

SECTION 09 77 01
FIBERGLASS-REINFORCED PLASTIC (FRP) PANEL WALLS

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Society of Civil Engineers (ASCE): 13, Seismic Evaluation of Existing Buildings.
2. ASTM International (ASTM):
 - a. C636/C636M, Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
 - b. E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
 - c. E488/E488M, Standard Test Methods for Strength of Anchors in Concrete Elements.
 - d. E580/E580M, Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions.
 - e. E1190, Standard Test Methods for Strength of Power-Actuated Fasteners Installed in Structural Members.

1.02 DEFINITIONS

A. FRP: Fiberglass-reinforced plastic.

1.03 SUBMITTALS

A. Action Submittals:

1. Samples:
 - a. Samples for initial selection in form of manufacturer's standard color charts showing full range of colors, textures, and patterns available for each type of unit.
 - b. Samples for verification each type of exposed finish, prepared on samples of size below and of same thickness and material for final Work. Where finishes involve normal color and texture variations, include sample sets showing full range of variations expected.
 - 1) Two 12-inch-square samples of wall panel.
 - 2) Two 12-inch-long samples of each exposed molding.
 - 3) Two 12-inch-long samples of suspension system members.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver FRP wall panels, and components to Project Site in manufacturer's original unopened packages, fully identified with type, finish, performance data, and compliance labels.

PART 2 PRODUCTS

2.01 MANUFACTURERS AND PRODUCTS:

- A. Materials and products specified in this section shall be products of:

- 1. Crane Composites, Inc.; Sequentia embossed panels.
- 2. Or equal.

2.02 FRP WALL PANELS

- A. Physical Characteristics: FRP wall panels, that are 48-inch by 96-inch by 0.09-inch thick, with textured surface; color white.
- B. Functional Characteristics: Resistance to mild chemicals and moisture.
- C. Performance Characteristics: Furnish FRP wall panels with surface burning characteristics in accordance with ASTM E84.
 - 1. Fire-Rated: Class A.
 - 2. Flame Spread: 25 or less.
 - a. Smoke Developed: 450 or less.
- D. Moldings: Manufacturer's standard moldings for all panel joints, edges, and corners, in color to match panels.
- E. Fasteners: Manufacturer's recommended adhesive or corrosion-resistant fasteners to suit installation shown on the Drawings.
- F. Sealant: Manufacturer's recommended sealant for panel joints and edges, around fasteners, and at moldings.

PART 3 EXECUTION

3.01 PREPARATION

- A. Measure each wall area and establish layout of FRP wall panels to minimize joints. Lay out panels with all horizontal and vertical joints aligned.

3.02 FRP WALL PANEL INSTALLATION

- A. Install over substrate in accordance with manufacturer's instructions using adhesive or fasteners, or combination of both.
- B. Apply moldings and seal all panel joints, fasteners, and edges for a watertight installation.

END OF SECTION

