

KF-600 BD

Heavy-Duty, Bi-Directional Kevlar Fiber

Description

Advanced FRP Systems' **KF-600 BD** is a 3K, continuous tow, bi-directional kevlar fiber reinforcing fabric with a weight of 17.3 oz/yd² and an overall thickness of 36 mils. The threads are made up of Kevlar #29, a ballistics grade, high quality fiber and are sewn into a 4 x 4 basket weave. **KF-600 BD** forms an abuse resistant composite when coupled with an epoxy saturating resin.

Product Advantages

- Bi-Directional provides strength in every direction
- Zero VOC polymeric systems
- Lightweight, pliable fabric easily conforms to any shape
- Outstanding impact resistance
- Only 36 mils (0.036 inch) per layer
- Single or multi-layer systems available
- Extremely low Coefficient of Linear Thermal Expansion

Suggested Application

Used in conjunction with **FRP Saturant 200** or **Saturant 210 HT** for high strength, impact resistant composites. Possible applications include exterior pipe wraps, buried pipe repair, seismic reinforcement, concrete reinforcement, tank and vessel repair, etc.

Performance Data

Cured with FRP Saturant 200

	Test Method	Results
Coefficient of Linear Thermal Exp.	ASTM E831	3.2 x 10 ⁻⁶ in/in oF
Tensile Strength	ASTM D3039	Actual Value: 79,000 psi Design Value: 63,200 psi
Young's Modulus	ASTM D3039	Actual Value: 3,910 ksi Design Value: 3.128 ksi
Lap Shear	ASTM D3165	3,450 psi
Impact Resistance	ASTM D5420	>160 in lbs
Elongation at Break	ASTM D 3039	7.9%
Effective Fabric Thickness		0.036 in

Product Characteristics

Finish: Gloss

Color: Yellow

Density: 1.44 g/mL

KF-600 BD is sold by the roll, where roll length is 50 yards and roll width is 50 in.

Sold FOB Weymouth, MA

Consult Saturating resin and tack coat data sheets for cure data and application information. KF-600 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

KF-600 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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