



MaxiForce Steel Bollard Base Installation Schedule

For Simple, Removable, and EZ Bases

Engineered Anchorage System for MaxiForce Steel Bollard Bases - Single Footing (For Simple, Removable and EZ Bases)				
Base Type	Concrete Pier Diameter (In.)	Concrete Pier Height (In.)	Concrete Pier Reinforcing	Bollard Base/Embedment at Concrete Pier
Simple	12"	39"	2 - #4 Vert.	8" Min
Removable	12"	39"	2 - #4 Vert.	8" Min
EZ	12"	39"	2 - #4 Vert.	6" Min

Engineered Anchorage System for MaxiForce Steel Bollard Bases - Continuous Beam Footing (For Simple, Removable and EZ Bases)				
Base Type	Concrete Grade Beam Width (In.)	Concrete Grade Beam Height (In.)	Concrete Grade Beam Reinforcing	Bollard Base/Embedment at Concrete Grade Beam
Simple	12"	22"	3 - #4 Cont.	8" Min
Removable	12"	22"	3 - #4 Cont.	8" Min
EZ	12"	22"	3 - #4 Cont.	6" Min

Design and Construction Notes

- 1.0 For continuous concrete grade beam footing, pipe bollards shall be spaced 4' - 0" O.C. maximum.
- 2.0 Allowable Foundation Pressure = 2,000 psf. Allowable Lateral Bearing = 150/psf. Assumed in-place soil, Sand, Silty Sand, Clayey Sand, Silty Gravel, or Clayey Gravel. For higher soil allowable design values, site soil investigation by a Registered Geotechnical Engineer is required.
- 3.0 See supplemental concrete footing details for additional information.
- 4.0 Material Specifications: Concrete = 3,000 psi (28-day min); Reinforcing ASTM A615 (60 ksi for all bars #5 and larger 40 ksi for all bars #4 and smaller).

Drawing Rev.
2

Created
11/19/2020

PROPRIETARY AND CONFIDENTIAL

THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF BLUE EMBER TECHNOLOGIES, LLC. ANY USE OF THIS DRAWING OR THE INFORMATION CONTAINED HEREIN FOR OTHER THAN THE PURPOSE FOR WHICH THIS DRAWING IS FURNISHED IS FORBIDDEN.

MaxiForce

7560 Main Street
Sykesville, MD 21784
tel: +1 (410) 552 9888
sales@maxiforcebollards.com
www.maxiforcebollards.com

MaxiForce Bollards

Title
S/R/EZ Base Installation Schedule

C

DO NOT SCALE DRAWING

SHEET 1 OF 1



Engineered Anchorage System for the MaxiForce EZ Base Circular Concrete Pier Footing

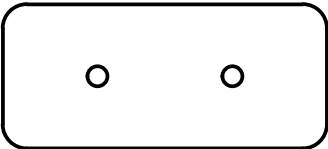
Protected Side

Attack Side

1. MaxiForce Steel pipe bollard per specification.
2. MaxiForce Universal Base assembly per Blue Ember Technologies.
3. Finished grade or pavement.
4. Concrete base pier per schedule, at each pipe sleeve.
5. Compacted gravel bed (3" minimum).
6. #3 hoop ties at 12" O.C. and 2 - #3 ties at top and bottom of concrete pier.
7. Centerline of bollard and concrete base pier.

Installation Orientation

Protected Side



Attack Side

(3)

(8)

(1)

(2)

(4)

(6)

(5)

3" Clr Typ

See Schedule

See Schedule

Drawing Rev.
1

Created
11/18/2020

PROPRIETARY AND CONFIDENTIAL
THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF **BLUE EMBER TECHNOLOGIES, LLC**. ANY USE OF THIS DRAWING OR THE INFORMATION CONTAINED HEREIN FOR OTHER THAN THE PURPOSE FOR WHICH THIS DRAWING IS FURNISHED IS FORBIDDEN.

MaxiForce

7560 Main Street
Sykesville, MD 21784
tel: +1 (410) 552 9888
sales@maxiforcebollards.com
www.maxiforcebollards.com



MaxiForce Bollards

Title **EZ Base Pier Footing**

C

DO NOT SCALE DRAWING

SHEET 1 OF 1

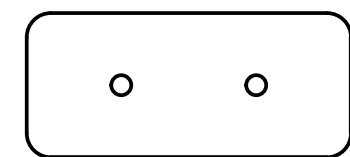


- ## Protected Side

Attack Side



Protected Side



Attack Side

Drawing Rev. 1		Created 11/18/2020		<div><h1>MaxiForce</h1><p>7560 Main Street Sykesville, MD 21784 tel: +1 (410) 552 9888 sales@maxiforcebollards.com www.maxiforcebollards.com</p><p>MaxiForce Bollards</p></div>
<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF BLUE EMBER TECHNOLOGIES, LLC. ANY USE OF THIS DRAWING OR THE INFORMATION CONTAINED HEREIN FOR OTHER THAN THE PURPOSE FOR WHICH THIS DRAWING IS FURNISHED IS FORBIDDEN.</p>		Title EZ Base Beam Footing		
C		DO NOT SCALE DRAWING		SHEET 1 OF 1