

**Moonlight Molds, Inc.**  
**Specification**

**Fiberglass Reinforced Polyester Components**

Requirements of the general conditions, supplementary general conditions and additional provisions to contracts apply to work of this section.

1.0 **GENERAL**

1.1 **SCOPE:**

Work included: furnish all materials and perform labor required to execute this work, as indicated on the drawings, as specified and as necessary to complete the contract, including but not limited to these major items:

- A. Fiberglass Column Covers
- B. Fiberglass Building Components

Related work not included in this specification:

- A. Concrete
- B. Miscellaneous steel
- C. Drywall

1.2 **GENERAL REQUIREMENTS:**

- A. Field Conditions: Verify drawings dimension with actual field conditions. Inspect related work and adjacent surfaces. Report to Architect any conditions which prevent proper execution of this Work. Assume full responsibility of fitting the components to the building.
- B. The components indicated on the drawings show dimensions established to accomplish the Architect's intended visual result and to conform to the buildings configuration. The contractor shall verify that the components that will be actually provided for the work of this section will fit the building's structural elements and conform to visual criteria and profiles indicated on the drawings without materially altering profiles and alignments.
- C. Any additional support or reinforcement for the components shall be provided and installed by the installation contractor as part of the work of this section.
- D. Codes: Materials and work shall conform to the government building codes.

1.3 **SUBMITTALS:**

- A. Submit following product data:
  - 1. Materials list of items proposed to be provided under this section.
  - 2. Manufacturer's specifications, technical data sheets and material safety data sheets needed to prove compliance with the specified requirements.
  - 3. Submit detailed shop drawings indicating dimensions, adjacent construction, materials, thicknesses, fabrication, details, required clearances, field jointing, tolerances, colors, finished, methods of support, and anchorages.

1.4 PERFORMANCE CRITERIA:

A. Structural Properties:

1. The fiberglass reinforced plastic components shall be engineered, fabricated and erected to conform to the specifications and applicable requirements as specified by local codes to fit the building structure and to conform to the Architect's design criteria.

1.5 MOCK-UP, PATTERNS AND MOLDS:

A. Upon approval by the Architect of the shop drawings, inspection of the tooling shall be approved by the architect on site or at the facility of the Fiberglass manufacturer prior to beginning of parts fabrication.

B. Patterns and mock-ups shall be fabricated by skilled craftsmen who have a minimum of five years experience in manufacturing of Architectural components and/or related design projects.

C. Molds shall be constructed of from seven to nine layers of glass fibers with tooling resin and gel coat and/or rubber molds shall be fabricated by skilled craftsmen with a minimum of five years experience in manufacturing of architectural components for similar projects.

1.6 MANUFACTURER QUALIFICATIONS:

The Fiberglass Manufacturer shall be one who is currently in the business of manufacturing and supplying architectural Fiberglass components for the building construction industry and can demonstrate this capability.

1.7 MANUFACTURER:

Moonlight Molds, Inc.  
13720 S. Western Ave., Unit A  
Gardena, CA 90249  
Phone: (310) 538-9142  
Fax: (310) 538-9717

2.0 PRODUCTS:

2.1 FIBERGLASS and RESIN MATERIALS:

A. Glass cloth, matt and "chop" shall be equal to the products of PPG or Owens/Corning.

B. Polyester resins shall be Class A, flame retardant, promoted thixotropic polyester resin designed for use in hand lay-up and spray-up process. This resin is specifically formulated for use in applications that require an ASTM E-84 flame spread rating of 25 unfilled. As required by local fire codes.

2.2 FABRICATION:

A. Fiberglass reinforced plastic components shall be manufactured using the specified resins, reinforced with the chopped glass fibers.

- B. Internal reinforcement, anchorage clips, brackets, and additional glass fiber and matt shall be provided as required by the structural design.
- C. Final ratio of materials, other than metal shall be 25% resin, 75% fiber for body of components.
- D. Facecoat thickness shall be .015" to .025".
- E. Finished panels shall be true to line in shapes indicated on the drawings.
- F. Joints in components shall be matched at the factory and numbered for field installation.
- G. Components shall be fabricated to eliminate exposed fasteners, whenever possible.
- H. Components shall have a smooth paint grade finish.

3.00 EXECUTION:

3.1 DELIVERY, STORAGE AND HANDLING:

- A. Transport and handle units in a manner that avoids excessive stresses or damage.
- B. Store the units level on a clean and dry surface in an area protected from weather and damage, preferably in an upright position.
- C. Do not unpack crates until immediately prior to installation.
- D. Handle materials to prevent damage to finished surfaces.

3.2 PRE-INSTALLATION RESPONSIBILITY:

- A. Prior to manufacturing, dimensions and conditions not shown on the drawings will be checked by the installer for inclusion in
- B. Prior to installation, the installer shall check jobsite dimensions. Any discrepancies between design and field dimensions shall be brought to the attention of the General Contractor and the Architect. Work shall not proceed until discrepancies are corrected.

3.3 ERECTION:

- A. Units shall be lifted carefully with suitable devices.
- B. Units shall be installed plumb and level.
- C. Fasten units with screws (through the face or from the back), bolting or welding as shown on the shop drawings.
- D. Where units are suspended, use as a minimum, the suspension points indicated on the shop drawings.

3.4 FINISHING:

- A. See painting/texturing section of the specifications.