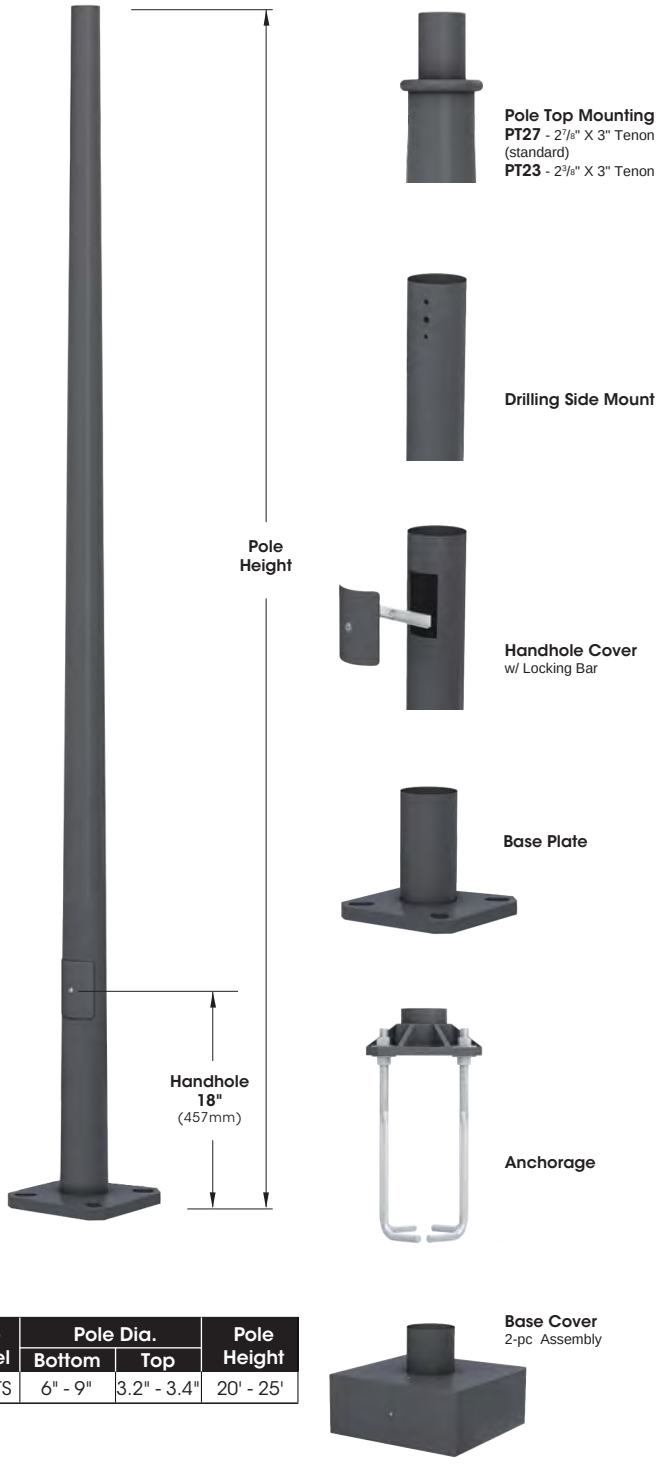
BLACKFORGE
WEST COAST METALWORKS

# ROUND TAPE STEEL
# BF-RTS




| Pole Model | Pole Dia. | | Pole Height |
|---|---|---|---|
| | Bottom | Top | |
| BF-RTS | 6" - 9" | 3.2" - 3.4" | 20' - 25' |

## SPECIFICATIONS

### Shaft
Round, fabricated from high grade structural steel tube. Shaft conforms to ASTM-A-501-68 specifications. Meets or exceeds minimum yield strength of 46,000 P.S.I. Wall thickness 11 GA. (.120 wall) or 7 GA. (.180 wall) as specified. Shaft is furnished with ground lug located inside pole on wall opposite hand hole.

### 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.) steel pipe – tenon options available for pole tops please see Mounting column. For other pole top configurations please consult factory.

### Hand Hole Cover
Steel Poles 15 feet and above - Supplied with reinforced steel 2 5/8" x 4 5/8" access opening. Hand Hole provided with rectangular 3"x5" stamped heavy gauge aluminum material, Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

**Poles under 15 feet** - Rectangular 3"x5" stamped heavy gauge aluminum material, 2¼" x 4¼" access opening. Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

### Base Plate
Fabricated from structural quality hot rolled steel. Meets or exceeds minimum yield strength of 36,000 P.S.I. Base telescopes and is circumferentially welded to pole shaft. Slotted bolt holes provide 1" flexibility on either side of bolt circle centerline.

### 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 gauge quality carbon steel. 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.

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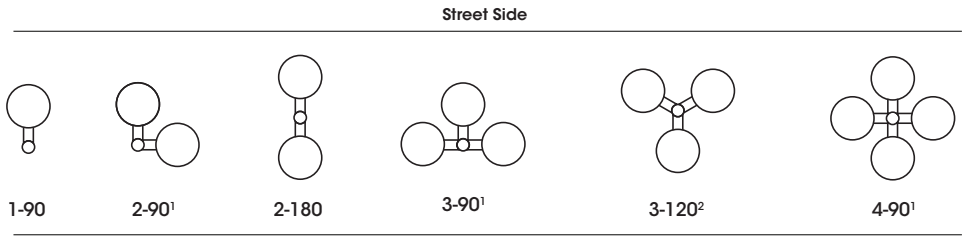
## DRILLING SIDE MOUNT




**Notes**

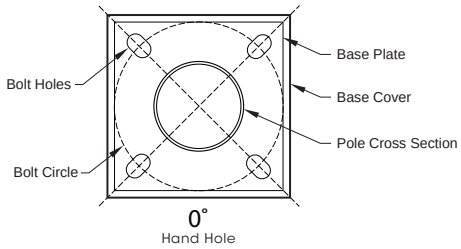
**1-** Poles smaller than 3" Dia. at top, or Non Linear Drilling requires PT27 and T490 Adapter. (Adaptor is rotatable)

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

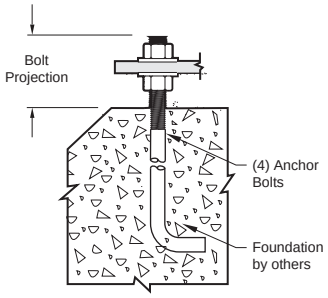
**[Drilling template must be provided by customer]**

## BOLT CIRCLE

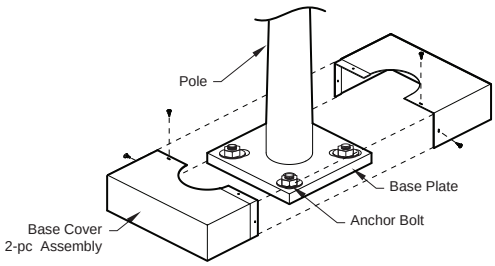
**Base Plate**




**Anchor Bolt**




**Base Cover**
2-pc Assembly




| Catalog Number | POLE | | | | | | | | ANCHOR BOLTS | | | | ANCHOR PLATE | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Height | | Bottom - Top | | | | Wall Thickness (In/Ga) | Weight (Lbs) | Bolt Size | Bolt Projection above grade[2,3] | Bolt Circle Dia Range[1] | Bolt Circle Dia (In) (Rec.)[1] | Template | Base Plate | Cover |
| | Ft | M | In | | Cm | | | | | | | | | | |
| **BF-RTS 20-11** | 20 | 6.10 | 6.00 | 3.20 | 15.24 | 8.13 | 11 | 154 | 1" x 36" x 4" | 4" - 4½" | 10½" - 12½" | 12" | BF12 | 1" x 11½" x 11½" | 5" x 12" x 12" |
| **BF-RTS 25-11** | 25 | 7.62 | 7.00 | 3.50 | 17.78 | 8.89 | 11 | 189 | 1" x 36" x 4" | 4" - 4½" | 10½" - 12½" | 12" | BF12 | 1" x 11½" x 11½" | 5" 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.

## ORDERING INFORMATION

**Spec/Order Example:** BF-RTA1643-125/2-180/7004-S

### Pole Model Number

| | Pole Height | Pole Bottom | Pole Top | Wall Thickness |
|---|---|---|---|---|
| **BF-RTS 20 - 11** | 20' | 6.00" | 3.20" | 11 |
| **BF-RTS 25 - 11** | 25' | 7.00" | 3.50" | 11 |

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# _____

**GLV** Galvanized

### 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

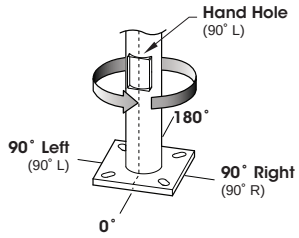
**[Drilling template must be provided by customer**

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

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

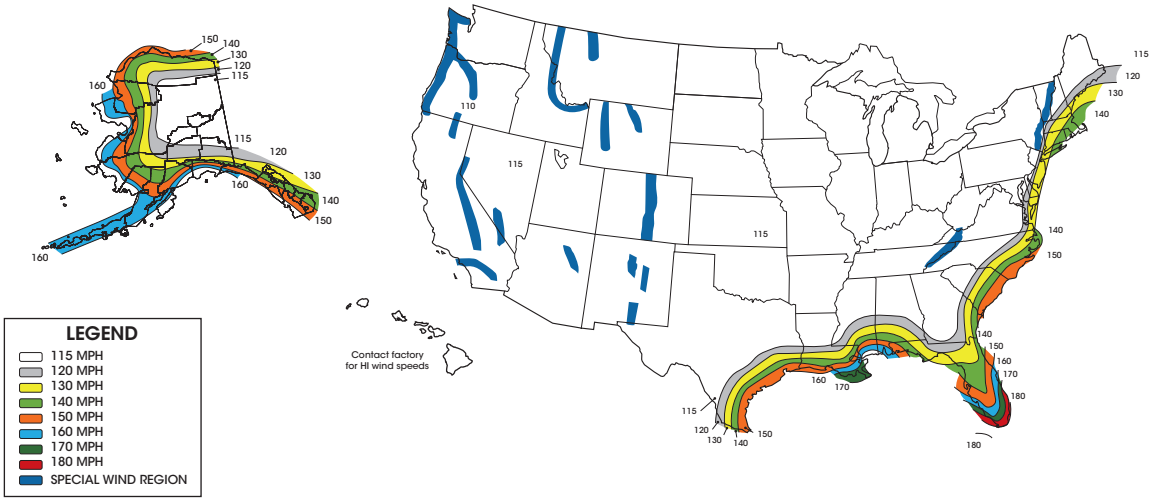
### Location Diagram

Please use this diagram to indicate placement location




Refer to the Accessories Section for other options

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BF-RTS 20-11 | 300 - 231* | 15.0 | 15.0 | 15.0 | 15.0 | 14.2 | 12.2 | 10.2 | 8.9 | 7.2 | 6.6 |
| BF-RTS 25-11 | 300 - 168* | 15.0 | 15.0 | 15.0 | 13.1 | 11.2 | 9.1 | 7.3 | 6.2 | 5.5 | 4.8 |

## 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 |
|---|---|---|---|---|---|---|---|---|
| BF-RTS 20-11 | 300 - 217* | 13.7 | 13.4 | 11.4 | 9.4 | 8.5 | 6.7 | 6.2 |
| BF-RTS 25-11 | 300 - 154* | 12.4 | 10.1 | 8.2 | 6.7 | 5.7 | 5.0 | 4.4 |

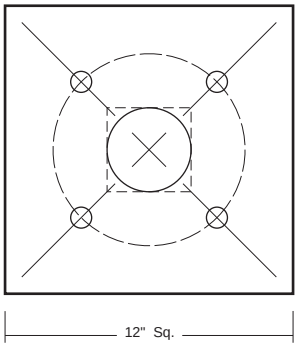
**Please use the following to obtain the proper weight capacity:**
**The maximum fixture weight equals 60 lbs., or the product of 35 lbs. x the EPA value (from the chart above), whichever is greater, not to exceed 300 lbs.**
**Example, EPA = 2.2, maximum fixture weight = 35 lbs. x 2.2 EPA = 77 lbs.**

**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.

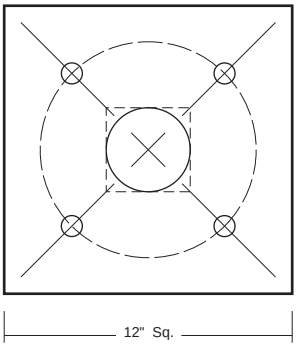
**To mitigate 2nd Mode (Aeolian) Vibration please read the following Recommendations:**
- We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
- Pole installations with a combined (fixtures, banners, flags, 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.

## ANCHOR BOLT TEMPLATES

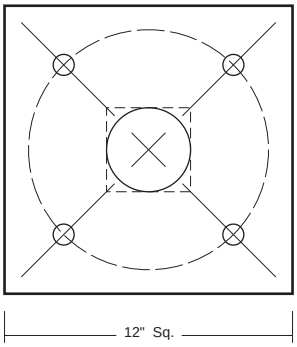
### BF8
8" Bolt Circle



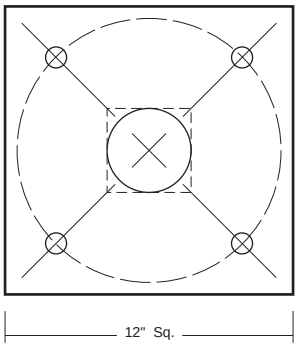

### BF9
9" Bolt Circle



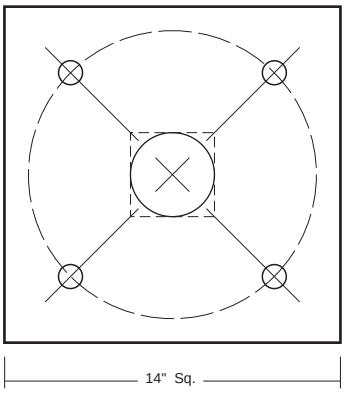

### BF10
10" Bolt Circle



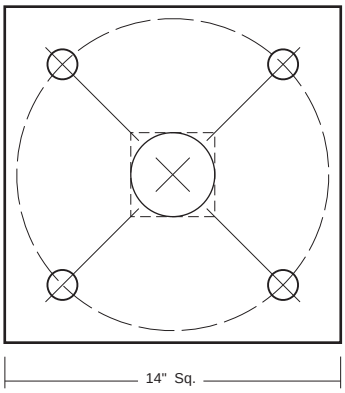

### BF11
11" Bolt Circle



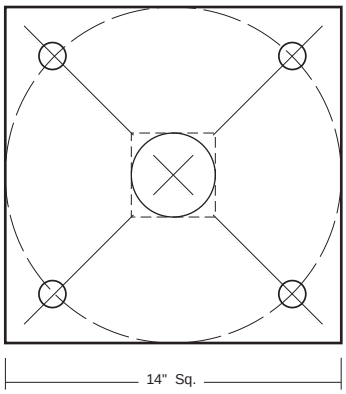

### BF12
12" Bolt Circle



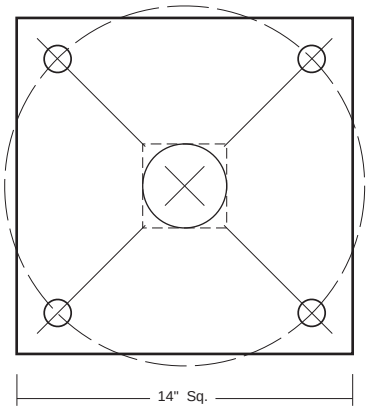

### BF13
13" Bolt Circle




### BF14
14" Bolt Circle




### BF15
15" Bolt Circle




### BF16
16" Bolt Circle