SECTION 11201

WASH TROUGHS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Wash troughs.

1.2 RELATED SECTIONS

A. Section 03300 - Cast-In-Place Concrete.

B. Section 08342 - Fiberglass Doors and Frames.

C. Section 11202 - Effluent (Collection) Troughs (Launders).

D. Section 11203 - Finger Weir Pans.

E. Section 11204 - Weir Plates, Scum Baffles, and Brackets.

F. Section 11205 - Density Current Baffle System.

G. Section 11206 - Palmer-Bowlus Flumes.

H. Section 11207 - Parshall Flumes.

I. Section 11208 - Metering Manholes.

J. Section 11286 - Slide Gates and Guides.

K. Section 11305 - Odor Control System.

L. Section 13122 - Pre-Engineered Fiberglass Buildings.

M. Section 13411 - Instrument Consoles.

1.3 REFERENCES

A. ANSI/NSF 61 - Drinking Water System Components - Health Effects; NSF International.

B. ANSI/AWWA F101 - Contact Molded, Fiberglass-Reinforced Plastic Wash Water Troughs and Launders; American Water Works Association.

C. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.

D. ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Test results of fiberglass reinforced plastic laminate.

C. Shop Drawings: Show:
1. Critical dimensions, jointing and connections, fasteners and anchors.
2. Materials of construction.
3. Sizes, spacing, and locations of structural members, connections, attachments, openings, fasteners, and loads.

D. Samples: 8-inch square sample of fiberglass reinforced plastic laminate.

E. Manufacturer's installation instructions.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store products indoors and protect from construction traffic and damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Provide products manufactured by Warminster Fiberglass Company;

B. Requests for substitution will be considered in accordance with provisions of Section 01600.

C. Substitutions: Not permitted.

2.2 WASH TROUGHS

A. Material: Fiberglass reinforced polyester resin, 1/4 inch thick, average; inside surface of smooth gel coat finish; outside surface resin sealed with no exposed glass fibers; molded-in color with ultraviolet inhibitor.
1. Tensile strength (ASTM D 638): 14,000 psi.
2. Flexural strength (ASTM D 790): 25,000 psi
3. Flexural modulus (ASTM D 790): 1,000,000 psi.
4. Color: White.

B. Construction: Comply with requirements of ANSI/AWWA F101 and ANSI/NSF 61; provide NSF labelled products and proof of certification.
   1. Designed to support applied water loadings at each location.
   2. Designed to resist deflection under full buoyant and gravity water loads with maximum upward and downward deflection less than or equal to L/1000 where L equals the unsupported trough length; maximum deflection at midpoint not greater than 3/16 inch.
   3. Round bottom, vertical sides.
   4. Top edges straight with not more than 1/8 inch deviation from true plane.
   5. Longitudinal steel stiffening ribs integrally molded on the outside of troughs to ensure rigidity.
   6. Plastic spacer rods to maintain uniform width over the length of trough.
   7. 2 inch wide, 1/2 inch thick wall, grouting rib molded to outside of each trough at the gullet end to act as a water stop when trough is grouted in place.
   8. Slotted holes in closed end of trough to allow a minimum vertical level adjustment of 1 inch.
   9. Stainless steel wall anchors and flat bars.
   10. Saddle at blind end.
   11. Straight edge weir plates, factory-installed.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that dimensions are correct and project conditions are suitable for installation. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Ensure that products are installed plumb and true, free of warp or twist, within tolerances specified by the manufacturer and as indicated in the contract documents.

C. Set in place with weir edges to elevations indicated.

D. Level weir edges to within 1/8 inch of level over entire length.

E. Grout in place after leveling.

3.3 ADJUST AND CLEAN

A. Clean surfaces in accordance with manufacturer's instructions.

B. Remove trash and debris, and leave the site in a clean condition.

END OF SECTION

Contact Plastic Engineered Products
1-800-407-3726