

ARCHITECTURAL DESIGN SPECIFICATIONS

FB-30 Fixed Bollard, Shallow Mount

RB-30 Removable Bollard, Shallow Mount

PART I – General

1.1 SECTION INCLUDES

- A. This section covers the furnishing and installation of a FB-30/RB-30 Bollard system. Provide complete system that has been fabricated and tested for proper operation at the factory.
- B. All tube steel conforms to ASTM A500-10A. All plate and shaped steel to ASTM A36. All pipe to ASTM A53. All welds conform to AWS ASTM D1.1, D1.3 for sheet metal.
- C. FB-30 System includes fixed bollards and fully welded sub-frame.
- D. RB-30 System includes removable bollard, fully welded sub-frame, and receiver.
- E. Design and materials are identical as those used to engineer the FB-30 system.

1.2 RELATED SECTIONS

- A. Section 03 11 00 Concrete Forming
- B. Section 03 20 00 Concrete Reinforcing

1.3 CRASH RATING, TESTING AND QUALITY ASSURANCE

- A. The FB-30/RB-30 shallow mount bollard model engineered to meet ASTM PU40 in which the impact conditions are;

- Crash rating PU40
- Vehicle Weight 5000 pounds
- Impact Speed 40 mph

Note: The FB-30/RB-30 vehicle barrier system must be installed per manufacturer's specifications and designs. Failure to comply with all installation requirements will void the Warranty.

- B. Manufacturer shall be a company specializing in the supply of security vehicle barriers.

1.4 SUBMITTALS

- A. Submit generic drawings of standard product and finish samples if required.
- B. Indicate pertinent dimensions, general construction, component connections and location, anchorage methods and location, hardware, and installation details.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver material to job site in manufacturer's packaging undamaged, complete with installation instructions.
- B. Store off ground, under cover, protected from weather and construction activities.

1.6 PROJECT/SITE CONDITIONS

- A. Install FB-30/RB-30 Bollard including excavation, trenching and concrete foundation per manufacturer's printed instructions. Installer/owner to supply required permits/inspections.

1.7 WARRANTY

Atlantic Anti-Ram warrants its products against defects in material and workmanship for a period of one and one half (1½) years from date of shipment. This warranty excludes normal wear on finishes or damage that occurs due to impact, abuse, misuse or acts of God.

PART II – Products

2.1 MANUFACTURER

FB-30: Shallow mount fixed bollard

RB-30 Shallow mount removable bollard as manufactured by:



Atlantic Anti-Ram
Weathers Manufacturing Inc.
9535 N US 401 N, Fuquay Varina, NC 27526
Ph 919.552.5945 Fax 866.438.4682
www.AtlanticAntiRam.com

2.2 CONSTRUCTION

- A. Bollard: Constructed from 8” diameter schedule 40 steel pipe. FB-30 style bollard is welded to the sub-frame. RB-30 (Removable bollard) can be lifted out of the receiver portion of the sub-frame when traffic will be allowed to pass through the area. The bollards are then inserted and pinned to lock them when passage is restricted. Bollard is primed zinc rich primer. Standard overall height of bollard is 40” above ground.
- B. Sub-frame: Constructed from A36 channel steel, fully welded. FB-30 bollard is welded to sub-frame. RB-30 sub-frame has a 10” diameter stop ring welded to bollard mounting area to allow bollard to be locked into position.

2.3 EQUIPMENT

- A. Bollard Operation: FB-30 bollard is a fixed bollard for permanent installations. RB-30 bollard allows the bollard to be removed to allow traffic to use area. Bollard is inserted into receiver in sub-frame and locked into place when traffic is to be restricted.

2.4 FINISHES

- A. Bollard is delivered with zinc rich primer finish. Finish is 2 part epoxy (yellow is standard color).(Optional – Bollards may be finish painted to color of choice).
- B. Zinc primer to conform to SSPC Paint Specification #20 and SSPC-LO for zinc rich primers. Zinc dust is to meet ASTM D520, Type II.
- C. Intermediate primer must meet or exceed SSPC #36 level 3. Finish Paint to meet or exceed SSPC paint #22.
- D. Zinc-arc Galvanization OPTIONAL

PART III – EXECUTION

3.1 INSTALLATION

- A. Inspection: Installer must examine the location and advise the Contractor/Owner of any site conditions unacceptable for proper installation of product. These conditions include but are not limited to the following:
 - 1. Existing underground utilities or unforeseen issues.
 - 2. Removal of pavers, stones, road surfaces or landscaping.
- B. Erection: Install FB-30/RB-30 unit in accordance with manufacturer’s printed instructions. Set units’ level and plumb and in line with adjacent structures or roadway.



- C. Anchor securely into place. Use installers with experience in the installation of vehicle barriers.
- D. Adjustment: Installer shall insure that the bollard can be easily removed on the RB-30 unit. Maintenance: Follow maintenance procedures as outlined in the Instruction or Operation Maintenance Manual.
- E. Cleaning: Clean surfaces carefully after installation to remove excess caulk, dirt and labels.