TF 6088 Bollard

3/04



Size: 17" x 48" Weight: 315 lbs.

Material: Reinforced Concrete. Reinforcing: 1/4" Dia. rebar.

Hardware: (4) - 1/2" Dia. threaded inserts.

Anchoring: Anchor method A & B. See below.

Maintenance: Rinse with water & mild detergent.

Annual re-sealing recommended.

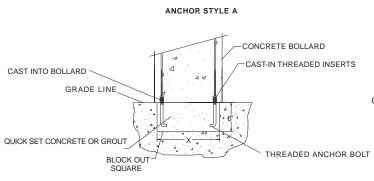
Packaging: Banded to pallet.

Options:
Note: Options may change without notice.
Call to confirm current options.

Weatherstone:

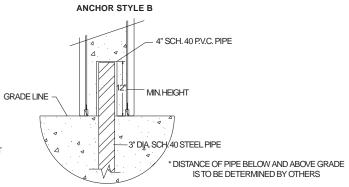
Sand - Gray - Brown - Buff - Cream - Soulard Green Light Charcoal - French Gray - Brick Red

Custom Options Available



NOTE: THIS TYPE ANCHORING IS NOT USED AS BARRICADE. IF USING BOLLARD WITH LIGHT, RUN CONDUIT THROUGH CENTER OF BOLT PATTERN AND STUB OUT.

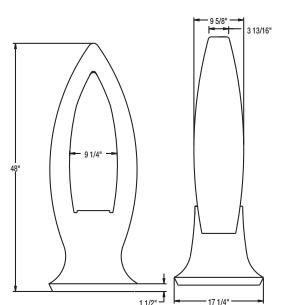
 $\rm X=BLOCKOUT$ DIMENSION SHOULD BE 1/2" LESS THAN THE OUTSIDE OF THE BOLLARD.



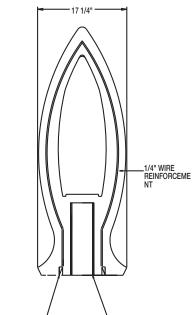
NOTE: THIS TYPE ANCHORING IS ALSO USED AS A BARRICADE. BOLLARD HELD IN PLACE BY STEEL PIPE STEEL PIPE MUST BE ANCHORED IN CONCRETE FOOTING

TYP. 12" DIA. CONCRETE BOLLARD SAME ANCHORING SYSTEM USED ON14" AND 18" DIA. OR SQ. BOLLARDS

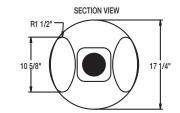
SPECIFICATIONS

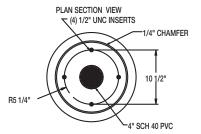


FRONT ELEVATION



SIDE ELEVATION





TF 6088 Bollard

1.1 SUMMARY

A. Section includes: Furnish Precast Concrete Bollard indicated on drawings or specified herein.

1.2 REFERENCES

- A. American Society for Testing & Material
 - 1. ASTM C33 2. ASTM C150 3. ASTM C31

1.5 SUBMITTALS

- A. Submit product data, shop drawings and samples.
 - Product Data: Manufacturer's specifications and technical data edited specifically for proposed system, including the following specific information:
 - a. Detailed specification of construction fabrication.
 - b. Manufacturer's installation instructions
 - c. Maintenance literature
 - d. Product warranty
 - Shop Drawings: Indicate pertinent dimensions, general construction, component connections anchoring methods, hardware and installation procedures.
 - 3. Samples as requested by Architect.

1.6 QUALITY ASSURANCE

A. Qualifications of Manufacturer: Manufacturer to be prequalified by specifier prior to bidding. Failure to comply will result in disqualification of bid. Manufacturer to have at least five years experience in the manufacturer of precast concrete bollards field proven for at least five years.

1.10 WARRANTY

Manufacturer shall submit a written warranty for precast products for the period of two years upon acceptance of products.

2.1 MANUFACTURERS

A. Acceptable manufacturer for Precast Concrete Bollards to be known as Wausau Tile, Inc.

Terra-Form Division.

P.O. Box 1520

Wausau, WI 54402-1520.

(800) 388-8728 (715) 359-3121 FAX (715) 355-4627

- B. Clarification Note: Drawings and installation specification are based on manufacturers proprietary literature from Wausau Tile, Inc.
 Other manufacturers shall comply with minimum levels of material and detailing indicated on drawings or specified herein.
- C. All Precast products for this project shall be of one manufacturer.

2.2 MATERIALS

- A. Portland Cement: ASTM C150 specifications for Portland Cement.
- B. Aggregates: All aggregates to meet ASTM C33 specifications, to be cleaned of foreign matter and properly graded to size.
- C. Coloring: Pigments used shall be inorganic, resistant to alkalinity and used as per manufacturers recommendations.



(4) 1/2" UNC INSERTS

4" SCH 40 PVC PIP