

**SPECIAL SPECIFICATION**  
**SECTION 06610S**  
**GLASS-FIBER-REINFORCED PLASTIC**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. **Fiberglass grating, struts and shapes.****

**1.02 RELATED SECTIONS**

- A. Section 03300S – Cast-In-Place Concrete: Framing and Sheathing: Framing of openings.**

**1.03 REFERENCES**

- A. ASTM D635 Rate of Burning and/or Extent and time of burning of self-supporting plastics in a horizontal position .**
- B. ASTM E84 surface burning characteristics of building materials.**
- C. UL - Fire Resistance Directory.**

**1.04 DESIGN REQUIREMENTS**

- A. Design Live and Dead Loads: 125 pounds per square foot with deflection limited to 1/360 of span.**

**1.05 PERFORMANCE REQUIREMENTS**

- A. Conform to applicable code for a flame/smoke rating of 25/500 in accordance with UL 723 requirements for “Surface Burning Characteristics Of Building Materials.”**

**1.06 SUBMITTALS**

- A. Shop Drawings: Indicate design load parameters, dimensions, adjacent construction, materials, thicknesses, fabrication details, required clearances, field jointing, tolerances, colors, finishes, methods of support, integration of plumbing and electrical components, and anchorages.**
- B. Product Data: Submit data on specified component products.**
- C. Design Data: Submit design calculation.**

- D. Samples: Submit two samples, six-inch by six-inch in size illustrating color, texture, and finish.
- E. Operation and Maintenance Data: Submit instructions for stain removal, and surface and gloss restoration.

#### 1.07 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years documented experience, and with service facilities within 100 miles of Project.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum three years documented experience and approved by manufacturer.
- C. Shop Fabricator Qualifications: Company specializing in architectural glass fiber and resin components with three years documented experience.

#### 1.08 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

### PART 2 - PRODUCTS

#### 2.01 GLASS FIBER AND RESIN FABRICATIONS

- A. Fabricators:
  - 1. DEC Associates.
  - 2. Melton Classics, Inc.
  - 3. Molded Fiber Glass/Union City.
  - 4. Morrison Molded Fiber Glass Co.
  - 5. Spaulding Craft, Inc.
  - 6. Fibergrate Composite Structures, Inc.

#### 2.02 COMPONENTS

- A. Fabric Reinforcement: Glass fiber woven fabric, 200 ounces per square yard.
- B. Roving: Continuous glass fiber strands, chemically sized, wound into tubeless packaging.

Glass-fiber-reinforced Plastic

- C. Mat: Chopped fine glass fiber strand, sized into mat form, 9.5 ounces per square yard, for polyester resin laminate reinforcement.
- D. System: Basis of design shall be “Vi-Corr<sup>®</sup>” by Fibergrate Composites, Inc.; submit corrosion resistance data from tests on grating products.
- E. Polishing Cream: Compatible gel coat polishing cream to restore gloss surface finish.

#### 2.03 SHOP FABRICATION

- A. Fabricate components with the open mold hand lay-up method.
- B. Finish other surfaces not in contact with the mold to match the molded surfaces in appearance.
- C. Finish trim corners and edges.
- D. Coat exposed surfaces and surfaces in contact with moisture or earth with gel coat of colored resin.

#### 2.04 SHOP FINISHING

- A. Color: As selected, by architect.
- B. Exposed to View Surface Texture: Smooth with concave non-skid surface.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Verify that surfaces and substrate are ready to receive work and dimensions are as indicated on shop drawings.

#### 3.02 INSTALLATION

#### 3.03 ERECTION TOLERANCES

- A. Maximum variation from true position: 1/4-inch.
- B. Maximum offset from true alignment: 1/8-inch.

3.04 CLEANING

- A. Clean components of foreign material without damaging finished surface.
- B. Hand rub smooth surfaces with polishing cream.
- C. Clean fabrications.

END OF SECTION