

SECTION 11203
FINGER WEIR PANS

PART GENERAL

SECTION INCLUDES

Finger weir pans.

RELATED SECTIONS

Section 03300 - Cast-In-Place Concrete.

Section 08342 - Fiberglass Doors and Frames.

Section 11201 - Wash Troughs.

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

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

Section 11205 - Density Current Baffle System.

Section 11206 - Palmer-Bowlus Flumes.

Section 11207 - Parshall Flumes.

Section 11208 - Metering Manholes.

Section 11286 - Slide Gates and Guides.

Section 11305 - Odor Control System.

Section 13122 - Pre-Engineered Fiberglass Buildings.

Section 13411 - Instrument Consoles.

REFERENCES

ANSI/AWWA F102 - Matched-Die-Molded, Fiberglass-Reinforced Plastic Weir Plates, Scum Baffles, and Mounting Brackets; American Water Works Association.

ASTM D 256 - Standard Test Methods for Determining the Pendulum

Impact Resistance of Notched Specimens of Plastics.

ASTM D 570 - Standard Test Method for Water Absorption of Plastics.

ASTM D 618 - Standard Practice for Conditioning Plastics and Electrical Insulating Materials for Testing.

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

ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 degrees C.

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

ASTM D 2583 - Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.

SUBMITTALS

Submit under provisions of Section 01300.

Product Data: Test results of fiberglass reinforced plastic laminate.

Shop Drawings: Show:

Critical dimensions, jointing and connections, fasteners and anchors.

Materials of construction.

Sizes, spacing, and locations of structural members, connections, attachments, openings, fasteners, and loads.

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

Manufacturer's installation instructions.

DELIVERY, STORAGE, AND HANDLING

Store products indoors and protect from construction traffic and damage.

PART PRODUCTS

MANUFACTURER

Provide products manufactured by Warminster Fiberglass Company; P.O Box 188, Southampton PA 18966-0188; ASD. Tel. (215) 953-1260, Fax. (215) 357-7893.

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

Substitutions: Not permitted.

FINGER WEIR PANS

Fiberglass Components:

Weir pan system: Adjustable with separate weir plates to control rate and uniformity of flow over "V" notches.

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.

Weir pan support brackets.

Pan spacing: As indicated on the drawings.

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.

Scum baffle support brackets.

Brackets: 3/16 inch thick by 4 inches wide; slotted to allow for at least 1-1/2 inch adjustment in all directions.

Material: Matched metal die molded fiberglass.

Color: White.

Color: Turquoise.

Tensile strength (ASTM D 638): 14,000 psi.

Flexural strength (ASTM D 790): 25,000 psi.

Flexural modulus (ASTM D 790): 1,000,000 psi.

Impact, notched, Izod (ASTM D 256): 15.0 ft-lb/in.

Barcol hardness (resin-rich surface) (ASTM D 2583): 40 minimum, average.

Water absorption, (ASTM D 570): 0.2 percent at 24 hrs.

Coefficient of thermal expansion, average (ASTM D 696): 0.0000105 in/in/degree F.

Test coupons prepared in accordance with ASTM D 618.

Chemical resistance: Comply with ANSI/AWWA F102, Type II classification.

Assembly Hardware and Wall Anchors: Type 304 stainless steel.

Assembly Hardware and Wall Anchors: Type 316 stainless steel.

PART EXECUTION

EXAMINATION

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

INSTALLATION

Install products in accordance with manufacturer's instructions.

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.

Install in accordance with approved shop drawings and in true and proper alignment.

Adjust weir plate elevation for flow indicated or as directed by the Engineer.

ADJUST AND CLEAN

Clean surfaces in accordance with manufacturer's instructions.

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

END OF SECTION