

# HINGED BASE SQUARE RD NON-TAPERED ALUMINUM POLE

# **HBSNTAR**

### Shaft

Square, rounded corners, extruded from 6063 alloy aluminum tubing. Heat treated to produce a T6 temper. Shaft includes a hand hole furnished with cover.

## **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,  $2\frac{1}{4}$ " x  $4\frac{1}{4}$ " 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**

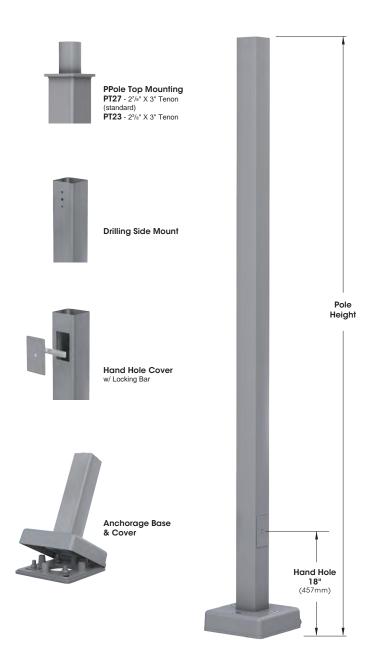
(4) Anchor Bolts fabricated from hot rolled steel bar. Minimum yield strength of 50,000 P.S.I. Bolts have "L" bend on one end and are threaded on the other. Bolts are fully galvanized and are furnished with two nuts and two washers.

#### **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 NAME:

#### PROJECT TYPE:



Pole Model	Pole Sq.	Pole Height				
HBSNTAR4	4"	8' - 20'				
HBSNTAR5	5"	15' - 20'				





# **DRILLING SIDE MOUNT**

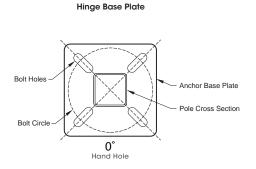
# Street Side 2-180

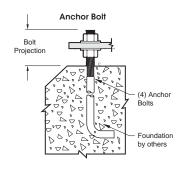
Sidewalk Side Hand Hole located on Sidewalk Side

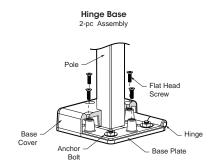
Notes
When drilling pattern from other manufacturer's fixture is required, add "DP" to drill specifications.
(Example: 2-180DP) Drilling template must be provided.

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

# **BOLT CIRCLE**







	HINGE BASE POLE						ANCHOR BOLTS				HINGE BASE ASSEMBLY				
Catalog Number	Height		Bottom - Top				Weight (Lbs)	DOII 3126	Bolt Projection above grade <sup>2,3</sup>	Bolt Circle Dia Range <sup>1</sup>	Bolt Circle Dia (ln)	Template	Hinge Anchor Plate	Hinge Base Asembly	
	Ft	M	l li	n		m	(,)		,			(Rec.) <sup>1</sup>			
HBSNTAR 84-125	8	2.44	4.00	4.00	10.16	10.16	0.125	39	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"
HBSNTAR 104-125	10	3.05	4.00	4.00	10.16	10.16	0.125	44	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"
HBSNTAR 124-125	12	3.66	4.00	4.00	10.16	10.16	0.125	49	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"
HBSNTAR 154-125	15	4.57	4.00	4.00	10.16	10.16	0.125	56	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 154-188	15	4.57	4.00	4.00	10.16	10.16	0.188	75	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 184-125	18	5.49	4.00	4.00	10.16	10.16	0.125	64	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 184-188	18	5.49	4.00	4.00	10.16	10.16	0.188	86	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 204-188	20	6.10	4.00	4.00	10.16	10.16	0.188	94	3/4" x 24" x 3"	31/4" - 33/4"	8" - 12"	10"	US10	3/4" x 12"x 12"	3½" x 12" x 12"
HBSNTAR 155 - 125	15	4.57	5.00	5.00	12.70	12.70	0.125	65	3/4" x 24" x 3"	31/4" - 33/4"	10" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 185 - 125	18	5.49	5.00	5.00	12.70	12.70	0.125	74	3/4" x 24" x 3"	31/4" - 33/4"	10" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 185 - 188	18	5.49	5.00	5.00	12.70	12.70	0.188	102	3/4" x 24" x 3"	31/4" - 33/4"	10" - 12"	12"	US12	3/4" x 12"x 12"	3½" x 12" x 12"
HBSNTAR 205 - 125	20	6.10	5.00	5.00	12.70	12.70	0.125	80	3/4" x 24" x 3"	31/4" - 33/4"	10" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"
HBSNTAR 205 - 188	20	6.10	5.00	5.00	12.70	12.70	0.188	111	3/4" x 24" x 3"	31/4" - 33/4"	10" - 12"	12"	US12	3/4" x 12" x 12"	3½" x 12" x 12"

- Not using correct bolt size or "(REC.) Recommended" Bolt Circle could result in Pole's failure.
   Bolt Projection is calculated for slopes with 3 degrees or less.
   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: HBSNTAR124-12/2-180/RAL-8019-S

Pole Model Numb	er	Mounting	Finish	Options				
Pole Model Nur	mber	Mounting	Finish	Options				
	Pole Wa eight Thickr		Standard Smooth Finish	☐ Vibration Dampener 2nd Mode Field Install				
☐ HBSNTAR 84-125	8' 0.12	PT27	Black RAL-9005-S	VBDS-M2				
	<ul><li>10' 0.12</li><li>12' 0.12</li></ul>		☐ White RAL-9003-S	Receptacle  G.F.I. Receptacle w/ Cover GFI G.F.I. Receptacle w/ In-Use Cover GFIU				
_	15' 0.12	PT23	Grey RAL-7004-S					
	15' 0.18 18' 0.12	PT276	☐ Dark Bronze RAL-8019-S	[Specify GFI location: Height and Direction] See Location Diagram below				
	18' 0.18 20' 0.18	B Drill Mount	Green RAL-6005-S	Coupling    ½"Coupling   ¾"Coupling				
5" Pole Sq	15' 0.12		Premium Finishes	CPLN12 CPLN34  ☐ 1¼" Coupling ☐ 1½" Coupling CPLN114 CPLN112				
☐ HBSNTAR 185 - 125	18' 0.12	<b>□ 2-180</b>	Rust	2" Coupling CPLN2				
	18' 0.18 20' 0.12	to drill specifications	Copper PC	[Specify Coupling location: Height and Direction] See Location Diagram below				
☐ HBSNTAR 205 - 188	20' 0.18		Custom Specify RAL#	Nipple				
Other heights i Please consul Poles not to exce	t factory		☐ Anodized AZ	NPLE12				
			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



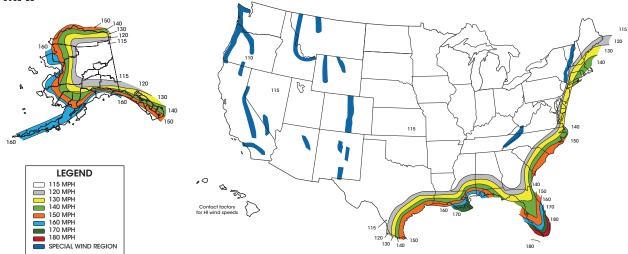
CPLN ½", ¾", 1¼', 1½", or 2" Coupling



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



# WIND MAP



# **EPA INFORMATION (ft²)** (per AASHTO LRFDLTS-1 revised 2022)

#### Capacity Maximum 100 110 115 130 140 150 160 170 180 120 Cat. No. MPH (Lbs.) **HBSNTAR 84-125** 100 - 100\* 13.9 10.9 9.7 8.3 7.1 5.6 4.5 3.8 3.5 3.3 HBSNTAR 104-125 9.7 7 7 3.0 2.0 100 - 703 6.9 6.2 5.0 44 3.6 2.2 HBSNTAR 124-125 1.8 0.8 100 - 60\* 7.5 6.0 5.0 4.4 3.4 3.0 2.4 1.4 HBSNTAR 154-125 100 - 60\* 5.0 3.4 3.0 2.4 2.0 1.4 0.6 0.3 0.0 0.0 HBSNTAR 154-188 100 - 60\* 4.8 4.2 2.2 1.6 1.4 0.6 HBSNTAR 184-125 98 - 60\* 2.8 1.8 1.4 0.8 0.3 0.0 0.0 0.0 0.0 0.0 **HBSNTAR 184-188** 100 - 603 42 3.0 27 19 1.5 0.9 0.3 0.0 Ωn 0.0 HBSNTAR 204-188 100 - 603 0.5 nη 0.0 0.0 0.0 nη 39 27 16 11 100 - 60\* 7.5 5.9 4.9 4.5 3.1 2.5 1.5 0.9 0.7 0.3 HBSNTAR 155 - 125 HBSNTAR 185 - 125 2.1 0.0 0.0 100 - 60\* 1.4 0.9 0.3 0.0 HBSNTAR 185 - 188 100 - 60\* 7.0 5.2 4.4 3.8 2.9 1.8 1.3 0.7 0.3 0.0 HBSNTAR 205 - 125 100 - 603 3.1 21 1.3 ΠQ 0.2 0.0 0.0 0.0 0.0 0.0 100 - 60\* 4.1 HBSNTAR 205 - 188 6.0 4.9 3.5 2.1 1.5 0.6 0.3 0.0 0.0

# **EPA INFORMATION** (ft²) (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
HBSNTAR 84-125	100 - 100*	7.6	6.6	5.0	4.2	3.5	3.2	3.0
HBSNTAR 104-125	100 - 65.8*	5.8	4.7	4.0	3.3	2.8	2.0	1.9
HBSNTAR 124-125	100 - 60*	4.0	3.1	2.8	2.5	1.6	1.3	0.7
HBSNTAR 154-125	100 - 60*	2.2	1.8	1.3	0.5	0.3	0.0	0.0
HBSNTAR 154-188	100 - 60*	4.2	3.0	2.1	1.5	1.3	0.9	0.6
HBSNTAR 184-125	100 - 60*	0.7	0.3	0.0	0.0	0.0	0.0	0.0
HBSNTAR 184-188	100 - 60*	1.9	1.5	0.9	0.3	0.0	0.0	0.0
HBSNTAR 204-188	100 - 60*	1.5	1.0	0.5	0.0	0.0	0.0	0.0
HBSNTAR 155 - 125	100 - 60*	4.1	2.9	2.4	1.4	0.8	0.6	0.3
HBSNTAR 185 - 125	100 - 60*	1.4	09	0.3	0.0	0.0	0.0	0.0
HBSNTAR 185 - 188	100 - 60*	3.7	2.8	1.7	1.2	0.7	0.3	0.0
HBSNTAR 205 - 125	100 - 60*	0.8	0.2	0.0	0.0	0.0	0.0	0.0
HBSNTAR 205 - 188	100 - 60*	3.2	1.9	1.4	0.5	0.3	0.0	0.0

<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.

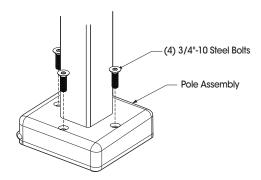
- Specifier is responsible for correct pole selection. For proper pole choice, the specifier must consider the total EPA of fixtures, banners, arms, and any other accessories attached to pole assembly.
- U.S. Architectural discourages the attachment of unauthorized accessories; any such attachments will 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:

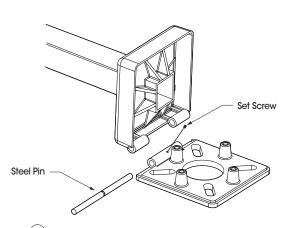
- · We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
- Pole installations with a combined (fixtures, banners, flags, etc.) of less than 0.75 ft2 EPA and 20 feet or taller will be provided with a vibration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



# **INSTALLATION**

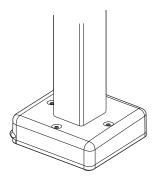


(1) Remove four 3/4"-10 Steel Bolts from Pole Assembly.



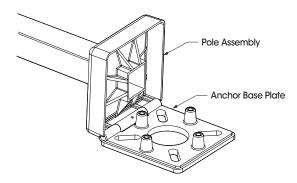
(3) **Optional For Easier Installation** 

> 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.)

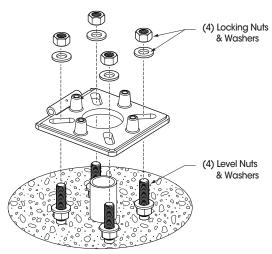


(5) Attach Pole Assembly back on to Anchor Base Plate. If Steel Pin was removed, restore to original position and lock into place with Set Screw provided.

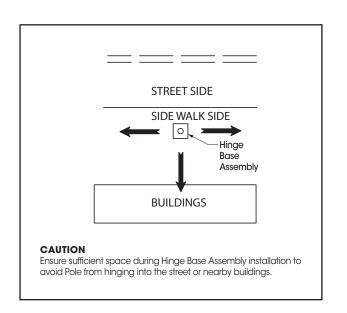
> Secure Pole Assembly to Anchor Base Plate by reinstalling four 3/4"-10 Steel Bolts.



(2) Unhinge Pole Assembly from Anchor Base Plate.



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

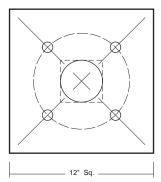




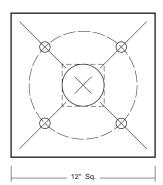
# **ANCHOR BOLT TEMPLATES**

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

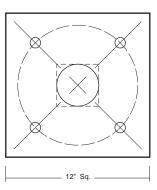
**US8** 8" Bolt Circle



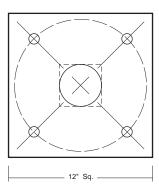
US9 9" Bolt Circle



US10 10" Bolt Circle



US11 11" Bolt Circle



US12 12" Bolt Circle

