



Warminster Fiberglass
Water and Wastewater Treatment Products
Keeping Americas' Water Clean

SECTION 11205 DENSITY CURRENT BAFFLES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Density Current Baffles

1.2 REFERENCES

- A. ASTM D 256 - Standard Test Methods for determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- B. ASTM D 570 - Standard Test Method for Water Absorption of Plastics.
- 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.
- E. ASTM D2583 - Test Method for Indentation Hardness of Rigid Plastics by means of a Barcol Impressor.

1.3 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, and fasteners.
 - 4. Field measurements or plans.
- D. Manufacturer's installation instructions.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store products indoor and protect from construction traffic and damage

PART 2 PRODUCTS

Warminster Fiberglass
P.O. Box 188
Southampton PA 18966-0188
725 County Line Road
Phone: 215-953-1260 | Fax: 215-357-7893



Warminster Fiberglass
Water and Wastewater Treatment Products
Keeping Americas' Water Clean

2.1 MANUFACTURER

A. Provide products manufactured by Warminster Fiberglass Co., 725 County Line Rd., Southampton, PA 18966-0188 www.warminsterfiberglass.com Telephone: 215-953-1260 - FAX: 215-357-7893.

B. Products from other manufacturers (no supplier or distributor) may be considered for substitution 4 weeks prior to receipt of bids. Requests for substitution after the job bids will not be considered. Requests for substitution must include the following information to be considered:

1. Formal written request certifying that products to be substituted are equal in all respects to the specified products in terms of materials, structural properties, dimensions, physical appearance, quality level and quantities, and that they will perform the same function, in the same manner and will achieve the same result.
2. Manufacturer's, supplier's material data sheets, specifications, and performance data for evaluation and approval.
3. A list of five or more projects in satisfactory service for no less than five years with DCB's identical to those being proposed for substitution. For each project, include name, address, and telephone number of the engineer, the contractor, and the plant manager. List must be complete or substitution will be denied.

2.2 DENSITY CURRENT BAFFLE SYSTEM

A. Material: Fiberglass reinforced polyester resin composite laminate, having the following physical characteristics.

1. Color: White
2. Tensile strength (ASTM D 638): Minimum 9,000 psi.
3. Flexural strength (ASTM D 790): 16,000 psi.
4. Flexural Modulus (ASTM D 790): 900,000 psi.
5. Impact, Notched, Izod (ASTM D 256): 10.0 ft-lb/in.
6. Barcol hardness (resin-rich surface) (ASTM D2583): 40 minimum, average.
7. Water absorption, (ASTM D 570): 0.2 percent at 24 hrs.
8. Heat distortion point, (ASTM D 648): 175 degrees F.
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.

B. Baffle Segments:

1. Nominal baffle length to be 10 feet.
2. Molded of fiberglass-reinforced polyester resin composite laminate, minimum 3/16-inches wall thickness, with minimum 20 mil thick gel coat each surface.
3. Mold integral mounting flange 1/4-inch thick along top edge, factory drilled for anchors.
4. Mold face sloping inward and downward to resist solids build-up.
5. Mold integral reinforcing flange 1/4-inch thick at bottom edge to resist sag and uplift.
6. For circular tanks, mold baffle segments curved for tank diameter indicated on drawings.
7. Factory-drill holes for end-to-end connection of baffle segments in field.
8. Resin coat all cut edges and drilled holes.

C. Mounting Brackets: Angle brackets fabricated of same composition as baffle segments.

Warminster Fiberglass
P.O. Box 188
Southampton PA 18966-0188
725 County Line Road
Phone: 215-953-1260 | Fax: 215-357-7893



Warminster Fiberglass
Water and Wastewater Treatment Products
Keeping Americas' Water Clean

1. A minimum of two angular fiberglass support brackets 1/4 x 3 x 3 each baffle segment required, spaced 30" in from each end. Support Brackets to be spaced a minimum of 5' center to center. One molded-in bracket per segment is unacceptable.
2. Factory-drill holes for end-to-end connection of baffle segments in field.
3. Resin coat all cut edges and drilled holes.

D. Fasteners: 3/8-inch diameter wedge anchor bolts and fasteners of 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. Mounting Brackets: Install two brackets per baffle segment, equally spaced; anchor to substrates using 3/8-inch diameter stainless steel wedge anchors.

E. Baffle Segments: Install to full extent indicated on drawings; secure to brackets using stainless steel fasteners.

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.

Warminster Fiberglass
P.O. Box 188
Southampton PA 18966-0188
725 County Line Road
Phone: 215-953-1260 | Fax: 215-357-7893