SECTION 06 83 16
FIBERGLASS REINFORCED PANELING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fiberglass reinforced plastic panels.

B. Trim.

1.02 RELATED REQUIREMENTS

A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.

1.03 REFERENCE STANDARDS

A. 9 CFR 416.2 - Regulatory Requirements Under the Federal Meat Inspection Act and the Poultry Products Inspection Act, Part 416-Sanitation; current edition.

B. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2016.

C. ASTM D5319 - Standard Specification for Glass-Fiber Reinforced Polyester Wall and Ceiling Panels; 2022.

D. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.

C. Samples: Submit two samples 4 by 4 inch (____by____ mm) in size illustrating material and surface design of panels.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Store panels flat, indoors, on a clean, dry surface. Remove packaging and allow panels to acclimate to room temperature for 48 hours prior to installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Fiberglass Reinforced Plastic Panels:
   1. Crane Composites, Inc: www.cranecomposites.com.
   2. Marlite, Inc: www.marlite.com.
   3. Panolam Industries International, Inc; Panolam FRP: www.panolam.com.

2.02 PANEL SYSTEMS

A. Wall Panels:
   1. Panel Size: 4 by 8 feet (1.2 by 2.4 m).
   2. Panel Thickness: 0.10 inch (2.5 mm).
   3. Surface Design: Embossed.
   4. Color: White.
   5. Attachment Method: Adhesive only, with trim and sealant in joints.

2.03 MATERIALS

A. Panels: Fiberglass reinforced plastic (FRP), complying with ASTM D5319.
   1. Surface Burning Characteristics: Maximum flame spread index of 200 and smoke developed index of 450; when system tested in accordance with ASTM E84.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
   3. Sanitation and Cleanability: Comply with 9 CFR 416.2.

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    B.   Trim: Vinyl; color coordinating with panel.

    C.   Adhesive: Type recommended by panel manufacturer.

    D.   Sealant: Type recommended by panel manufacturer; white.

PART 3 EXECUTION

3.01 EXAMINATION

    A.   Verify existing conditions and substrate flatness before starting work.

    B.   Verify that substrate conditions are ready to receive the work of this section.

3.02 INSTALLATION - WALLS

    A.   Install panels in accordance with manufacturer's instructions.

    B.   Cut and drill panels with carbide tipped saw blades, drill bits, or snips.

    C.   Apply adhesive to the back side of the panel using trowel as recommended by adhesive manufacturer.

    D.   Apply panels to wall with seams plumb and pattern aligned with adjoining panels.

    E.   Install panels with manufacturer's recommended gap for panel field and corner joints.

    F.   Place trim on panel before fastening edges, as required.

    G.   Fill channels in trim with sealant before attaching to panel.

    H.   Install trim with adhesive and screws or nails, as required.

    I.   Seal gaps at floor, ceiling, and between panels with applicable sealant to prevent moisture intrusion.

    J.   Remove excess sealant after paneling is installed and prior to curing.

END OF SECTION