





HINGED BASE ROUND NON-TAPERED ALUMINUM POLE

# **HBRNTA**

#### Shaft

Round extruded from 6063 alloy aluminum tubing. Heat treated to produce a T6 temper. Shaft includes a hand hole furnished with cover. 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, 21/4" x 41/4" 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.

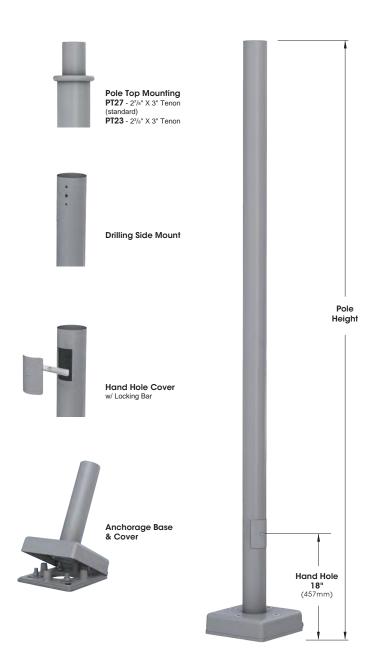
#### **Anchorage**

(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.

#### PROJECT TYPE:



Pole Model	Pole Dia.	Pole Height
HBRNTA4	4"	8' - 14'
HBRNTA5	5"	10' - 20'





#### **DRILLING SIDE MOUNT**

# Street Side 2-180

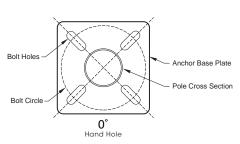
Sidewalk Side Hand Hole located on Sidewalk Side

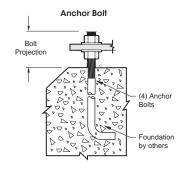
Notes
When drilling pattern from other manufacturer's fixture is required, add "DP" to drill specifications.
(Example: 2-180DP) Drilling template must be provided.

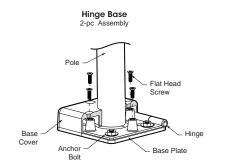
In the case of other manufacturer's drilling pattern, customer must provide drilling pattern.

#### **BOLT CIRCLE**









	HINGE BASE POLE									ANCHOR BO	DLTS	HINGE BASE ASSEMBLY			
Catalog Number	He Ft	eight M	lr	<b>Bottom - Top</b> In Cm		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	Hinge Anchor Plate	Hinge Base Asembly	
HBRNTA 84-125	8	2.44	4.00	4.00	10.16	10.16	0.125	34	3/4" x 18" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 104-125	10	3.05	4.00	4.00	10.16	10.16	0.125	38	3/4" x 18" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 124-125	12	3.66	4.00	4.00	10.16	10.16	0.125	41	3/4" x 18" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12"x 12"	3½" x 12" x 12"
HBRNTA 144-125	14	4.27	4.00	4.00	10.16	10.16	0.125	45	3/4" x 18" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 105-125	10	3.05	5.00	5.00	12.70	12.70	0.125	42	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 125-125	12	3.66	5.00	5.00	12.70	12.70	0.125	47	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 145-125	14	4.27	5.00	5.00	12.70	12.70	0.125	51	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 145-188	14	4.27	5.00	5.00	12.70	12.70	0.188	67	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 165-125	16	4.88	5.00	5.00	12.70	12.70	0.125	56	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12"x 12"	3½" x 12" x 12"
HBRNTA 165-188	16	4.88	5.00	5.00	12.70	12.70	0.188	73	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 185-125	18	5.49	5.00	5.00	12.70	12.70	0.125	60	3/4" x 24" x 3"	3¼" - 3¾"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBRNTA 185-188	18	5.49	5.00	5.00	12.70	12.70	0.188	80	3/4" x 24" x 3"	3¼" - 3¾"	8" - 12"	12"	US12	3/4" x 12"x 12"	3½" x 12" x 12"
HBRNTA 205-188	20	6.10	500	5.00	12.70	12.70	0.188	86	3/4" x 24" x 3"	3¼" - 3¾"	8" - 12"	12"	US12	3/4" x 12" x 12"	3½" 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: HBRNTA205-188/1-90/RAL-6005-T

Pole Model Number				Mounting	Finish	Options				
	Pole Model N	umber		Mounting	Finish	Options				
4" Pole Dia.		Pole Height	Wall Thickness	Tenon Mount	Standard Smooth Finish	☐ Vibration Dampener 2nd Mode Field Install				
	HBRNIA 84-125 8 0.125 PT27				☐ Black RAL-9005-S	VBDS-M2				
	☐ HBRNTA 104-125	10'	0.125	(Standard)	☐ White	Receptacle				
	☐ HBRNTA 124-125	12'	0.125	☐ 2³/8" X 3" Tenon	RAL-9003-S	☐ G.F.I. Receptacle w/ Cover				
	☐ HBRNTA 144-125	14'	0.125	PT23	☐ Grey	GFI ☐ G.F.I. Receptacle w/ In-Use Cove				
5" Pole Dia.				27/8" X 6" Tenon	RAL-7004-S	GFI-IU				
	☐ HBRNTA 105-125	10'	0.125	PT276	☐ Dark Bronze  RAL-8019-S	[Specify GFI location: Height and Direction] See Location Diagram below				
	☐ HBRNTA 125-125	12'	0.125	Other Tenon Mt		Coupling				
	☐ HBRNTA 145-125	14'	0.125	Drill Mount	Green RAL-6005-S	□ ½" Coupling □ ¾" Coupling				
	☐ HBRNTA 145-188	14'	0.188	□ 1-90		CPLN12 CPLN34				
	☐ HBRNTA 165-125	16'	0.125		Premium Finishes	☐ 1¼" Coupling ☐ 1½" Coupling CPLN114 CPLN112				
	☐ HBRNTA 165-188	16'	0.188	□ 2-180	☐ Rust	2" Coupling				
	☐ HBRNTA 185-125	18'	0.125 When Drilling Pattern from other	☐ Patina	CPLN2 [Specify Coupling location: Height and Direction]					
	☐ HBRNTA 185-188	18'	0.188	manufacturer is required, add "DP" to drill specifications	Copper <b>PC</b>	See Location Diagram below				
	☐ HBRNTA 205-188	20'	0.188	(Example: 2-180DP)  Drilling template must be provided.	☐ Custom	Nipple				
	Other heig	hts available			Specify RAL#	☐ ½" Nipple ☐ ¾" Nipple NPLE12 NPLE34				
	Please co Poles 4" Dia. not Poles 5" Dia. not				AZ AZ	☐ 1¼" Nipple ☐ 1½" Nipple NPLE114 NPLE112				
					For Smooth Finish replace suffix "T" with suffix "T" Example: RAL-9005-S	2" Nipple NPLE2				
					See USALTG.COM for additional colors	[Specify Coupling location: Height and Direction] See Location Diagram below				
						Location Diagram Please use this diagram to indicate placement location				
						Hand Hole (0° Zero degrees)  90° Right (90° R)  0°				
						Refer to the Accessories Section for other options				

## **OPTIONS**



GFI Duplex GFI w/ Cover



GFI-IU Duplex GFI w/ In-Use Cover



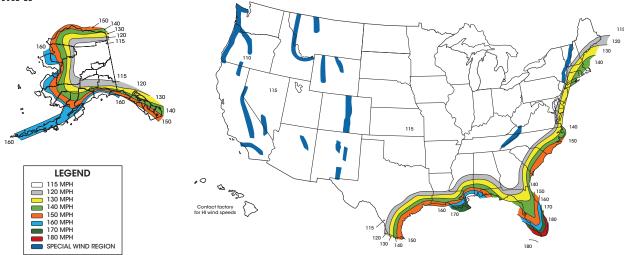
CPLN ½", ¾", 1¼', 1½", or 2" Coupling



**NPLE** ½", ¾", 1¼', 1½", or 2" Nipple



#### **WIND MAP**



## **EPA INFORMATION (ft²)** (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
HBRNTA 84 - 125	100 - 100*	13.8	11.1	10.0	9.2	7.5	6.1	5.3	4.6	4.0	3.5
HBRNTA 104 - 125	100 - 77*	10.3	8.1	7.1	6.5	5.2	4.2	3.6	3.1	2.5	2.2
HBRNTA 124 - 125	100 - 60*	7.5	5.9	5.2	4.4	3.5	2.8	2.2	1.7	1.6	1.2
HBRNTA 144 - 125	100 - 60*	5.7	4.1	3.5	3.1	2.1	1.4	1.1	0.9	0.7	0.5
HBRNTA 105 - 125	100 - 100*	17.4	13.8	12.4	11.4	9.6	8.1	7.0	5.9	5.3	4.7
HBRNTA 125 - 125	100 - 100*	13.3	10.6	9.3	8.3	6.9	5.8	5.1	4.4	3.8	3.3
HBRNTA 145 - 125	100 - 84*	10.5	7.8	7.0	6.1	5.0	4.3	3.6	3.2	2.6	2.4
HBRNTA 145 - 188	100 - 100*	16.9	13.2	11.8	10.8	8.8	7.4	6.5	5.6	4.7	4.1
HBRNTA 165 - 125	100 - 60*	7.3	5.5	4.7	4.1	3.3	2.8	2.2	1.8	1.5	1.4
HBRNTA 165 - 188	100 - 100*	12.6	9.9	8.5	7.6	6.4	5.4	4.4	3.9	3.3	3.0
HBRNTA 185 - 125	100 - 60*	5.4	3.8	3.2	2.6	2.0	1.7	1.2	09	0.7	0.5
HBRNTA 185 - 188	100 - 73.5*	10.2	7.6	6.6	5.7	4.6	3.8	3.4	2.7	2.3	2.1
HBRNTA 205 - 188	100 - 60*	7.8	5.6	4.7	4.2	3.3	2.8	2.1	1.7	1.4	1.3

# **EPA INFORMATION (ff²)** (per 2020 FL Building Code)

Cat. No.	Weight Capacity Maximum	120	130	140	150	160	170	180
	(Lbs.)	MPH	MPH	MPH	MPH	MPH	MPH	MPH
HBRNTA 84 - 125	100 - 100*	8.4	7.1	5.7	4.7	4.3	3.7	3.2
HBRNTA 104 - 125	100 - 66.5*	5.8	4.7	4.0	3.1	2.7	2.3	1.9
HBRNTA 124 - 125	100 - 60*	4.3	3.2	2.6	2.0	1.5	1.4	1.1
HBRNTA 144 - 125	100 - 60*	3.0	1.8	1.3	1.0	0.8	0.7	0.5
HBRNTA 105 - 125	100 - 100*	10.1	8.8	7.4	6.5	5.3	4.8	4.2
HBRNTA 125 - 125	100 - 100*	7.5	6.6	5.5	4.6	3.9	3.6	3.0
HBRNTA 145 - 125	100 - 73.5*	5.8	4.8	4.0	3.3	3.0	2.3	2.1
HBRNTA 145 - 188	100 - 100*	9.5	8.5	7.1	5.8	5.4	4.2	3.8
HBRNTA 165 - 125	100 - 60*	3.9	2.9	2.5	2.0	1.6	1.3	1.2
HBRNTA 165 - 188	100 - 94.5*	6.9	6.0	4.8	4.1	3.5	2.9	2.7
HBRNTA 185 - 125	100 - 60*	2.4	1.8	1.5	1.1	0.8	0.6	0.4
HBRNTA 185 - 188	100 - 66.5*	5.4	4.3	3.7	3.2	2.4	2.1	1.9
HBRNTA 205 - 188	100 - 60*	4.0	3.1	2.5	2.0	1.5	1.2	1.1

<sup>\*</sup> 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 100 lbs. Example, EPA = 2.2, weight = 35 lbs. x 2.2 EPA = 77 lbs.

- 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.

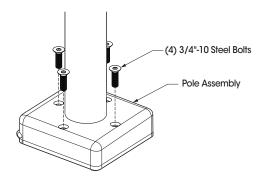
  • U.S. Architectural discourages the attachment of unauthorized accessories; any such attachments will void the manufacturer's warranty.
- ALL EPAs are calculated for ground installations. For installations on bridges, buildings or other structures, the specifier must contact the factory or consult with 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:

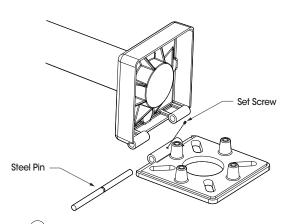
- We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
   Pole installations with a combined (fixtures, banners, flags, etc.) of less than 0.75 ft2 EPA and 20 feet or taller will be provided with a vibration dampener.



#### **INSTALLATION**

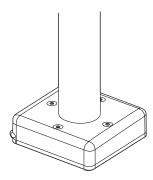


(1) Remove four 3/4"-10 Steel Bolts from Pole Assembly.



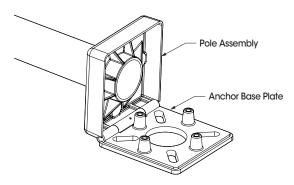
(3) **Optional For Easier Installation** 

> 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.)

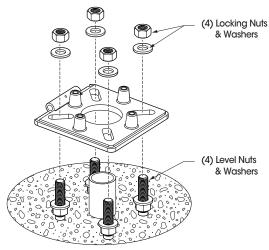


(5) Attach Pole Assembly back on to Anchor Base Plate. If Steel Pin was removed, restore to original position and lock into place with Set Screw provided.

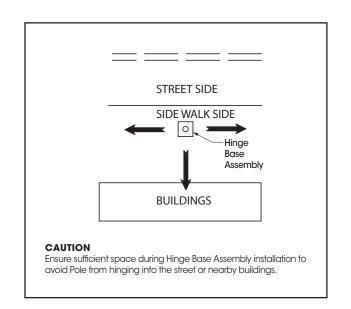
> Secure Pole Assembly to Anchor Base Plate by reinstalling four 3/4"-10 Steel Bolts.



(2) Unhinge Pole Assembly from Anchor Base Plate.



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

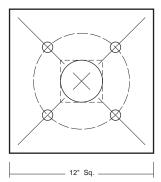




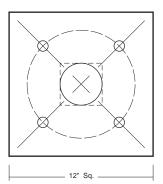
## **ANCHOR BOLT TEMPLATES**

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

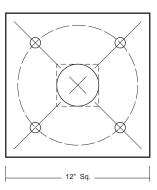
**US8** 8" Bolt Circle



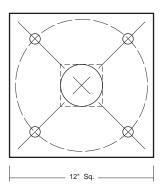
US9 9" Bolt Circle



US10 10" Bolt Circle



US11 11" Bolt Circle



US12 12" Bolt Circle

