



EQUIPMENT ENCLOSURE

SECTION 13166 PRE-ENGINEERED ENCLOSURE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Pre-engineered enclosures.

1.2 REFERENCES

- A. ASTM D 256 – Standard Test Method for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- B. ASTM D 618 – Standard Practice for Conditioning Plastics for Testing.
- C. ASTM D 638 – Standard Test Method for Tensile Properties of Plastics.
- D. ASTM D 732 – Standard Test Method for Shear Strength Plastics by Punch Tool.
- E. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- F. ASTM D 1622 – Standard Test Method for Apparent Density of Rigid Cellular Plastics.
- G. ASTM D 2583 – Standard 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 representative 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 location of structural members, connections, attachments, openings, and fasteners.
 - 4. Color(s).
- D. Samples: 8-inch square sample of representative fiberglass reinforced plastic laminate.
- E. Manufacturer's installation instructions.

1.4 SYSTEM DESCRIPTION

- A. Size: provide an enclosure of the following type(s):
 - 1. Size: (*select 3 FEET 4 INCHES W / 5 FEET 0 INCHES W / 6 FEET 8 INCHES W*) x 1 FEET 9 INCHES D x 2 FEET 4 1/2 INCHES H.
 - i. One-piece molded construction, paneled construction shall not be acceptable.
 - ii. 3 1/4 INCH domed lid.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products indoors or in weather protected area until installation. Protect from construction traffic and damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. The product shall be manufactured by TRACOM, Inc.; 6575-A Industrial Way, Alpharetta, Georgia 30004; Tel. (877) 435-8637, Fax (770) 664-6565, www.tracomfrp.com.
- B. Requests for substitution must be made in writing and received by the engineer's office a minimum of ten (10) business days before bid opening. Substitutions shall be made in accordance with the provisions of Section 01600.
- C. Substitutions: Manufacturers not pre-approved shall not be allowed.
- D. Warranty: Buildings shall be warranted to be free of defects in workmanship and materials for a period of two years from shipment.

2.2 MATERIALS

- B. One-Piece Molded Composite Construction:
 - 1. Laminate: Isophthalic polyester resin and chopped commercial grade E-glass strand fiberglass with a coupling agent that will provide a suitable bond between the glass reinforcement and the resin, with a minimum glass content of 25%.
 - i. Exterior surface: 15 mil gel coat with U.V. inhibitors and a satin finish, lightly textured and free from fiber pattern, roughness, or other irregularities.
 - ii. Laminate: 1/8 inch thick (minimum); chemically bonded to the surface gel coat and encapsulating the foam core.
 - iii. Interior surface: White (#1540) gel coat with satin finish, and free from exposed glass or other irregularities.
 - iv. Laminate properties:
 - 1. Tensile strength (ASTM D 638): 11,000 psi.
 - 2. Flexural strength (ASTM D 790): 18,000 psi.
 - 3. Shear strength (ASTM D 732): 12,000 psi.
 - 4. Barcol hardness (ASTM D 2583): 40.

- 5. Impact (ASTM D 256): 12 ft lbs/inch.
- 2. Coupons prepared in accordance with ASTM D 618.
- C. The manufacturer shall maintain a continuous quality control program and upon request shall furnish to the engineer certified test results of the physical properties.

2.3 COMPONENTS

- A. Lid:
 - a. Top access lid: Domed, one-piece molded fiberglass construction 3 1/4 inch H.
 - i. Mount door with continuous T-304 stainless steel piano hinge.
 - ii. Provide T-304 stainless steel stop chains at each end.
 - iii. Provide T-304 stainless steel padlockable hasp.
- B. Louvers:
 - a. Provide one, _____ inch by _____ inch (10 inch or 12 inch - square) fiberglass gravity shutter with heavy-duty fiberglass frame using stainless steel pins and bearing at pivot points **(OPTIONAL)**.
- C. Integral Floor

2.4 FINISHES:

- A. Color: #1540 Pure White.
- B. Color: _____ **(OPTIONAL)**.

END OF SECTION

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