MOONLIGHT MOLDS, INC.

MOLDED GLASS FIBER REINFORCED GYPSUM (GRG)
(Where Joint Taping is Required)

NOTE TO SPECIFIER:

Use this guide in preparing specifications for column covers, light troughs, cornices, coffered and vaulted ceilings and similar elements too complex to execute in conventional drywall or lath and plaster.

1. GENERAL

1.1 Scope:
Furnish all materials, labor, equipment and related services necessary to supply and erect Moonlight Molds GRG units as indicated and described in the contract documents and in compliance with local codes and ordinances.

1.2 Work Included:
1. Supply of Moonlight Molds GRG
2. Erection
3. Joint Treatment

1.3 Related Work Excluded:
1. Gypsum Drywall
2. Framing and Suspension
3. Finishes

1.4 Responsibility:
The gypsum drywall contractor shall install and tape the work under this section and will be responsible for coordinating this installation with gypsum drywall work and other trades.

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

1.6 Samples and Submittals:
1. Submit a minimum of three 8" x 8" GRG flat samples to the finishing contractor for paint selections.

2. Submit shop drawings for approval showing plans, sections, details, joint treatment, reinforcing, fastening devices and the relation of the GRG to the surrounding construction.

1.7 Substitution:

Companies desiring to submit proposals other than Moonlight Molds, Inc. shall, at least ten working days in advance of the bid date, submit to the architect all descriptive information of the system. Independent test data and samples of similar details must be submitted.

2. PRODUCT

2.1 Materials:

1. Moonlight Molds (GRG) units shall be prefabricated with high density gypsum, reinforced with continuous filament random glass fiber mat.
2. Units to be suitably reinforced.
3. GRG shall be ready to receive primer and paint as specified elsewhere.

2.2 Tolerances (fabrication):

Dimensional - all directions	± 1/8"
Thickness - skin	+ 1/16" - 0"
Thickness - total unit	+ 1/8"
Warpage or Bowing	1/16" per ft

2.3 Physical Properties:

Shell Thickness	1/8" to 3/16"
Weight (depending on reinforcing)	1 1/2 - 3 lbs/sq ft
Density	110 lbs/cu ft
Flexural Strength (ASTM C947-81)	
Modulus of Rupture	3310 psi (avg)
Compressive Strength (ASTM C109-87)	7260 (avg)
Indentation Hardness (ASTM D2583-87/ BARCOL)	74
Coefficient of Linear Thermal Expansion (ASTM D696-79)	1.83×10^{-5} (avg)
Humidified Deflection (ASTM C473-87a)	1/8"
Fuel Contribution (ASTM E84-80)	0
Flame Spread (ASTM E84-80)	0
Smoke Index (ASTM E84-80)	0
IZOD Impact Strength (ASTM D256-88)	3.76 ft.-lb.
Embeddment Pulloff Test	571.0 lbs (avg.)
Screw Pullout / wood embeddment	330.5 lbs (avg.)
Screw Pullout / metal embeddment	482.0 lbs (avg.)

3. EXECUTION

3.1 Delivery, Storage and Handling:

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

3.2 Pre-Installation Responsibility:

1. Prior to manufacturing, dimensions and conditions not shown on the drawings will be checked by the installer for inclusion in the manufacturer's shop drawings.
2. 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:

1. Units shall be lifted carefully with suitable devices.
2. Units shall be installed plumb and level.
3. Fasten units with screws (through the face or from the back), bolting or welding as shown on the shop drawings.
4. Where units are suspended, use as a minimum, the suspension points indicated on the shop drawings.
5. Provide framing, hangers, etc. as specified for gypsum drywall.

3.4 Taping, Patching and Control Joints:

1. Tape, float and sand all joints and provide control joints (where required) as specified under the gypsum drywall section of the specifications and as described in the “Standard Specification for Application and Finish of Gypsum Board” (ASTM C-840) and the “Recommended Specification on Levels of Gypsum Board Finish”.
2. Countersunk fasteners and damage is to be patched to match unit's texture.

3.5 Finishing:

1. See painting/texturing section of the specifications.
2. The painting contractor shall comply with “Standard Specification for Application and finish of Gypsum Board” (ASTM C-840), specifically with regards to sealing.

JOB APPLIED DECORATION OF GLASS FIBER REINFORCED GYPSUM

GENERAL NOTES:

GRG should be sealed and painted in the same manner as gypsum wallboard. A good quality primer is recommended. These recommendations, based on "Standard Specification for Application and Finish of Gypsum Board" (ASTM C-840), are applicable to decorating Moonlight Molds GRG products.

SPECIFICATION NOTES:

A. With the joints and fastener head depressions treated, glass fiber reinforced gypsum may be decorated in any of the popular variety of finishes, such as texture or stipple, flat paint or flat enamel paint, wallpaper, or vinyl wall coverings.

B. Because the porosity and texture of the gypsum differs from that of the joint treatment, the surface shall be primed and sealed as may be required for the subsequent finish coats.

C. In rooms where high humidity may be encountered, such as the kitchen, bath or utility room, a flat or semi-gloss enamel finish is recommended.

D. Care should be exercised in the selection of primer and sealer paints to make sure they will perform satisfactorily, and fulfill the following functions:

1. Equalize variations of suction over the entire surface.
2. Provide a bonding surface or "tooth" for the paint to be applied.

E. Before applying the sealer, remove all loose dirt and dust by brushing with a soft brush or by rubbing with a dry cloth. Be sure the joint treatment is thoroughly dry before any application of sealer or paint.

F. In applying primers or sealers, apply sufficient quantity to assure that the surface is completely covered. Follow the manufacturer's printed directions and do not over thin. It is good practice to tint the sealer to approximately the shade of the finish coat. This will lead to better results in the finished job.

G. In all cases where deep tones are to be used in the finish paint, best results will be achieved if the surface is first sealed. More than one coat of sealer may be necessary. Each coat must be thoroughly dry before applying another.

H. Under normal atmospheric conditions, a waiting period of 12 to 18 hours after application of primer-sealer should be observed before decoration is applied. In rainy, humid, and cold weather, a longer waiting period, sometimes as long as 36 to 48 hours may be necessary to make certain the sealer coat is absolutely dry.

I. Gypsum must not be used in direct moisture exposed installations. When used in protected locations like underground garages and open lobbies, surface shall be painted with not less than two coats of exterior paint.