

GF-300 BD

Medium-Weight, Bi-directional Glass Fabric

Description

Advanced FRP Systems' **GF-300 BD** is a plain weave S-glass, 20 oz/yd², bi-directional glass fiber woven fabric. **GF-300 BD** is made in the USA and provides strong, durable and lightweight composites for long term structural reinforcement. **GF 300-BD** is primarily used as a galvanic barrier between steel and carbon fiber composites for immersion applications.

Product Advantages

- Bi-Directional weave provides outstanding strength in all directions
- ASME PCC-2 Compliant reinforcement
- Lightweight, pliable fabric easily conforms to any shape
- Excellent insulator of both heat and electricity
- Only 40 mils (0.040 inch) per layer
- Single or multi-layer systems available
- Compatible with Carbon overcoat

Suggested Application

GF-300 BD is commonly used to create high strength fiberglass reinforcement systems for pipes, tanks and vessels. It is also commonly used as a galvanic barrier between carbon fiber based composites and steel substrates in immersion conditions.

Performance Data

Cured with FRP Saturant 200

	Test Method	Results
Coefficient of Linear Thermal Exp.	ASTM E831	5.71 x 10 ⁻⁶ in/in °F
Tensile Strength	ASTM D3039	Actual Value: 70,000 psi Design Value: 56,000 psi
Young's Modulus	ASTM D3039	Actual Value: 1,260 ksi Design Value: 1,008 ksi
Electrical Volume Resistivity	ASTM D257	1.2 x 10 ⁻¹⁴ ohm m
Lap Shear	ASTM D3165	3,120 psi
Thermal Conductivity		1.2 W/m K
Flexural Strength	ASTM D790	Actual Value: 72,000 psi Design Value: 57,600 psi
Compressive Strength	ASTM D695	Actual Value: 101,500 psi Design Value: 81,200 psi
Elongation at Break	ASTM D 3039	5.7%
Effective Fabric Thickness		0.040 in

Product Characteristics

Finish: Gloss

Color: White

Density: 2.45 g/mL

GF-300 BD is sold by the yard. Available in 25" and 50" widths.

Sold FOB Weymouth, MA



Consult saturating resin and tack coat data sheets for cure data and application information. GF-300 BD is designed to be used exclusively with Advanced FRP Systems epoxy saturating resins. FRP Saturant 200 is recommended for general applications, FRP Saturant 210 HT for elevated temperature applications, and FRP Saturant 220 C for chemically resistant applications.

Storage and Shelf Life

GF-300 BD must be stored between 0 – 140 °F, out of direct sunlight. If stored in these conditions, the product will have a 5-year shelf life.

Safety Precautions

Please consult up-to-date Safety Data Sheets (SDS's) prior to use. An SDS should be available on site whenever Advanced FRP products are being used.

Warranty Information

Advanced FRP Systems, Inc. warrants that our products are free of manufacturing defects in accordance with applicable Advanced FRP quality control parameters. Liability for products proven defective, if any, is limited to replacement of defective product or refund of purchase price as determined by Advanced FRP Systems. Additional warranties and protection are available. Contact Advanced FRP for more information.

Disclaimer

The information and recommendations set forth upon this data sheet are based on years of laboratory and field analysis. This information is intended to be used as guidance only as many factors affect the performance of polymeric systems. Actual exposure conditions are the best test of suitability and Advanced FRP Systems will generally provide complimentary samples for field testing.

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