SECTION 06 8208

GLASS-FIBER-REINFORCED WALL AND FACIA PANELING

PART 1 - GENERAL

1.1 SUMMARY

A. Includes But Not Limited To:
   1. Furnish and install wall and facia panels, including design and detail of structural connections necessary to fasten panels to building, as described in Contract Documents.

B. Related Sections:
   1. Section 07 9213: Quality of sealants.

1.2 SYSTEM DESCRIPTION

A. Design Requirements:
   1. Design and fabricate items and fastening systems to withstand 100 mph 161 kph winds and to meet Seismic Zone 4 requirements.
   2. Design items to withstand handling stresses.

1.3 SUBMITTALS

A. Shop Drawings:
   1. Show proper handling and erection procedures.
   2. Show design load parameters, dimensions, adjacent construction, materials, thicknesses, fabrication details, required clearances, field jointing, tolerances, colors, finishes, method of support, integration of components, and anchorages.

B. Samples: Provide one full size facia panel showing details, color, texture, etc, to Architect for inspection and approval. Panel work will be judged by approved sample.

C. Quality Assurance / Control:
   1. Submit evidence that Manufacturer meets specified experience requirements. Include list of five completed Projects as close to Project site as possible.
   2. Manufacturer’s erection instructions and drawings.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements: If required by local code authority, fiberglass fabrications shall be Class A fire rated and so labeled.

B. Qualifications: Manufacturing company specializing in architectural fiberglass and plastic fabrication with ten years experience.
1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect components during shipment by means of crates or padding sufficient to prevent damage during delivery. Replace damaged components at no additional cost to Owner.

B. Deliver, store, and protect fiberglass fabrications until installation is complete.

1.6 WARRANTY

A. Manufacturer's written 5-year guarantee for material and workmanship.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Class One fire-retardant, corrosion-resistant resin and gelcoat.

B. Fiberglass:
   2. Mat: Equal to product of Certainteed or Owens Corning.

C. Polyester Resin: High quality isothalic resin.

D. Gel-Coat:
   1. Base resin used in manufacture of gel-coat shall meet or exceed MIL-R-21607B Grade A.
   2. Finish gel-coat shall be light stabilized with 1.2 percent Tinuvin 'P' or equal based on weight of resin for optimum ultraviolet resistance.

E. Reinforcement:
   1. Chopper Strand Mat or Strand Woven Roving: Type E glass, 2 oz per sq ft with silane finish and styrene soluble binder.
   2. Woven roving (18 oz 60 end minimum): Type E glass with R methacrylate chromic chloride or silane type finish.

2.2 FABRICATION

A. Category Four Approved Manufacturers. See Section 01 6000 for definitions of Categories.

B. Fabricate components by hand-lay-up method, no chopper gun allowed.

C. Gel-Coat, including veil, shall be 15 to 20 mils thick.

D. Reinforcement:
   1. Surfacing veil and gel-coat shall be 15 to 20 mils thick.
   2. Minimum glass content: 35 percent by weight.

E. Seal inside of fiberglass on backside with resin or gel coat material 10 to 15 mils thick.
F. Provide stiffener legs, blind fasteners, and foam insulation coat.

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

A. Verify that substrates and structural framing are ready to receive work and that dimensions are as shown on shop drawings.

**3.2 INSTALLATION**

A. Site Tolerances:
   1. Maximum variation from true position: 1/8 inch in 20 feet 3 mm in 6 meters.
   2. Maximum offset from true alignment: Between adjacent members butting or in line 1/8 inch in 20 feet 3 mm in 6 meters.

B. Seal joints between panels and contacts with other substrates with sealants specified in Section 07 9213.

**3.3 CLEANING**

A. Clean fabrications of foreign material using cleaning methods recommended in writing by Fabricator.

**3.4 PROTECTION**

A. Protect finished installation as recommended by Fabricator.

**END OF SECTION**