

IntexForms, Inc.

Global Leader in Glass-Fiber Reinforced Custom Products

Spec 2A (Rev.5)
Rev. September 2010
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GFRC* - Polymer Glass-fiber Reinforced Cement
(For Exterior, High Moisture, and High Traffic Applications)

1. GENERAL

1.1 Scope:

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

1.2 Work Included:

1. Supply of Intex GFRC* Units
2. Erection
3. Supply of connection hardware

1.3 Related Work Excluded:

1. Pre-cast concrete
2. Structural framing
3. Finishes - Note: Intex GFRC* is available in natural (cement) gray color only and requires field finishing.
4. Caulking

1.4 Intent:

This specification is intended to generally outline the Intex GFRC* requirements. It is not intended to amend or change the manufacturer's printed specification.

1.5 Design Responsibility:

Intex GFRC* is to be considered a decorative material only. IntexForms, Inc. cannot take responsibility for structural load (Live or Wind) or seismic considerations.

1.6 Manufacturers:

IntexForms, Inc. Contact: DS Finishes Inc. info@dsfinishes.com 888-692-7377

1.7 Samples and Submittals:

1. Submit a minimum of (3) three - 8" x 8" Intex GFRC* flat samples to the finishing contractor for coating 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 GFRC* to the surrounding construction.
3. Prior to production, 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 Intex 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 architects and contractors. Independent test data showing compliance with the specified system and 3 physical samples must also be submitted.

2.0 PRODUCTS

2.1 Materials:

1. Intex GFRC* units shall be prefabricated with Polymer Glass-fiber Reinforced Cement (P.G.R.C.).
2. Units are to be suitably reinforced.
3. Intex GFRC* shall be ready to receive finish coatings as specified elsewhere. These coatings shall be applied after the units are installed.
4. Where exposed face fasteners are used, these shall be stainless steel. All other fasteners or connectors shall be galvanized or plated.
5. Note: Intex GFRC* is supplied in natural (cement) grey color only and requires field finishing by others.

2.2 Tolerances (Fabrication):

Dimensional - all directions	+/- 1/8"
Thickness - skin	+ 1/8" / -1/16"
Thickness - total unit	+ 1/4" / - 1/8"
Warpage or bowing	+/- 1/16" per foot

2.3 Physical Properties:

Shell Thickness	3/16" to 3/8"
Weight (depending on reinforcing)	2-1/2 to 6 lbs./sq.ft.

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2.3 Physical Properties: (cont'd.)

Density	approx. 140 lbs./cu.ft.
Tensile strength	1300 p.s.i.
Bending strength	2600 p.s.i.
Compressive strength	8000 p.s.i.
Shear strength (interlaminar)	650 p.s.i.
Pullout Test (steel angle)	975 lbs. (min.)
Fastener Test Pullout (wood stud)	440 lbs. (avg.)
Fastener Test Pullout (metal stud)	340 lbs. (avg.)
Fastener Test Push Through	550 lbs. (avg.)
Uniform Load @ 25 PSF (deflection in inches)	0.041 in (avg.)
Racking Test @ 1,400 Load Lbs (deflection in inches)	1.044 No Failure
Flexural Test @ 260 Load Lbs (deflection in inches)	0.365 No Failure
Compression Test @ 8000 Lbs (deflection in inches)	0.002 No visible Damage
Fuel contributed (A.S.T.M. E84-80)	5
Flame spread (A.S.T.M. E84-80)	5
Smoke Index (A.S.T.M. E84-80)	15

3.0 EXECUTION

3.1 Delivery, Storage and Handling:

1. Transport and handle units in a manner that avoids excessive stresses or damage.
2. Store units on a level and clean surface.

3.2 Pre-Installation Responsibilities:

1. Prior to manufacturing, dimensions and conditions not shown on the drawings will be checked by the erector for inclusion by the manufacturer.
2. Prior to installation, the erector shall check job-site 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 these discrepancies are corrected.

3.3 Erection Qualifications:

The erector must be regularly engaged in the erection of Glass-fiber Reinforced Cement or Pre-cast Concrete panels.

3.4 Erection:

1. Units shall be lifted with suitable devices at points indicated by the manufacturer.
2. Installation of units shall be plumb and level.

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3.4 Erection: (cont'd.)

3. The erector shall provide temporary support to maintain position as units are being connected.

4. Fasten units with screws (through the face or from the back).

3.4 Tolerances - Erected Units:

Width of caulked joint	+/- 3/16"
Out of plane (unit to unit)	+/- 1/4"
Warpage or bowing	+/- 1/16" per foot

3.5 Joint Treatment and Patching:

Joints shall be treated (as shown on the drawings) as follows:

A. For caulked joints, see the Caulking section of the specifications;

OR

B. Tape the joints with fiberglass scrim (drywall) tape embedded in Auto Body Filler with cream hardener. (Never use drywall taping compounds for Exterior applications.) To ensure that the "taped" surface blends in with the surrounding Intex GFRC*, more than one application may be required.

Note: In freeze/thaw areas, use only caulked joints. Tape joint have been used under certain conditions. If required notify IntexForms for recommendations

C. To patch chips, breaks, countersunk fasteners, etc., use Auto Body Filler as above or cement patching compound as recommended by IntexForms, Inc.

Note: Always scuff area to be filled with heavy grit sandpaper. This includes tape joints!

3.6 Cleaning:

Clean soiled units with detergent and water.

3.7 Finishing:

Intex GFRC* s available in natural (cement) gray color and requires field finishing. Finishes used, shall be the same as for concrete tilt-up materials and are shown under the Painting Section of the specifications. Gloss finishes require extensive prep work, **Advise IntexForms if a gloss finish required**

4.0 Warranty:

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