

**SPECIFICATIONS**



**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 customer provided drilling template.

**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.

**Base Plate**

Cast aluminum constructed of A-356 aluminum alloy heat treated to produce a T6 temper. Structurally engineered base includes eight heavy wall reinforcing vertical gussets. Base telescopes and is circumferentially welded to shaft at both the outside top and inside bottom of the base.

**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 wall aluminum construction. Two piece cover conceals base.

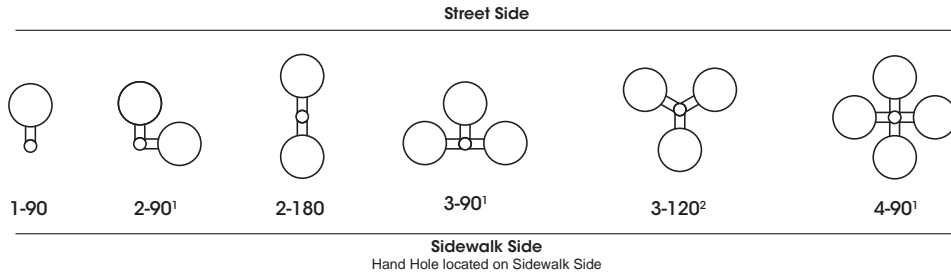
**Finish**

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.

Pole Model	Pole Dia.	Pole Height
BF-RNTA4	4"	8' - 14'
BF-RNTA5	5"	10' - 20'
BF-RNTA6	6"	20' - 25'
BF-RNTA658	6 5/8"	20' - 25'



## DRILLING SIDE MOUNT

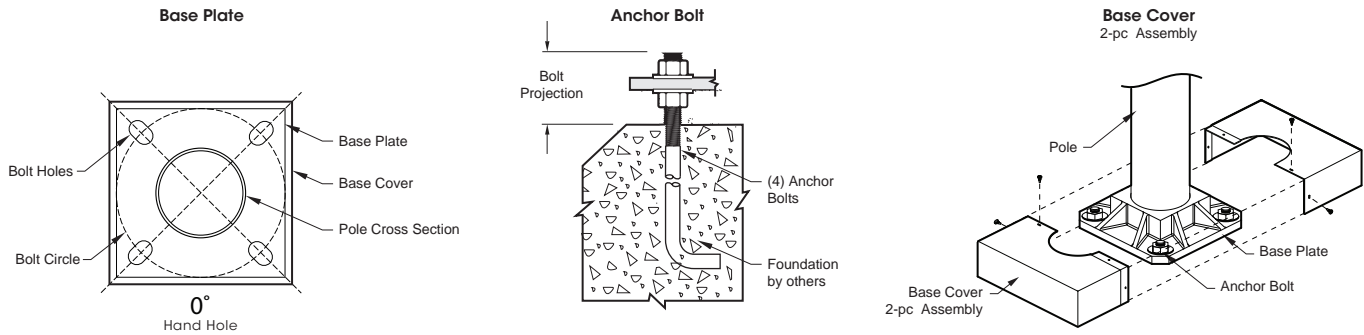


### Notes

- 1- Poles smaller than 3" Dia. at top, or Non Linear Drilling requires PT27 and T490 Adaptor. (Adaptor is rotatable)
- 2- Poles smaller than 3" Dia. at top, or Non Linear Drilling requires PT27 and T3120 Adaptor. (Adaptor is rotatable)

[Drilling template must be provided by customer]

## BOLT CIRCLE









Catalog Number	POLE							ANCHOR BOLTS				ANCHOR PLATE			
	Height		Bottom - Top			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	Base Plate	Cover	
	Ft	M	In	Cm											
BF-RNTA 84-125	8	2.44	4.00	4.00	10.16	10.16	0.125	23	3/4" x 18" x 3"	3/4" - 3/4"	9 1/2" - 10 1/2"	10"	BF10	3/4" x 10" x 10"	5" x 12" x 12"
BF-RNTA 104-125	10	3.05	4.00	4.00	10.16	10.16	0.125	27	3/4" x 18" x 3"	3/4" - 3/4"	9 1/2" - 10 1/2"	10"	BF10	3/4" x 10" x 10"	5" x 12" x 12"
BF-RNTA 124-125	12	3.66	4.00	4.00	10.16	10.16	0.125	30	3/4" x 18" x 3"	3/4" - 3/4"	9 1/2" - 10 1/2"	10"	BF10	3/4" x 10" x 10"	5" x 12" x 12"
BF-RNTA 144-125	14	4.27	4.00	4.00	10.16	10.16	0.125	34	3/4" x 18" x 3"	3/4" - 3/4"	9 1/2" - 10 1/2"	10"	BF10	3/4" x 10" x 10"	5" x 12" x 12"
BF-RNTA 105-125	10	3.05	5.00	5.00	12.70	12.70	0.125	32	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 125-125	12	3.66	5.00	5.00	12.70	12.70	0.125	36	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 145-125	14	4.27	5.00	5.00	12.70	12.70	0.125	41	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 145-188	14	4.27	5.00	5.00	12.70	12.70	0.188	56	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 165-125	16	4.88	5.00	5.00	12.70	12.70	0.125	45	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 165-188	16	4.88	5.00	5.00	12.70	12.70	0.188	63	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 185-125	18	5.49	5.00	5.00	12.70	12.70	0.125	50	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 185-188	18	5.49	5.00	5.00	12.70	12.70	0.188	69	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 205-188	20	6.10	5.00	5.00	12.70	12.70	0.188	76	3/4" x 24" x 3"	3/4" - 3/4"	11" - 12"	12"	BF12	1" x 11" x 11"	5" x 12" x 12"
BF-RNTA 206-188	20	6.10	6.00	6.00	15.24	15.24	0.188	95	1" x 36" x 4"	4" - 4 1/2"	12" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	5" x 12" x 12"
BF-RNTA 206-250	20	6.10	6.00	6.00	15.24	15.24	0.250	121	1" x 36" x 4"	4" - 4 1/2"	12" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	5" x 12" x 12"
BF-RNTA 256-188	25	7.62	6.00	6.00	15.24	15.24	0.188	115	1" x 36" x 4"	4" - 4 1/2"	12" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	5" x 12" x 12"
BF-RNTA 256-250	25	7.62	6.00	6.00	15.24	15.24	0.250	147	1" x 36" x 4"	4" - 4 1/2"	12" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	5" x 12" x 12"
BF-RNTA 20658-250	20	6.10	6.63	6.63	16.83	16.83	0.250	135	1" x 36" x 4"	4" - 4 1/2"	11" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	5" x 12" x 12"
BF-RNTA 25658-250	25	7.62	6.63	6.63	16.83	16.83	0.250	165	1" x 36" x 4"	4" - 4 1/2"	11" - 13"	13"	BF13	1" x 11 1/2" x 11 1/2"	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.  
 4 - With 5" poles, max allowable bolt for 11" circle is 3/4".

### ORDERING INFORMATION

Spec/Order Example: BF-RNTA206-188/3-120/9005-S

Pole Model Number			Mounting	Finish	Options
	Pole Height	Wall Thickness			
<b>4" Pole Dia.</b>			<b>Tenon Mount</b>	<b>Standard Smooth Finish</b>	
BF-RNTA 84 - 125	8'	.125	PT27 27/8" X 3" Tenon (Standard)	9005-S Black	VBDS-M2 Vibration Dampener 2nd Mode Field Install
BF-RNTA 104 - 125	10'	.125	PT23 23/8" X 3" Tenon	9003-S White	
BF-RNTA 124 - 125	12'	.125	PT276 27/8" X 6" Tenon	7004-S Grey	
BF-RNTA 144 - 125	14'	.125	Other Tenon Mt _____	8019-S Dark Bronze	
<b>5" Pole Dia.</b>			<b>Drill Mount</b>	<b>Premium Finishes</b>	<b>Receptacle</b>
BF-RNTA 105 - 125	10'	.125	1-90 	Custom Specify RAL# _____	GFI G.F.I. Receptacle w/ Cover
BF-RNTA 125 - 125	12'	.125	2-180 	ANZ Anodized	GFI-IU G.F.I. Receptacle w/ In-Use Cover
BF-RNTA 145 - 125	14'	.125	2-90 		[Specify GFI location: Height and Direction] See Location Diagram below
BF-RNTA 145 - 188	14'	.188	3-90 		T3120 3 Way Adapter
BF-RNTA 165 - 125	16'	.125	4-90 		T490 4 Way Adapter
BF-RNTA 165 - 188	16'	.188	3-120 		[Drilling template must be provided by customer]
BF-RNTA 185 - 125	18'	.125			
BF-RNTA 185 - 188	18'	.188			
BF-RNTA 205 - 188	20'	.188			
<b>6" Pole Dia.</b>					<b>Coupling</b>
BF-RNTA 206 - 188	20'	.188			CPLN12 1/2" Coupling
BF-RNTA 206 - 250	20'	.250			CPLN34 3/4" Coupling
BF-RNTA 256 - 188	25'	.188			CPLN114 1 1/4" Coupling
BF-RNTA 256 - 250	25'	.250			CPLN112 1 1/2" Coupling
<b>6 5/8" Pole Dia.</b>					CPLN2 2" Coupling
BF-RNTA 20658 - 250	20'	.250			[Specify Coupling location: Height and Direction] See Location Diagram below
BF-RNTA 25658 - 250	25'	.250			

Other heights available  
Please consult factory

### 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]



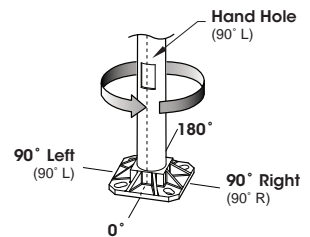
**CPLN**  
1/2", 3/4", 1 1/4", 1 1/2",  
or 2" Coupling



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

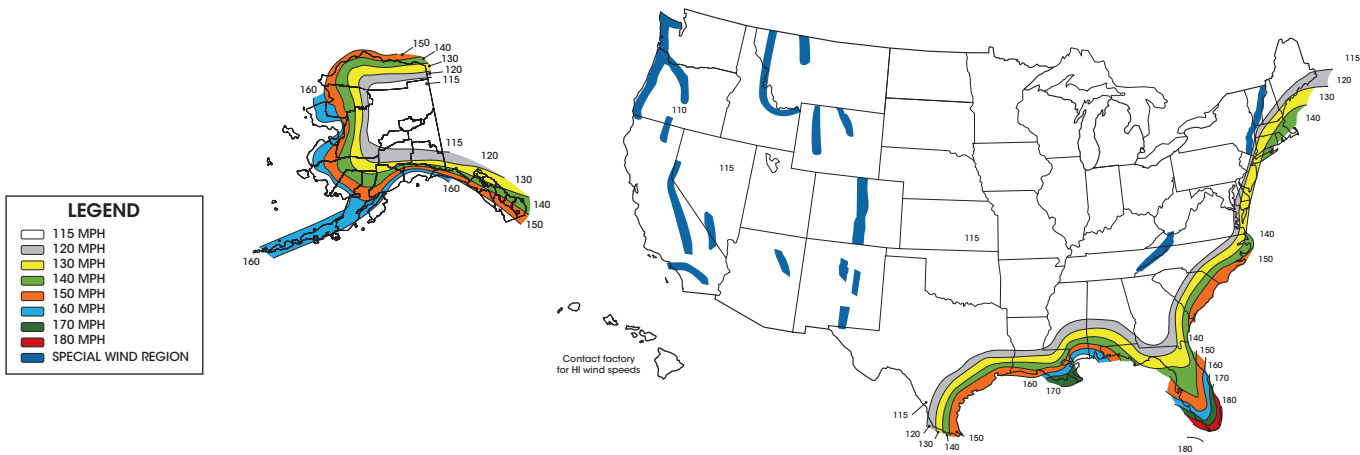
### Location Diagram

Please use this diagram to indicate placement location



Refer to the Accessories Section for other options

## WIND MAP



### EPA INFORMATION (ft<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
BF-RNTA 84 - 125	300 - 122.5*	13.8	11.1	10.0	9.2	7.5	6.1	5.3	4.6	4.0	3.5
BF-RNTA 104 - 125	300 - 77*	10.3	8.1	7.1	6.5	5.2	4.2	3.6	3.1	2.5	2.2
BF-RNTA 124 - 125	262.5 - 60*	7.5	5.9	5.2	4.4	3.5	2.8	2.2	1.7	1.6	1.2
BF-RNTA 144 - 125	199.5 - 60*	5.7	4.1	3.5	3.1	2.1	1.4	1.1	0.9	0.7	0.5
BF-RNTA 105 - 125	300 - 164.5*	17.4	13.8	12.4	11.4	9.6	8.1	7.0	5.9	5.3	4.7
BF-RNTA 125 - 125	300 - 115.5*	13.3	10.6	9.3	8.3	6.9	5.8	5.1	4.4	3.8	3.3
BF-RNTA 145 - 125	300 - 84*	10.5	7.8	7.0	6.1	5.0	4.3	3.6	3.2	2.6	2.4
BF-RNTA 145 - 188	300 - 143.5*	16.9	13.2	11.8	10.8	8.8	7.4	6.5	5.6	4.7	4.1
BF-RNTA 165 - 125	255.5 - 60*	7.3	5.5	4.7	4.1	3.3	2.8	2.2	1.8	1.5	1.4
BF-RNTA 165 - 188	300 - 105*	12.6	9.9	8.5	7.6	6.4	5.4	4.4	3.9	3.3	3.0
BF-RNTA 185 - 125	189 - 60*	5.4	3.8	3.2	2.6	2.0	1.7	1.2	0.9	0.7	0.5
BF-RNTA 185 - 188	300 - 73.5*	10.2	7.6	6.6	5.7	4.6	3.8	3.4	2.7	2.3	2.1
BF-RNTA 205 - 188	273 - 60*	7.8	5.6	4.7	4.2	3.3	2.8	2.1	1.7	1.4	1.3
BF-RNTA 206 - 188	300 - 119*	13.7	10.9	9.8	8.9	7.4	6.2	6.6	5.1	4.3	3.4
BF-RNTA 206 - 250	300 - 154*	14.2	13.2	12.1	11.0	9.2	7.6	6.6	5.7	4.8	4.4
BF-RNTA 256 - 188	241.5 - 60*	6.9	5.2	4.7	4.0	3.4	3.0	2.7	2.4	2.0	1.6
BF-RNTA 256 - 250	300 - 91*	9.0	8.3	7.5	6.7	5.8	4.8	3.9	3.5	3.1	2.6
BF-RNTA 20658 - 250	300 - 178.5*	20.0	16.2	14.5	13.2	11.2	9.4	8.0	6.9	6.0	5.1
BF-RNTA 25658 - 250	300 - 91*	11.9	9.5	8.6	7.6	6.1	5.2	4.3	3.6	3.2	2.6

### EPA INFORMATION (ft<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
BF-RNTA 84 - 125	294 - 112*	8.4	7.1	5.7	4.7	4.3	3.7	3.2
BF-RNTA 104 - 125	203 - 66.5*	5.8	4.7	4.0	3.1	2.7	2.3	1.9
BF-RNTA 124 - 125	150.5 - 60*	4.3	3.2	2.6	2.0	1.5	1.4	1.1
BF-RNTA 144 - 125	105 - 60*	3.0	1.8	1.3	1.0	0.8	0.7	0.5
BF-RNTA 105 - 125	300 - 147*	10.1	8.8	7.4	6.5	5.3	4.8	4.2
BF-RNTA 125 - 125	262.5 - 105*	7.5	6.6	5.5	4.6	3.9	3.6	3.0
BF-RNTA 145 - 125	203 - 73.5*	5.8	4.8	4.0	3.3	3.0	2.3	2.1
BF-RNTA 145 - 188	300 - 133*	9.5	8.5	7.1	5.8	5.4	4.2	3.8
BF-RNTA 165 - 125	136.5 - 60*	3.9	2.9	2.5	2.0	1.6	1.3	1.2
BF-RNTA 165 - 188	241.5 - 94.5*	6.9	6.0	4.8	4.1	3.5	2.9	2.7
BF-RNTA 185 - 125	84 - 60*	2.4	1.8	1.5	1.1	0.8	0.6	0.4
BF-RNTA 185 - 188	189 - 66.5*	5.4	4.3	3.7	3.2	2.4	2.1	1.9
BF-RNTA 205 - 188	140 - 60*	4.0	3.1	2.5	2.0	1.5	1.2	1.1
BF-RNTA 206 - 188	287 - 108.5*	8.2	6.8	5.6	4.6	4.2	3.6	3.1
BF-RNTA 206 - 250	300 - 147*	10.6	8.9	7.3	6.4	5.4	4.5	4.2
BF-RNTA 256 - 188	136.5 - 60*	3.9	3.2	2.7	2.4	2.2	1.8	1.4
BF-RNTA 256 - 250	220.5 - 84*	6.3	5.4	4.5	3.6	3.3	2.9	2.4
BF-RNTA 20658 - 250	300 - 168*	12.6	10.4	8.9	7.6	6.7	5.7	4.8
BF-RNTA 25658 - 250	245 - 80.5*	7.0	5.7	4.6	3.9	3.2	2.9	2.3

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

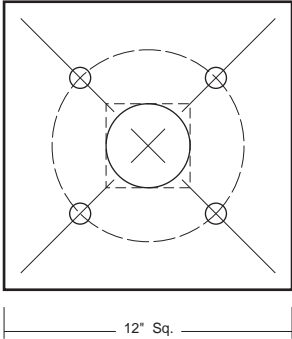
- Specifier is responsible for correct pole selection. For proper pole choice, the specifier must consider the total EPA of fixtures, banners, arms, and any other accessories attached to pole assembly.
- ALL EPAs are calculated for ground installations. For installations on bridges, buildings or other 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:

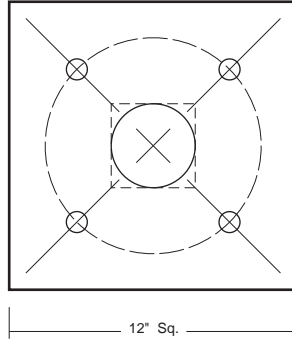
- We do not recommend the installation of poles without a fixture; such installations have been known to fail due to destructive 2nd mode pole vibration.
- Pole installations with a combined (fixtures, banners, flags, etc.) EPA of less than 2.0 ft<sup>2</sup> and 20 feet or taller are strongly recommended to be installed with a Vibration Dampener. Please consult with your Structural Engineer for site-specific requirements.
- Blackforce offers a 2nd Mode Vibration Dampener VBDS-M2 for purchase as a field-installable option.

**ANCHOR BOLT TEMPLATES**

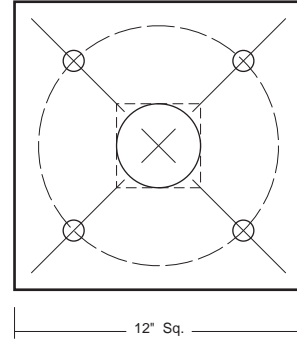
**BF8**  
8" Bolt Circle



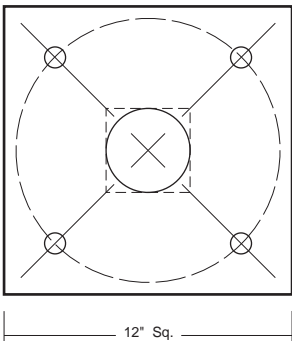
**BF9**  
9" Bolt Circle



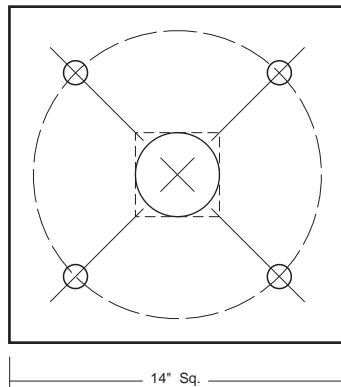
**BF10**  
10" Bolt Circle



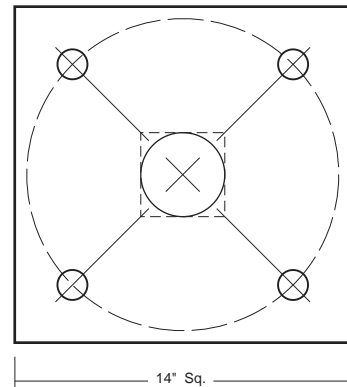
**BF11**  
11" Bolt Circle



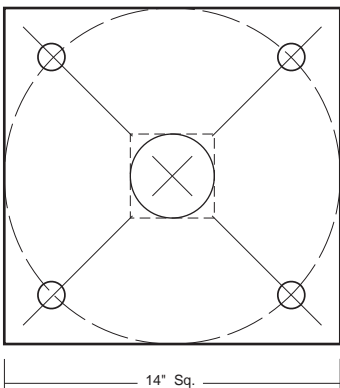
**BF12**  
12" Bolt Circle



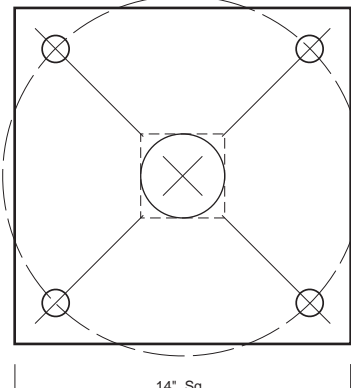
**BF13**  
13" Bolt Circle



**BF14**  
14" Bolt Circle



**BF15**  
15" Bolt Circle



**BF16**  
16" Bolt Circle

