

○ HINGED BASE ROUND TAPERED ALUMINUM POLE

# HBRTA

### 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.

### Anchor Base & Cover

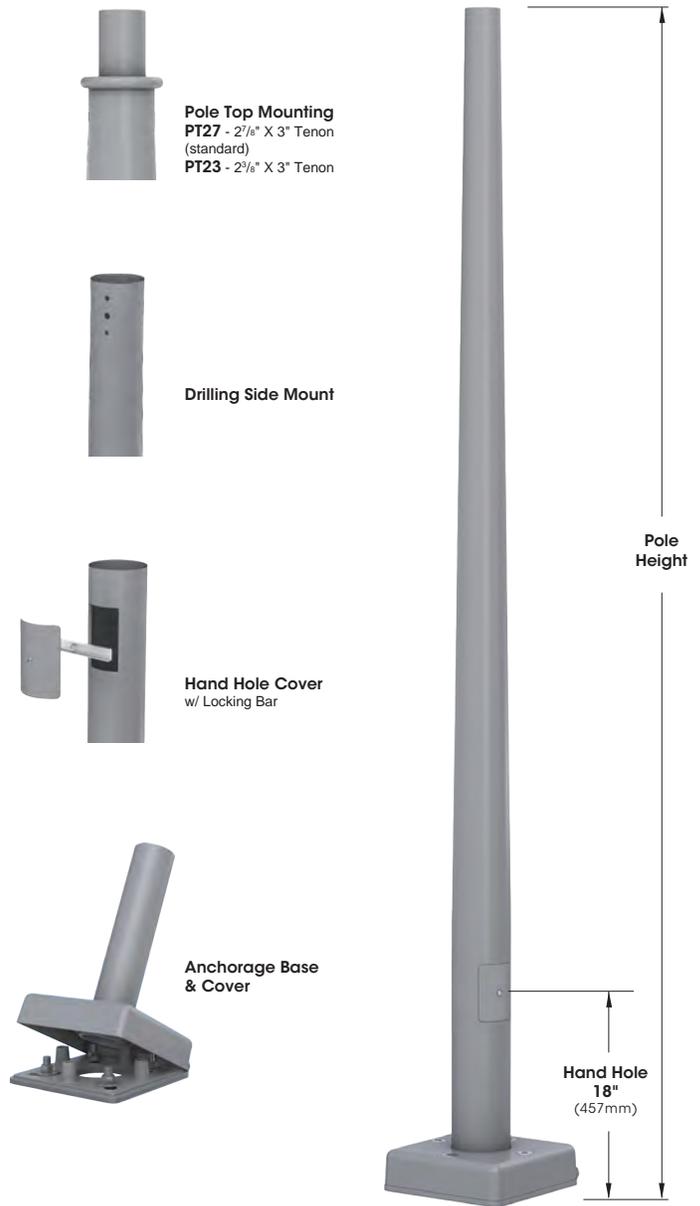
Uniquely designed, patented Hinge Base Pole Assembly was created to simplify the installation process. Hinged Anchor Base Assembly, with four heavy wall bosses to accept four stainless steel Countersink Bolts, for a strong and secure fit, is cast from 356 alloy aluminum. The complete Assembly is heated-treated to a T6 temper. (4) 3/4"-10 Bolts secure Base to Anchor Plate. Base Hinges utilize a 11/16" steel Pin, to insure easy and secure hinging mechanism for safe installation and maintenance. Steel Pin is easily removed by internal stainless Set Screw. Hinge Base is self-containing with the Base Top serving as an aesthetically pleasing decorative Cover.

### 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.

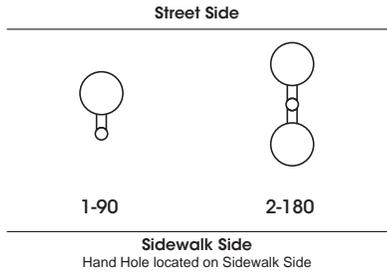
### Finish

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 Model	Pole Dia.		Pole Height
	Bottom	Top	
HBRTA	4"	3"	10' - 16'
HBRTA	5"	3"	12' - 18'

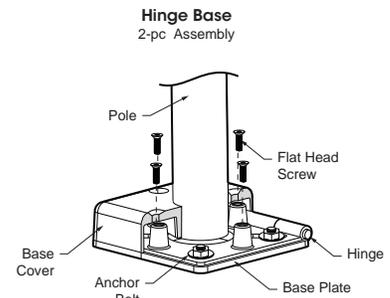
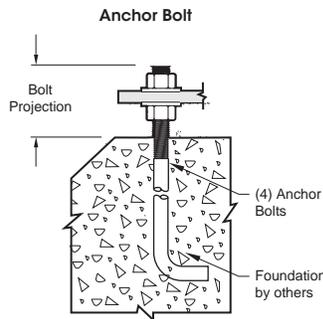
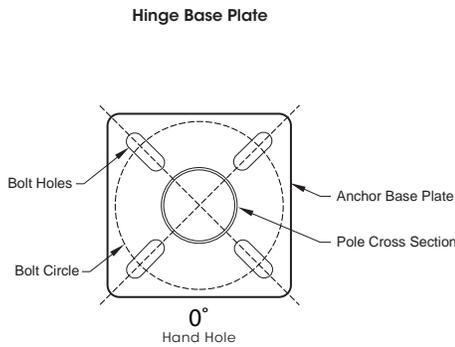
## DRILLING SIDE MOUNT



**Notes**  
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	HINGE BASE POLE							Weight (Lbs)	ANCHOR BOLTS				HINGE BASE ASSEMBLY		
	Height		Bottom - Top				Wall Thickness (In/Ga)		Bolt Size	Bolt Projection above grade <sup>2,3</sup>	Bolt Circle Dia Range <sup>1</sup>	Bolt Circle Dia (In) (Rec.) <sup>4</sup>	Template	Hinge Anchor Plate	Hinge Base Assembly
	Ft	M	In	Cm	In	Cm									
HBRTA 1043-188	10	3.05	4.00	3.00	10.16	7.62	0.188	43	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1243-188	12	3.66	4.00	3.00	10.16	7.62	0.188	48	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1443-125	14	4.27	4.00	3.00	10.16	7.62	0.125	42	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1443-188	14	4.27	4.00	3.00	10.16	7.62	0.188	52	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1643-125	16	4.88	4.00	3.00	10.16	7.62	0.125	45	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1253-188	12	3.66	5.00	3.00	12.70	7.62	0.188	52	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1453-188	14	4.27	5.00	3.00	12.70	7.62	0.188	57	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1553-188	15	4.57	5.00	3.00	12.70	7.62	0.188	60	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1653-188	16	4.88	5.00	3.00	12.70	7.62	0.188	62	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3 1/2" x 12" x 12"
HBRTA 1853-188	18	5.49	5.00	3.00	12.70	7.62	0.188	67	3/4" x 18" x 3"	3 1/4" - 3 3/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3 1/2" x 12" x 12"

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 - The maximum weight allowed on any assembly, including fixtures and options, is 100 lbs.

## ORDERING INFORMATION

Spec/Order Example: HBRTA2064-188/1-90/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"/> HBRTA 1043-188	10'	4.00"	3.00"	0.188	<b>Tenon Mount</b>  <input type="checkbox"/> 27/8" X 3" Tenon <b>PT27</b> (Standard)  <input type="checkbox"/> 23/8" X 3" Tenon <b>PT23</b>  <input type="checkbox"/> 27/8" X 6" Tenon <b>PT276</b>  <input type="checkbox"/> Other Tenon Mt _____  <b>Drill Mount</b>  <input type="checkbox"/> <b>1-90</b> ..... ●  <input type="checkbox"/> <b>2-180</b> ..... ●●  When Drilling Pattern from other manufacturer is required, add "DP" to drill specifications (Example: 2-180DP) <b>Drilling template must be provided.</b>	<b>Standard Smooth Finish</b>  <input type="checkbox"/> Black <b>RAL-9005-S</b>  <input type="checkbox"/> White <b>RAL-9003-S</b>  <input type="checkbox"/> Grey <b>RAL-7004-S</b>  <input type="checkbox"/> Dark Bronze <b>RAL-8019-S</b>  <input type="checkbox"/> Green <b>RAL-6005-S</b>  <b>Premium Finishes</b>  <input type="checkbox"/> Rust  <input type="checkbox"/> Patina Copper <b>PC</b>  <input type="checkbox"/> Custom Specify RAL# _____  <input type="checkbox"/> Anodized <b>AZ</b>  For Smooth Finish replace suffix "T" with suffix "T" Example: RAL-9005-S  See USALTG.COM for additional colors	<input type="checkbox"/> Vibration Dampener 2nd Mode Field Install <b>VBDS-M2</b>  <b>Receptacle</b>  <input type="checkbox"/> G.F.I. Receptacle w/ Cover <b>GFI</b> <input type="checkbox"/> G.F.I. Receptacle w/ In-Use Cover <b>GFHU</b> [Specify GFI location: Height and Direction] See Location Diagram below  <b>Coupling</b>  <input type="checkbox"/> 1/2" Coupling <b>CPLN12</b> <input type="checkbox"/> 3/4" Coupling <b>CPLN34</b> <input type="checkbox"/> 1 1/4" Coupling <b>CPLN114</b> <input type="checkbox"/> 1 1/2" Coupling <b>CPLN112</b> <input type="checkbox"/> 2" Coupling <b>CPLN2</b> [Specify Coupling location: Height and Direction] See Location Diagram below  <b>Nipple</b>  <input type="checkbox"/> 1/2" Nipple <b>NPLE12</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
<input type="checkbox"/> HBRTA 1243-188	12'	4.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1443-125	14'	4.00"	3.00"	0.125			
<input type="checkbox"/> HBRTA 1443-188	14'	4.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1643-125	16'	4.00"	3.00"	0.125			
<input type="checkbox"/> HBRTA 1253-188	12'	5.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1453-188	14'	5.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1553-188	15'	5.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1653-188	16'	5.00"	3.00"	0.188			
<input type="checkbox"/> HBRTA 1853-188	18'	5.00"	3.00"	0.188			

Other heights available  
 Please consult factory  
 Poles 4" Dia. bottom not to exceed 16 feet  
 Poles 5" Dia. bottoms not to exceed 18 feet

## OPTIONS



**GFI**  
Duplex GFI  
w/ Cover



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

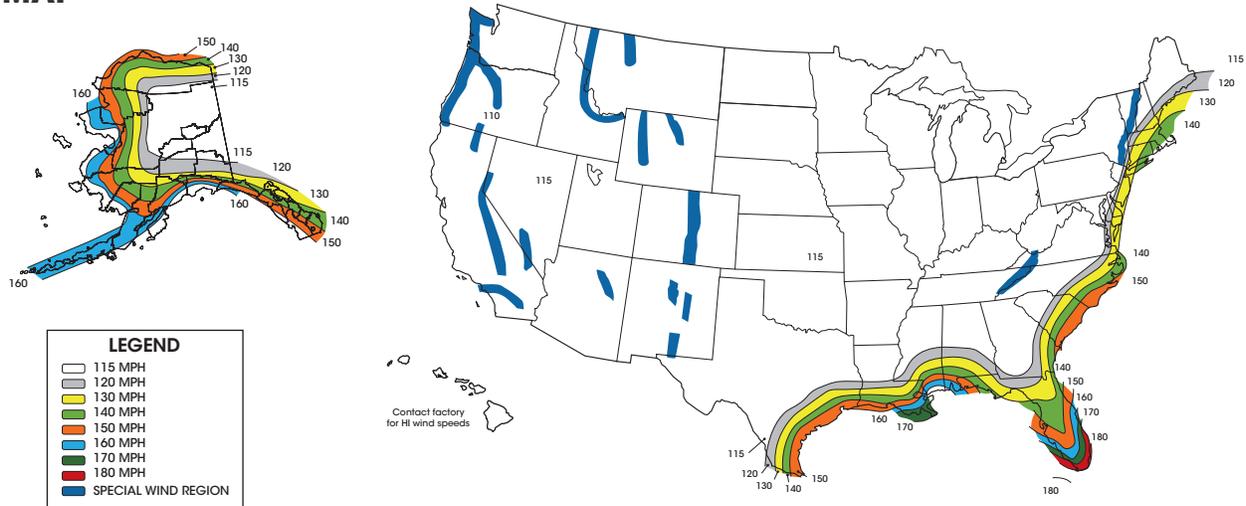


**CPLN**  
1/2", 3/4", 1 1/4", 1 1/2",  
or 2" Coupling



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

## WIND MAP



## EPA INFORMATION (ff<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
HBRTA 1043-188	100 - 73.5*	9.8	7.8	7.0	6.1	5.0	4.0	3.3	2.8	2.6	2.1
HBRTA 1243-188	100 - 60*	7.4	5.6	5.0	4.5	3.4	2.6	2.2	1.7	1.6	1.3
HBRTA 1443-125	100 - 60*	3.0	2.1	1.7	1.3	0.8	0.4	0.0	0.0	0.0	0.0
HBRTA 1443-188	100 - 60*	5.5	4.2	3.5	3.0	2.2	1.5	1.2	1.0	0.8	0.6
HBRTA 1643-125	100 - 60*	1.9	1.1	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
HBRTA 1253-188	100 - 100*	12.9	10.4	9.3	8.4	6.9	6.0	5.0	4.3	3.9	3.3
HBRTA 1453-188	100 - 87.5*	10.2	8.1	7.0	6.3	5.2	4.5	3.7	3.3	2.7	2.5
HBRTA 1553-188	100 - 73.5*	9.1	7.0	6.1	5.6	4.5	3.9	3.3	2.8	2.4	2.1
HBRTA 1653-188	100 - 60*	7.6	5.9	5.0	4.6	3.6	3.0	2.5	2.1	1.9	1.5
HBRTA 1853-188	100 - 60*	6.1	4.4	3.9	3.4	2.8	2.1	1.7	1.5	1.2	1.1

## EPA INFORMATION (ff<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
HBRTA 1043-188	100 - 66.5*	5.4	4.5	3.8	3.1	2.6	2.4	1.9
HBRTA 1243-188	100 - 60*	3.6	2.9	2.4	2.0	1.5	1.4	1.0
HBRTA 1443-125	100 - 60*	2.0	1.6	1.3	1.0	0.8	0.6	0.5
HBRTA 1443-188	100 - 60*	1.0	0.7	0.4	0.0	0.0	0.0	0.0
HBRTA 1643-125	100 - 100*	7.7	6.6	5.6	4.7	4.1	3.7	3.1
HBRTA 1253-188	100 - 66.5*	5.7	4.9	4.2	3.5	3.1	2.5	1.9
HBRTA 1453-188	100 - 60*	5.1	4.3	3.6	3.0	2.6	2.0	1.7
HBRTA 1553-188	100 - 60*	4.0	3.3	2.7	2.2	1.9	1.7	1.3
HBRTA 1653-188	100 - 60*	3.0	2.3	1.6	1.3	1.1	0.9	0.7
HBRTA 1853-188	100 - 60*	3.0	2.3	1.6	1.3	1.1	0.9	0.7

\* 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 (from the chart above), whichever is greater, not to exceed 300 lbs.  
Example, EPA = 2.2, maximum fixture weight = 35 lbs. x 2.2 EPA = 77 lbs.

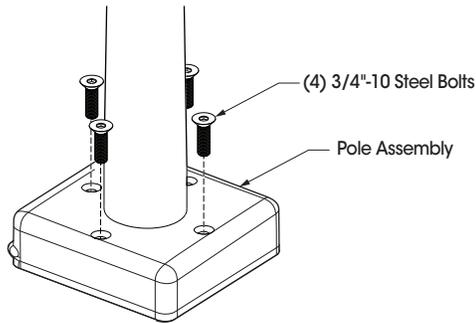
### Notes

- 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. Outdoor Lighting 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 2nd Mode (Aeolian) wind-induced vibrations are not included in wind velocity ratings or EPA ratings.
- Wind gust factors are considered in developing all EPA chart data.

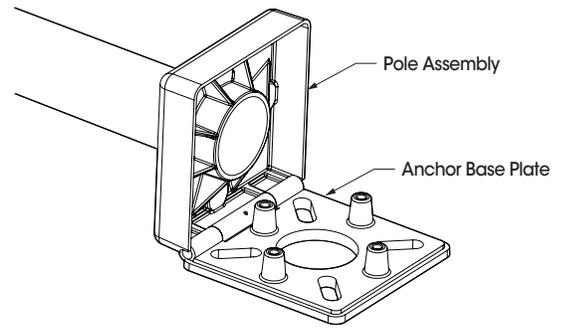
### To mitigate 2nd Mode (Aeolian) Vibration please read the following Recommendations:

- 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.) EPA of less than 2.0 ff<sup>2</sup> and 25 feet or taller are strongly recommended to be installed with a Vibration Damper. Please consult with your Structural Engineer for site-specific requirements.
- U.S. Outdoor Lighting offers a 2nd Mode Vibration Damper VBDS-M2 for purchase as a field-installable option.

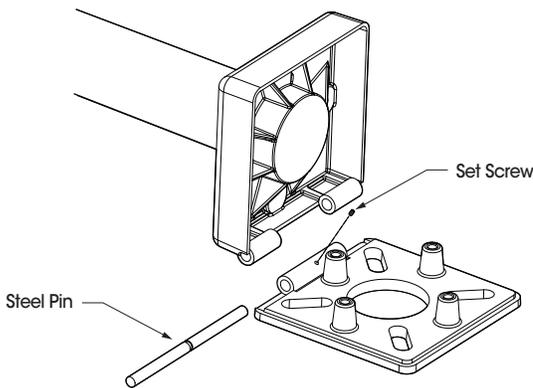
## INSTALLATION



- ① Remove four 3/4"-10 Steel Bolts from Pole Assembly.

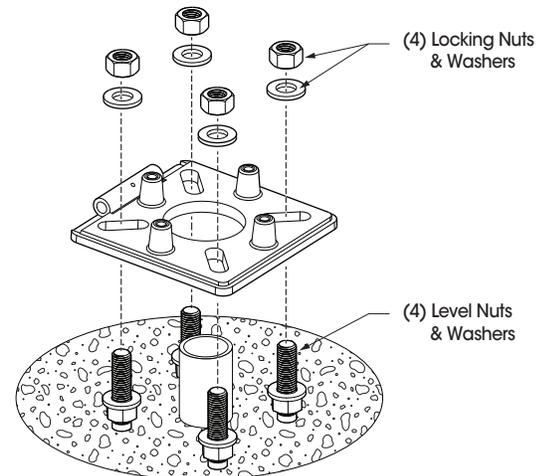


- ② Unhinge Pole Assembly from Anchor Base Plate.

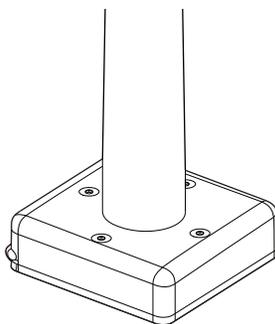


- ③ **Optional For Easier Installation**

Loosen Set Screw and slide Steel Pin out, save for later use.  
**(NOTE: Anchor Base Plate/Pole Assembly can also be installed w/out the removal of Steel Pin.)**

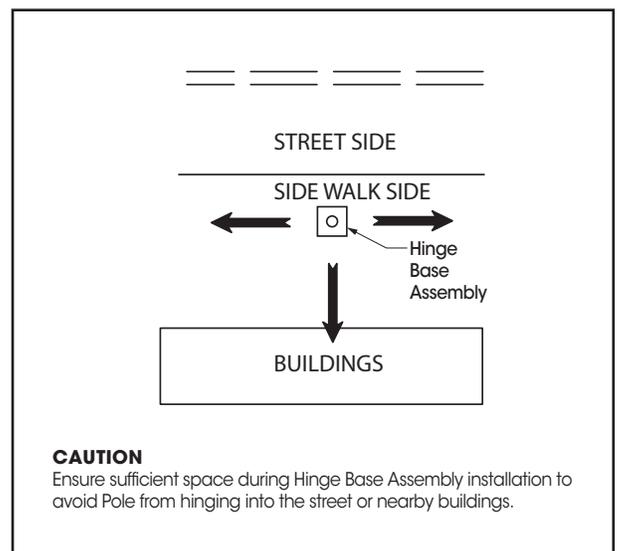


- ④ Install Anchor Base Plate following installation instructions (available upon request).



- ⑤ Attach Pole Assembly back on to Anchor Base Plate. If Steel Pin was removed, restore to original position and lock into place with Set Screw provided.

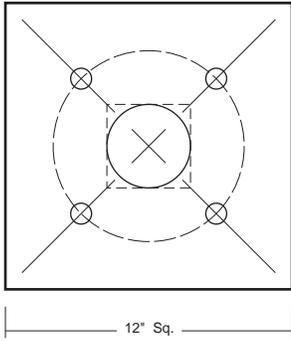
Secure Pole Assembly to Anchor Base Plate by reinstalling four 3/4"-10 Steel Bolts.



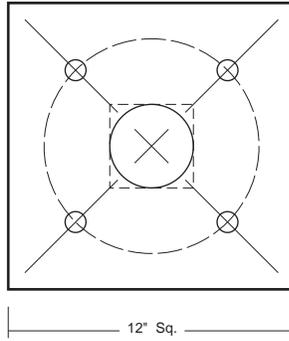
## ANCHOR BOLT TEMPLATES

For printable versions of Templates: click on the Template's name, otherwise go to <https://usaltg.com/downloads/templates.html>.

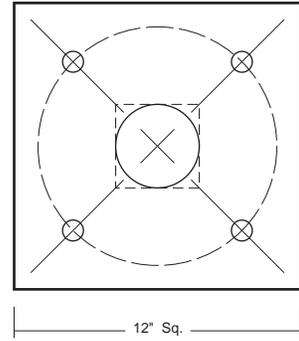
**US8**  
8" Bolt Circle



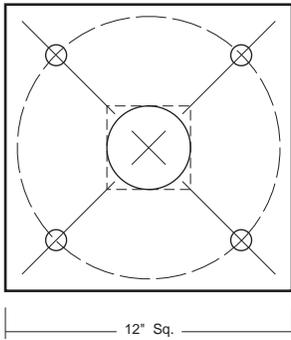
**US9**  
9" Bolt Circle



**US10**  
10" Bolt Circle



**US11**  
11" Bolt Circle



**US12**  
12" Bolt Circle

