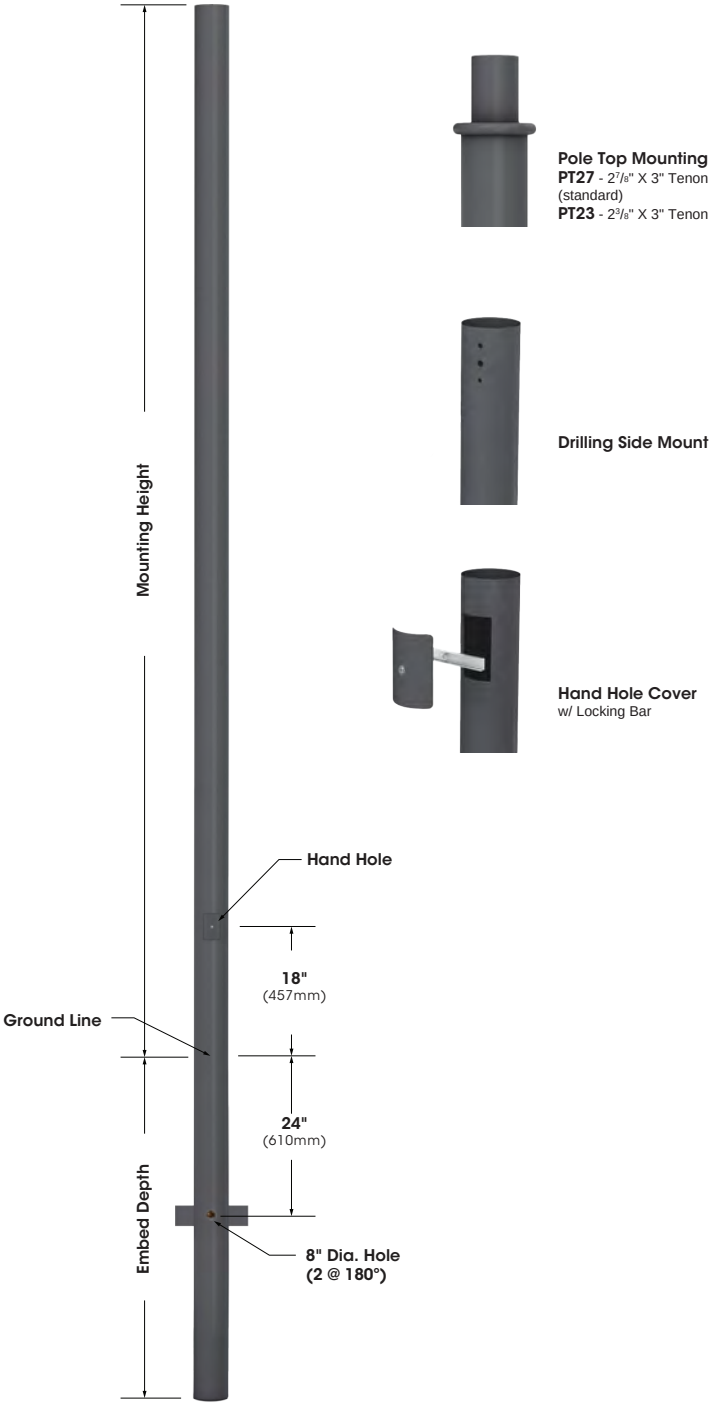
BLACKFORGE
WEST COAST METALWORKS

EMBEDDED ROUND NON-TAPERED ALUMINUM
BF-ERNTA



Pole Model	Pole Dia.	Mounting Height	Embed Depth
BF-ERNTA4	4"	8' - 14'	3'
BF-ERNTA5	5"	10' - 20'	4'
BF-ERNTA6	6"	20' - 25'	4'
BF-ERNTA658	6 5/8"	20' - 25'	5'

SPECIFICATIONS

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.

Embed and Direct Burial Detail
Designed for durability and stability, the bottom of the embedded pole section includes welded aluminum wings to prevent rotation and ensure secure placement. Wire access holes are conveniently located 24 inches below the ground line for easy installation and maintenance. Due to varying soil conditions at different sites, it is essential that foundation requirements be assessed by a qualified Structural Engineer familiar with the specific soil characteristics of the job site. This ensures optimal performance and longevity of the installation.

Drilling Side Mount
A removable pole cap is included. Pole will be drilled to match customer provided drilling template.

Pole Top Mount
Standard pole top mount - PT27, fabricated from 2.5" (2.875" O.D.) aluminum pipe – tenon options for PT276 and PT23 pole tops please see Mounting column. For other pole top configurations please consult factory.

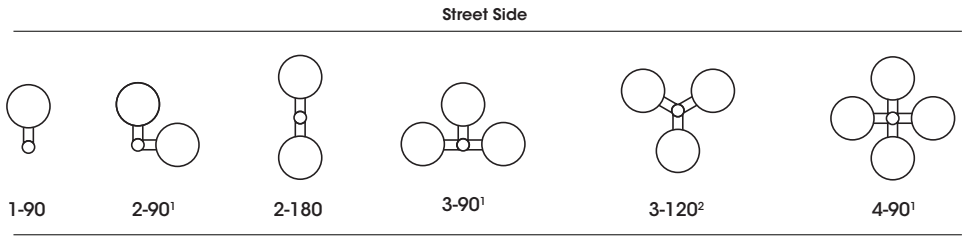
Hand Hole Cover
Rectangular 3" x 5" stamped heavy gauge aluminum material Hand Hole Cover, 2¼" x 4¼" access opening. Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

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.

BLACKFORGE
WEST COAST METALWORKS

EMBEDDED ROUND NON-TAPERED ALUMINUM
BF-ERNTA

DRILLING SIDE MOUNT



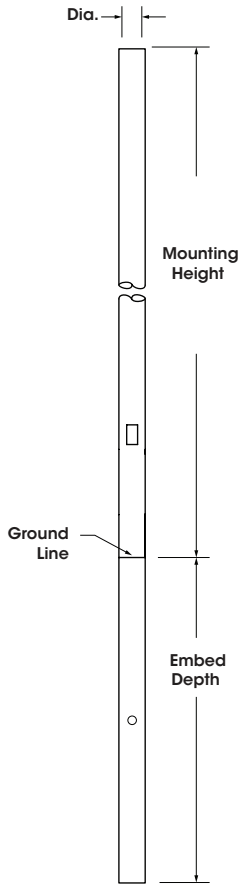
Notes

1- Poles smaller than 3" Dia. at top, or Non Linear Drilling requires PT27 and T490 Adapter. (Adaptor is rotatable)

2- Poles smaller than 3" Dia. at top, or Non Linear Drilling requires PT27 and T3120 Adapter. (Adaptor is rotatable)

[Drilling template must be provided by customer]

BOLT CIRCLE



Catalog Number	POLE								
	Mounting Height		Bottom - Top				Wall Thickness (In/Ga)	Weight (Lbs)	Embed Depth
	Ft	M	In		Cm				
BF-ERNTA 84-125	8	2.44	4.00	4.00	10.16	10.16	0.125	23	3'
BF-ERNTA 104-125	10	3.05	4.00	4.00	10.16	10.16	0.125	27	3'
BF-ERNTA 124-125	12	3.66	4.00	4.00	10.16	10.16	0.125	30	3'
BF-ERNTA 144-125	14	4.27	4.00	4.00	10.16	10.16	0.125	34	3'
BF-ERNTA 105-125	10	3.05	5.00	5.00	12.70	12.70	0.125	32	4'
BF-ERNTA 125-125	12	3.66	5.00	5.00	12.70	12.70	0.125	36	4'
BF-ERNTA 145-125	14	4.27	5.00	5.00	12.70	12.70	0.125	41	4'
BF-ERNTA 145-188	14	4.27	5.00	5.00	12.70	12.70	0.188	56	4'
BF-ERNTA 165-125	16	4.88	5.00	5.00	12.70	12.70	0.125	45	4'
BF-ERNTA 165-188	16	4.88	5.00	5.00	12.70	12.70	0.188	63	4'
BF-ERNTA 185-125	18	5.49	5.00	5.00	12.70	12.70	0.125	50	4'
BF-ERNTA 185-188	18	5.49	5.00	5.00	12.70	12.70	0.188	69	4'
BF-ERNTA 205-188	20	6.10	5.00	5.00	12.70	12.70	0.188	76	4'
BF-ERNTA 206-188	20	6.10	6.00	6.00	15.24	15.24	0.188	95	4'
BF-ERNTA 206-250	20	6.10	6.00	6.00	15.24	15.24	0.250	121	4'
BF-ERNTA 256-188	25	7.62	6.00	6.00	15.24	15.24	0.188	115	4'
BF-ERNTA 256-250	25	7.62	6.00	6.00	15.24	15.24	0.250	147	4'
BF-ERNTA 20658-250	20	6.10	6.63	6.63	16.83	16.83	0.250	135	5'
BF-ERNTA 25658-250	25	7.62	6.63	6.63	16.83	16.83	0.250	165	5'

BLACKFORGE
WEST COAST METALWORKS

EMBEDDED ROUND NON-TAPERED ALUMINUM
BF-ERNTA

ORDERING INFORMATION

Spec/Order Example: BF-ERNTA145-188/2-90/ANZ

Pole Model Number

	Pole Height	Wall Thickness
4" Pole Dia.		
BF-ERNTA 84 - 125	8'	.125
BF-ERNTA 104 - 125	10'	.125
BF-ERNTA 124 - 125	12'	.125
BF-ERNTA 144 - 125	14'	.125
5" Pole Dia.		
BF-ERNTA 105 - 125	10'	.125
BF-ERNTA 125 - 125	12'	.125
BF-ERNTA 145 - 125	14'	.125
BF-ERNTA 145 - 188	14'	.188
BF-ERNTA 165 - 125	16'	.125
BF-ERNTA 165 - 188	16'	.188
BF-ERNTA 185 - 125	18'	.125
BF-ERNTA 185 - 188	18'	.188
BF-ERNTA 205 - 188	20'	.188
6" Pole Dia.		
BF-ERNTA 206 - 188	20'	.188
BF-ERNTA 206 - 250	20'	.250
BF-ERNTA 256 - 188	25'	.188
BF-ERNTA 256 - 250	25'	.250
6⅝" Pole Dia.		
BF-ERNTA 20658 - 250	20'	.250
BF-ERNTA 25658 - 250	25'	.250

Other heights available
Please consult factory

Mounting

Tenon Mount

PT27 2⅞" X 3" Tenon (Standard)
PT23 2⅜" X 3" Tenon
PT276 2⅞" X 6" Tenon
Other Tenon Mt ____

Drill Mount

1-90
2-180
2-90
3-90
4-90
3-120

3-120 requires PT27 and T3120 Adapter

2-90, 3-90, 4-90 requires PT27 and T490 Adapter

[Drilling template must be provided by customer]

Finish

Standard Smooth Finish

9005-S Black
9003-S White
7004-S Grey
8019-S Dark Bronze
6005-S Green

Premium Finishes

Custom
Specify RAL# _____

ANZ Anodized

Options

VBDS-M2 Vibration Dampener
2nd Mode Field Install

Receptacle

GFI G.F.I. Receptacle w/ Cover
GFI-IU G.F.I. Receptacle w/ In-Use Cover

[Specify GFI location: Height and Direction]
See Location Diagram below

T3120 3 Way Adapter
T490 4 Way Adapter

[Drilling template must be provided by customer]

Coupling

CPLN12 ½" Coupling
CPLN34 ¾" Coupling
CPLN114 1¼" Coupling
CPLN112 1½" Coupling
CPLN2 2" Coupling

[**Specify Coupling location**: Height and Direction]
See Location Diagram below

Nipple

NPLE12 ½" Nipple
NPLE34 ¾" Nipple
NPLE114 1¼" Nipple
NPLE112 1½" Nipple
NPLE2 2" Nipple

[**Specify Coupling location**: Height and Direction]
See Location Diagram below

ACCESSORIES

GFI
Duplex GFI w/ Cover

GFI-IU
Duplex GFI w/ In-Use Cover

T3120
3 Way Adapter

T490
4 Way Adapter

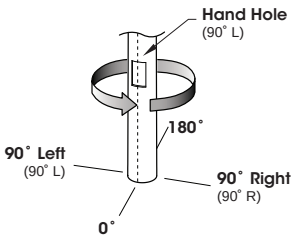
[Drilling template must be provided by customer]

CPLN
½", ¾", 1¼", 1½", or 2" Coupling

NPLE
½", ¾", 1¼", 1½", or 2" Nipple

Location Diagram

Please use this diagram to indicate placement location

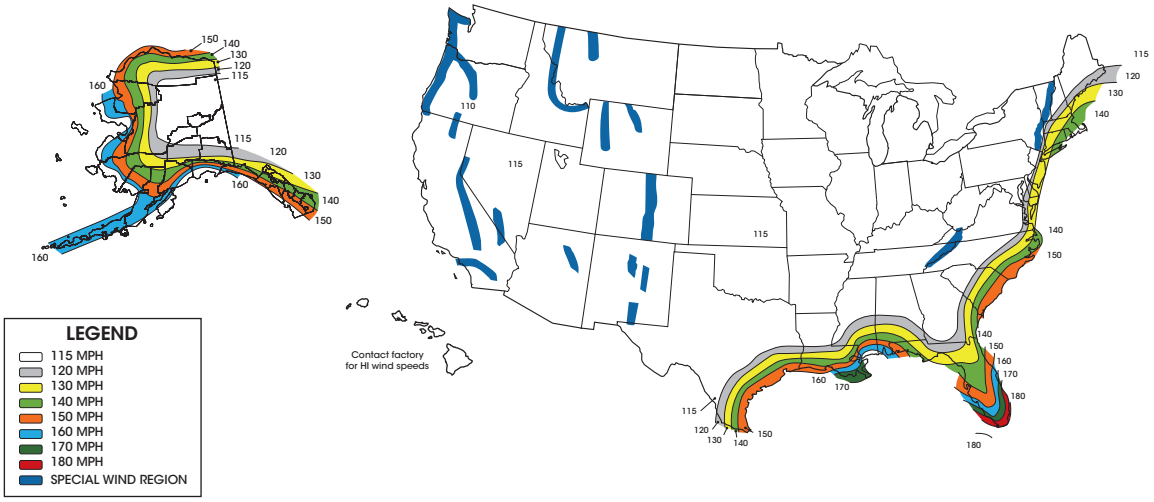


Refer to the Accessories Section for other options

BLACKFORGE
WEST COAST METALWORKS

EMBEDDED ROUND NON-TAPERED ALUMINUM BF-ERNTA

WIND MAP



EPA INFORMATION (ft^2)
(per 2020 FL Building Code)

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
BF-ERNTA 84 - 125	294 - 112*	15.0	12.0	10.9	9.8	8.4	6.8	5.8	5.0	4.6	3.8
BF-ERNTA 104 - 125	203 - 66.5*	11.5	9.0	8.4	7.6	6.2	4.8	4.0	3.4	3.2	2.6
BF-ERNTA 124 - 125	150.5 - 60*	8.9	6.8	6.4	5.4	4.2	3.6	2.6	2.2	2.0	1.6
BF-ERNTA 144 - 125	105 - 60*	6.8	5.4	4.4	3.8	2.8	2.4	1.8	1.2	1.0	0.8
BF-ERNTA 105 - 125	300 - 147*	19.0	15.4	14.0	12.5	10.5	9.3	7.7	6.7	6.1	5.1
BF-ERNTA 125 - 125	262.5 - 105*	15.0	12.0	10.7	10.0	8.0	7.1	6.0	5.3	4.7	4.1
BF-ERNTA 145 - 125	203 - 73.5*	12.1	9.7	8.3	7.7	6.1	5.1	4.3	3.5	3.2	2.7
BF-ERNTA 145 - 188	300 - 133*	19.0	15.5	14.0	12.3	10.3	8.7	7.5	6.7	5.9	4.9
BF-ERNTA 165 - 125	136.5 - 60*	8.9	6.7	6.1	5.1	4.5	3.7	2.9	2.7	2.3	1.7
BF-ERNTA 165 - 188	241.5 - 94.5*	14.7	11.5	10.5	9.5	7.9	6.7	5.7	4.9	4.3	3.5
BF-ERNTA 185 - 125	84 - 60*	7.0	5.3	4.5	3.9	2.9	2.3	2.1	1.5	1.3	1.0
BF-ERNTA 185 - 188	189 - 66.5*	12.0	9.5	`8.1	7.5	5.9	4.9	4.1	3.5	3.3	2.5
BF-ERNTA 205 - 188	140 - 60*	10.1	7.4	6.5	5.5	4.7	3.9	3.3	2.7	2.3	1.7
BF-ERNTA 206 - 188	287 - 108.5*	16.0	13.1	12.0	10.7	8.9	7.5	6.3	5.7	4.7	4.1
BF-ERNTA 206 - 250	300 - 147*	20.0	18.7	16.7	15.5	12.7	10.7	9.5	7.9	6.9	6.3
BF-ERNTA 256 - 188	136.5 - 60*	9.1	7.1	6.3	5.9	4.5	3.9	3.3	2.7	2.3	1.9
BF-ERNTA 256 - 250	220.5 - 84*	13.7	10.9	10.1	9.1	7.5	6.3	5.3	4.5	3.9	3.1

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.
- 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 ft2 and 20 feet or taller are strongly recommended to be installed with a Vibration Dampener. Please consult with your Structural Engineer for site-specific requirements.
- Blackforge offers a 2nd Mode Vibration Dampener VBDS-M2 for purchase as a field-installable option.