined (fixtures, banners, flags, etc.) of less than 0.75 ft<sup>2</sup> EPA and 20 feet or taller will be provided with a vibration dampener.

## ANCHOR BOLT TEMPLATES

For printable versions of Templates go to <https://usaltg.com/document-type/anchor-bolt-template>.

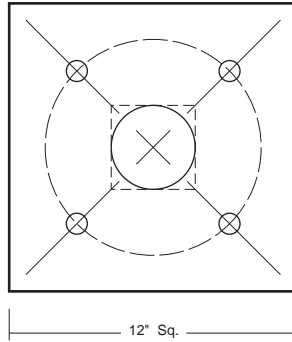
### US8

8" Bolt Circle



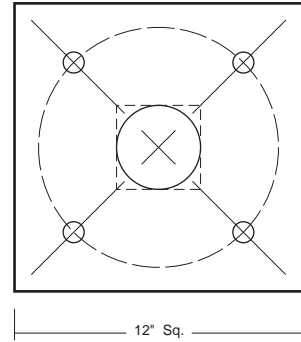
### US9

9" Bolt Circle



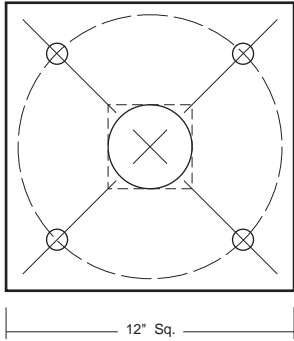
### US10

10" Bolt Circle



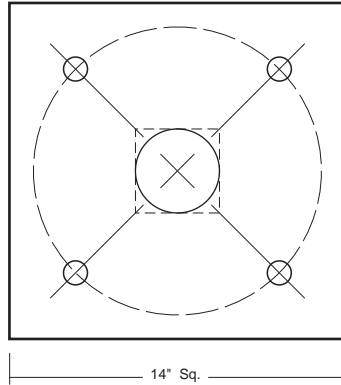
### US11

11" Bolt Circle



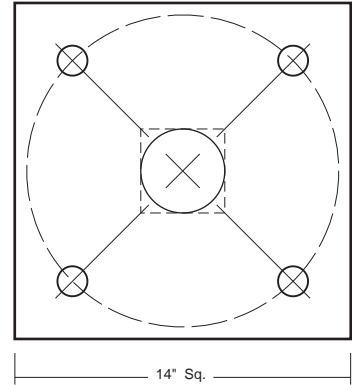
### US12

12" Bolt Circle



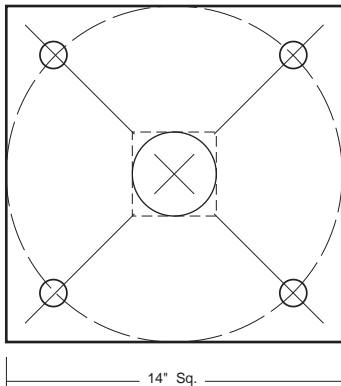
### US13

13" Bolt Circle



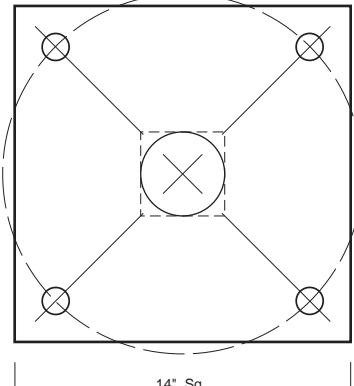
### US14

14" Bolt Circle



### US15

15" Bolt Circle



### US16

16" Bolt Circle

