

SECTION 11203
FINGER WEIR PANS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Finger weir pans.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete.
- B. Section 08342 - Fiberglass Doors and Frames.
- C. Section 11201 - Wash Troughs.
- D. Section 11202 - Effluent (Collection) Troughs (Launders).
- 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/AWWA F102 - Matched-Die-Molded, Fiberglass-Reinforced Plastic Weir Plates, Scum Baffles, and Mounting Brackets; American Water Works Association.
- B. ASTM D 256 - Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- C. ASTM D 570 - Standard Test Method for Water Absorption of Plastics.

- D. ASTM D 618 - Standard Practice for Conditioning Plastics and Electrical Insulating Materials for Testing.
- E. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.
- F. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 degrees C.
- G. ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- H. ASTM D 2583 - Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.

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 FINGER WEIR PANS

- A. Fiberglass Components:
 - 1. Weir pan system: Adjustable with separate weir plates to control rate and uniformity of flow over "V" notches.
 - 2. Weir plates: 1/4 inch thick with 2 inch deep 90 degree V-notches on 4-1/2 inch centers. Attached to pan with 3/8-16 x 1-1/4 inch stainless steel hex head cap screws.
 - 3. Weir pan support brackets.
 - 4. Pan spacing: As indicated on the drawings.
 - 5. Scum baffle plates: 1/4 inch by 12 inches, with mounting holes for attachment to support brackets; lap plates at each scum baffle joint; mount with 3/8 inch flat head screws with heads flush or below the surface of the inner face of the baffle.
 - 6. Scum baffle support brackets.
 - 7. Brackets: 3/16 inch thick by 4 inches wide; slotted to allow for at least 1-1/2 inch adjustment in all directions.

- B. Material: Matched metal die molded fiberglass.
 - 1. Color: White.
 - 2. Color: Turquoise.
 - 3. Tensile strength (ASTM D 638): 14,000 psi.
 - 4. Flexural strength (ASTM D 790): 25,000 psi.
 - 5. Flexural modulus (ASTM D 790): 1,000,000 psi.
 - 6. Impact, notched, Izod (ASTM D 256): 15.0 ft-lb/in.
 - 7. Barcol hardness (resin-rich surface) (ASTM D 2583): 40 minimum, average.
 - 8. Water absorption, (ASTM D 570): 0.2 percent at 24 hrs.
 - 9. Coefficient of thermal expansion, average (ASTM D 696): 0.0000105 in/in/degree F.
 - 10. Test coupons prepared in accordance with ASTM D 618.
 - 11. Chemical resistance: Comply with ANSI/AWWA F102, Type II classification.

- C. Assembly Hardware and Wall Anchors: Type 304 stainless steel.

- D. Assembly Hardware and Wall Anchors: Type 316 stainless steel.

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. Install in accordance with approved shop drawings and in true and proper alignment.
- D. Adjust weir plate elevation for flow indicated or as directed by the Engineer.

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**