

Rotational Biological Contactor Covers RBC's
Revised 7-30-2024

PART 1 GENERAL

1.1. SUBMITTALS

A. Shop Drawings

- i. Manufacturer's catalog information, descriptive literature, specifications, and identification of materials of construction, including resins and glass fiber content and layout for FRP constructions.
- ii. Detailed drawings that show equipment fabrication dimensional layouts, bill of materials, bolt and anchor locations, size of fasteners, and shall be based on field measurements by the Contractor to ensure proper installation.

B. Quality Control Submittals

- i. Manufacturer's Certificate of Compliance.
- ii. Special shipping, storage and protection and handling instructions.
- iii. Manufacturer's written/printed installation instructions.
- iv. Physical Properties:
 - a. Tensile Strength (ASTM D-638): 18,500 psi
 - b. Flexural Strength (ASTM D-790): 27,900 psi
 - c. Flexural Modulus (ASTM D-790): 1,080,000 psi
 - d. Izod, Notched (ASTM D-256): 15.4 ft-lb/in
 - e. Barcol Hardness, ASTM D2583: 40
 - f. Water Absorption, ASTM D 570: .13 percent

1.2. WARRANTY

- A. The manufacturer shall warrant the RBC Covers to be free of defects in materials and workmanship for a period of one year after the date of Substantial Completion.

1.3. COORDINATION

- A. The manufacturer shall coordinate the RBC Covers design and installation requirements with the tank and mechanicals configuration manufacturer.

PART 2 PRODUCTS

2.1. MANUFACTURERS

- A. The RBC Covers in this section shall be the products of:

National Manufacturing Water Treatment Products 7870 West Ridge Road Unit #9
Fairview PA 16415 dvorse@nationalcomposites.com

- i. The manufacturer of products shall be ISO 9001 certified.
- ii. FRP products must be completely manufactured in the U.S.A.
- iii. Supplier of FRP material shall be the manufacturer of the FRP material.

2.2. FRP Rotational Biological Contactor Buildings

- A. Except for bolts and hardware specified herein, RBC's will be made of Marine White Gelcoat and Isophthalic polyester resin. The surface shall be resin rich, free of voids and porosity, without dry spots, crazes or unreinforced areas and shall provide for increased corrosion resistance and UV protection.
- B. Expansion anchors, nuts, bolts, washers, and other hardware shall be Type 304 stainless steel.

PART 3 EXECUTION

3.1. INSTALLATION

- A. The installation contractor shall verify existing dimensions in accordance with the Contract Drawings, approved shop drawings and manufacturer's recommendations. All the fasteners required for installation will be supplied by the RBC Cover manufacturer.

END OF SECTION