

IntexForms, Inc.

GlassFiber Reinforced Custom Products

Spec 2A (Rev.33)
Rev. September 2019

IntexForms, Inc. GFRG* - Glassfiber Reinforced Gypsum
(For Interior Applications)

1 GENERAL

1.1 Scope:

Furnish all materials, labor, equipment and related services necessary to supply and erect Intex GFRG* units as indicated in the contract documents and in compliance with local codes.

1.2 Work Included:

1. Supply of Intex GFRG* units
2. Erection
3. Joint Treatment
4. Supply and installation of back-up supports, etc.

1.3 Related Work Excluded:

1. Gypsum Drywall
2. Finishes (see notes 2 & 3 for recommendations).

1.4 Intent:

This specification is intended to generally outline the IntexForms, Inc. requirements. It is not intended to amend or change the manufacturer's specifications.

1.5 Responsibility:

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

1.6 Manufacturers:

IntexForms, Inc.
5421 84th Street., Sacramento, CA 95826
Tel: 916-388-9933 Fax: 916-388-9949

1.7 Samples and Submittals:

1. Submit a minimum of three (3) - 8" x 8" Intex GFRG* flat samples to the finishing contractor for paint selection.

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1.7 Samples and Submittals: cont'd...

2. Submit shop drawings for approval showing plans, sections, details, joint treatment, reinforcing, fastening devices and the relation of the Intex product to the surrounding constructions.
3. Prior to production, and upon request erect one prototype unit on site or at the Intex plant for inspection by the architect.

1.8 Substitutions:

Companies desiring to submit proposals other than IntexForms, Inc. shall, at least 10 working days in advance of the bid date, submit to the architect all information of the system. These companies must have a minimum of 5 years experience and provide photographs and shop drawings of 3 projects similar in scope with names of the architects and contractors. Independent test data showing compliance with the specified system and 3 physical samples must also be submitted.

2 PRODUCTS

2.1 Materials:

1. Intex GFRG* units shall be prefabricated with high density gypsum, completely free of both asbestos and resin, reinforced with continuous random filament glassfiber mat. Chopped strand fiber reinforcing is **not** permitted.
2. Units to be suitably reinforced with steel or wood.
3. Intex GFRG* shall be ready to receive primer and paint as specified elsewhere.
4. No additives are allowed under any circumstances. These include: polymers, retarders, accelerators, etc. The architect or his representative shall have access to the manufacturing facilities, either prior to contract award or thereafter, to inspect or verify compliance with these specifications.

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 foot

2.3 Physical Properties:

Shell Thickness Ceiling Mount Material	1/8" to 3/16"
Shell Thickness Wall & Floor Mount Material	3/16" to 1/4"
Weight (depending on reinforcing)	1 - 2 lbs/sq ft
Density	103 - 112 lbs/cu ft
Ultimate Tensile Strength	1200 - 1400 psi

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2.3 Physical Properties: cont'd...

Mod. of Elasticity in Tension	2.7 - 3.8 x 10 ⁶ psi
Mod of Elasticity in Flexure	2.1 - 2.2 x 10 ⁵ psi
Glass Content	5 - 6% by weight
Impact Strength	8.0 - 8.8 ft lbs/in ²
Rockwell hardness	M72
Instron Failure Test (built in furring)	288 lbs min
Fastener Test Pullout (wood stud)	525 lbs avg
Fastener Test Pullout (metal stud)	215 lbs avg
Fastener Test Push Through	350 lbs avg
Uniform Load @ 25 PSF (Deflection in inches)	0.053 in avg
Racking Test @ 1,400 Load Pounds (Deflection in inches)	1.104 in / No Failure
Compression Test @ 8,000 PSF (Deflection in inches)	0.004 / No Visable Damage
Flexural Test @ 360 PSF (Deflection in inches)	0.350 / No Failure
Fuel Contribution (ASTM E84-800)	0
Flame Spread (ASTM E84-80)	0
Smoke Index (ASTM E84-80)	0
Combustion (ASTM E-136)	non-combustible
Thermal Coefficient of Expansion	8.3 x 10 ⁶ in/in/°F

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. Do not stack or lean units.

3.2 Pre-Installation Responsibility:

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. Framing, hangers etc. as specified for gypsum drywall.
6. Butt joints are to be cemented together using construction adhesive.
7. **Notes:**
 - A. Additional bracing, fastening points etc. not shown on the shop drawings may be required to ensure a proper installation.
 - B. To prevent reinforcing read-through, a skim coat may be required over the GFRG* units when subjected to certain lights conditions (atriums, etc.).

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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 C.G.C. or U.S.G. Gypsum Construction Handbook - Second Edition.
2. Countersunk fasteners and damage is to be patched to match unit's texture. Use standard gyp board joint compounds.

3.5 Finishing:

1. See painting/texturing section of the specifications.
2. The painting contractor shall comply with A.S.T.M. C-840 specifications - specifically with regards to sealing.

4.0 Warranty:

Intex GFRC* is warranted for one (1) years from the date of acceptance to remain free from cracks, chips and marks caused by defective material or workmanship.

Note 1: Intex GFRG* is a gypsum based material and is meant to be used as an interior product only.

Note 2: Unfinished Intex GFRG* may exhibit slight imperfections, normally hidden by textured finishes. To obtain satisfactory results with smooth finishes, filling and sanding may be required, to hide imperfections inherent with GFRG*.

Note 3: Improper sealing, more than crowning, can cause tape joint read through after painting. This is due to the porosity differential between joint compound and Intex GFRG*. Ensure therefore, that the painting contractor seals all surfaces properly prior to finishing.

Note 4: Use of semi gloss or gloss paint (Level 5 Finish / AWCI Levels of Gypsum Board Finish) skim coat required! In areas where direct light or harsh light occur again skim coat required.

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Attention: Drywall Contractors:

Read the following information

This is what the industry requires and recommends for painting over your gypsum wallboard installation. You should be familiar with these requirements and should make this known to your general contractors and builders, as well as the painting contractors with whom you work.

APPENDIXES

These appendixes give general information and also suggestions for inclusion to be made elsewhere by the specifier. They are not a part of this specification.

- X3 Job Applied Decorations
- X3.1 Prolonged exposure of gypsum board to sunlight may cause problems in decoration.
- X3.2 With the joints and fastener head depressions treated as specified in Section 10, interior walls of gypsum board 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.
- X3.3 Because of porosity and texture of the gypsum board differs from that of the joint treatment, the surface shall be primed and sealed as may be required for the subsequent finish coats.
- X3.4 In room where high humidity may be encountered, such as the kitchen, bath or utility room, a flat or semigloss enamel finish is recommended.
- X3.5 Care should be exercised in the selection of primer and sealer paints to may sure they will perform satisfactorily and fulfill the following functions.
- X3.5.1 Equalize variations of suction over the entire surface.
- X3.5.2 Provide a bonding surface or "tooth" for the paint to be applied.
- X3.5.3 Avoid nap raising.
- X3.6 Before applying the primer or 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.
- X3.7 In applying primers or sealers, apply sufficient quantity to assure that the surface is completely covered. Follow the manufacturer's printed direction 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.
- X3.8 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.
- X3.9 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 38 to 48 hrs. may be necessary to make certain the sealer coat is absolutely dry.
- X3.10 Exposed surfaces of gypsum board, as specified in Section 10, shall be painted with not less than two coats of interior paint.

THIS PAGE IS AN EXCERPT FROM ASTM C-840-79

Note: Per AWCI Bulletin GA-214 – 90 – Level 5 finish (gloss, semi gloss, enamel, or non-textured flat paints, or were severe lighting conditions occur.) a thin skim coat of joint compound shall be applied to the entire surface.