



“GRG” (GLASS FIBER REINFORCED GYPSUM CEMENT PLASTER)

“GRG” (Glass Reinforced Gypsum) is a molded product with a high strength to weight ratio that is used in construction to replace the disappearing art of plaster. In the past, “Master Plasterers” would reproduce stunning run-in-place architectural columns, domes, vaults, arches, cornices, etc... Today, there are very few “Masters” left. “GRG” produces these results in a premolded, light weight, time tested composite for far less the cost. It has been used on probably millions of projects all over the world to continue the “charm” of both traditional or classical architecture and to create the free flowing forms of modern design.

“GRG” is a multi-layered composite using only two basic raw materials: continuous strand fiberglass mats in a matrix of high density “alpha” gypsum cement plaster. A gypsum surface coat is applied to a mold (the “negative” of the shape required) and further alternating layers of fiberglass and gypsum are hand laminated until the desired thickness is achieved, typically a nominal 1/4”. The hand “lay-up” method allows consistent control of the shell thickness as well as the incorporation of embedded items for stiffness, strength, attachment and/or hanging. Once the “GRG” has set, the part will maintain it’s shape and it is removed from the mold, stored to prevent distortion, finished and inspected, and is ready to ship.

Daily production is a function of environmental factors, piece size and profile and the cure rate of the gypsum; usually allowing a minimum of four to a maximum of six pieces per day from the mold. Large projects may require that multiple molds be made of the same shape to increase daily yield.

“GRG” requires only “shape” and repetition to make it an appropriate material for an intended use. Shape enhances and lends it strength – repetition will allow any custom mold costs to be most economically used, amortizing the “fixed”, initial investment over a greater number of pieces. However, many very custom projects are done with only a few pieces and many “stock” molds are available for common shapes such as straight round cylindrical or “Classical” style column covers, ceiling domes, light coves, etc. Large, flat areas are usually most economically done in drywall, but designs for extensive, complex ceiling systems have been successfully completed. Historic replication of ornate, carved moldings are possible as are simple recessed fixture wells.

“GRG” is non-toxic and incombustible with “0” Fire, Fuel and Smoke ratings, allowing it’s use anywhere in interior construction. “GRG” weighs 1.5 to 2 lbs. per square foot and it’s design factors are similar to drywall.

Installation and finishing techniques are similar to those required for drywall construction. Details are kept simple and efficient with attachment and/or hanging points clearly noted on the job specific shop drawings. Standard drywall fasteners are countersunk into the piece to light gauge framing or blocking. Parts are adhered together with construction adhesive. Monolithic (seamless) appearances are achieved by embedding fiberglass mesh tape into commercial joint compound at the tape/bed recess cast both sides of the seam, then sanding to the piece profile.

“GRG” is field primed and painted with any commercial quality coating suitable for plaster surfaces. Special conditions as would also apply to drywall construction apply per the references listed above. High Gloss coatings are not recommended but may be acceptable if all parties are aware of the extra finishing efforts (multiple primer, sanding, skim coating) required. Proper priming of “GRG” and joint compound surfaces is extremely important to minimize the differences in porosity between the two materials and eliminate the chances of seam “read through.”

See our **Technical Specifications and Installation Data Sheets** for further information on this versatile product.