



Glass Reinforced Gypsum (GRG)

Product Data & Material Specifications

General Description

1. GRG is a composite blend of glass fiber reinforcing with a high strength gypsum matrix. Proprietary polymers in the system provide added performance and increased impact resistance. All GRG materials are in accordance with ASTM C1355 Standards.
2. GRG is factory molded into standard and custom shapes in accordance with ASTM C1381 Standards, typically including:
 - a. Column Covers
 - b. Ceiling Vaults and Domes
 - c. Light Coves
 - d. Moldings
3. GRG is made from minerals and is %100 non-combustible. GRG does not contain paper or cellulose that would promote or feed mold and mildew.
4. GRG is gypsum based, and therefore should not be used when in direct exposure to high

Technical Properties

Description	Typical Values
Weight	± 2 lb/sq ft (32 kg/sq m)
Glass Fiber	5 -6% by weight
Shell Thickness	.25" (6.35mm)
ASTM C947 Flexural Strength	4220 psi (28.4 MPa)
ASTM D790 Tensile Strength	1360 psi (9.4 MPa)
ASTM D256 Impact Resistance	8.34 ft-lb/in (43.7 kJ/m2)
ASTM D695 Compressive Strength	7600 psi (48.5 MPa)
Flame Spread Index	0
Smoke Developed Index (ASTM E01-84-)	>20



Glass Reinforced Gypsum (GRG)

Product Data & Material Specifications



Installation

1. **METHODS:** Installation methods vary for GRG products. Most elements are mechanically fastened using countersunk screws and/or adhesive. Ceiling elements can be suspended with rod or wire using embedded flanges
2. **CEILING:** GRG ceiling panels, domes, and shapes may be hung from hanger wire similar to suspended ceiling systems. Small elements may be supplied as a single unit. Larger shapes and domes are supplied in manageable sizes.
3. Where ceiling units are supplied in multiple pieces, sections are made with either ship-lap joints, or with standard tapered edges. Tape, float and sand all joints. Patch all countersunk fasteners.
4. **COLUMNS:** GRG columns are molded in two halves to surround an internal structural member. Column edges have embedded strips for reinforcing, and are secured by countersunk screws.
5. **HANDLING:** GRG products should be moved and handled with care. Store flat on a level surface and do not lean or stack pieces. Ambient temperatures should be maintained between 70-85 °F (21-29 °C). Keep product clean and dry, with adequate ventilation. Protect from forklifts and other moving equipment.
6. **FINISHING:** Most GRG products are painted. Ensure all joints and fasteners are taped, filled, and sanded smooth. Priming is recommended, and high gloss paints should be avoided. On smooth GRG surfaces that will be subjected to high glare lighting or gloss finishes, the GRG surface should be skim coated with joint compound to equalize suction and conceal all fasteners before coating.