

**Architectural Mall, Inc**  
***GFRG/GRG***  
**PRE FABRICATED GLASS FIBER**  
**REINFORCED GYPSUM COLUMNS AND FORMS**  
Section 09275

**PART 1 GENERAL:**

- 1.01 WORK COVERED:  
Manufacturer of GRG (Glass Fiber Reinforced Gypsum) Forms
- 1.02 RELATED WORK IN OTHER SECTIONS:
- A. Light gauge metal framing.
  - B. Veneer gypsum plaster.
  - C. Gypsum board.
  - D. Finishing glass fiber reinforced gypsum.
  - E. Miscellaneous metals.
- 1.03 SUBMITTALS:  
Samples and shop drawings to conform to Section 01200
- A. Samples:  
Samples submitted as required by architect.
  - B. Shop Drawings:  
Submit shop drawings completely detailing prefabricated glass fiber reinforced gypsum members, including locations, sizes and shapes of gypsum members shall be prepared at the factory by manufacturer only for those items indicated on approved shop drawings.
- 1.04 STANDARDS OF PERFORMANCE, DESIGN AND QUALITY:
- A. Manufactures Qualifications: 10 years
  - B. Acceptable Manufacturer: Architectural Mall, Inc
  - C. All GRG forms shall match approved samples.
  - D. All GRG forms will be installable according to details submitted in shop drawings.

**PART 2 PRODUCTS:**

- 2.01 MANUFACTURER:
- Architectural Mall, Inc  
323 St Paul Blvd  
Carol Stream, IL 60188  
T. 877-279-9993 F. 844-817-0480  
[www.columnsandbalustrades.com](http://www.columnsandbalustrades.com) [sales@architecturalmall.com](mailto:sales@architecturalmall.com)

2.02

**MATERIALS:**

- A. Description: Glass Fiber Reinforced Gypsum (GRG)
1. Pre molded GRG parts are fabricated to details and dimensions
  2. Finished product shall conform to the following standards.

**PHYSICAL PROPERTIES OF GRG "FIBROCAL"**

- a. Shell Thickness:  
3/16" minimum except for small components which may be 1/8" minimum, large components such as wall panels shall be of the thickness recommended by the manufacturer for the size and location of components.
  - b. Weight: 1.5 lbs. per square foot
  - c. Flexural Strength: 4,192 psi
  - d. Tensile Strength: 1,340 psi
  - e. Compressive Strength: 5,800 psi
  - f. Density: 110 lbs. per cubic foot
  - g. Hardness (Barcol): 105
  - h. Flammability:  
Flame Spread           0  
Smoke Developed       0  
ASTM E4                Class A
  - i. Glass Content: 38.7%
3. All parts to contain supports as required to keep within allowable tolerances.
  4. Finish surfaces shall be true or textured according to design requirements.

2.03

**FABRICATION:**

- A. Molds to be constructed of reinforced fiberglass to produce units conforming to the required profiles, dimensions and tolerances.
- B. Allowable Tolerances:
1. Dimensional Tolerances:  $\pm 1/8"$
  2. Wall Thickness: Nominal 3/16"
  3. Out of Plumb:  $\pm 1/8"$
  4. Bowing: L/360 Maximum

**PART 3 EXECUTION**

3.01

**INSTALLATION**

- A. General:  
Employ only workmen experienced, skilled and trained on this type of quality erection work.
- B. Workmanship:  
Install work of this section complete, straight, plumb, level, in true

alignment and securely anchored.

- C. Erection:  
GRG forms shall be installed per drawings, including the approved shop drawings, and the manufacturer's written recommendations and instruction for this project.
- D. Sealing and Caulking:  
Shall conform to requirements of Caulking and Sealing Section 07900 and requirements indicated and specified herein.
  - 1. Joints and Sealants: Joints (quantity, sizes, and shapes) indicated on contract drawings are minimum requirements.
- E. Finishing Materials:
  - 1. Fasteners:  
As indicated on approved shop drawings and in accordance with manufacturer's printed recommendations.
  - 2. Joint treatment materials:
    - a. General: ASTM C-475; type recommended by the manufacturer for the application indicated, except as otherwise indicated.
    - b. Joint tape: Perforated type.
    - c. Joint Compound: Ready Mixed vinyl-type for interior use. (1) Grade: 2 separate grades; one specifically for bedding tapes and filling depressions, and one for topping and sanding.
  - 3. Miscellaneous Materials:
    - a. General: Provide auxiliary material for work of types and grades recommended by manufacturer.
    - b. Adhesive: Special adhesive recommended for laminating gypsum plaster.
- F. Replacements:
  - 1. In-place GRG forms may be rejected for the following reasons.
    - a. Nonconformance to detail requirements specified previously.
    - b. Nonconformance with approved samples.
    - c. Nonconformance to specified fabrication or installation tolerance.
    - d. Damage beyond satisfactory field repair, as determined by the Architect.

3.02 CLEANUP:  
General:  
Perform cleaning procedures as recommended by GRG unit manufacturer.

3.03 GUARANTEE:  
One year from substantial completion.