vixen composites
An AIRXCEL Brand

FIBROTRANS™ FRP

Technical Data Sheet

PRODUCT

FibroTrans is a durable, translucent, semi-rigid fiberglass reinforced plastic (FRP). By using our unique polyester resin system, the product is designed and produced to allow a significant increase in daylight transmission up to 82%. FibroTrans FRP has excellent weathering characteristics and will filter most UV light waves as well as minimize heat buildup.

APPLICATION

FibroTrans products are designed to be used for roof applications on dry van trailers, truck bodies, commercial vehicles, step vans, cargo trailers and building structures. FibroTrans FRP will improve the performance and appearance of your trailer or building, and optimize weight savings, while achieving your application-specific physical property requirements.

ATTENTION

For installation, follow the adhesive manufacturer's recommendations for coverage and thickness. FRP must be free of dust, moisture, particulates or other contaminates to insure a 100% bond.

SPECIFICATIONS

FibroTrans is manufactured in lengths and widths as ordered.

COMPOSITION

Random chopped fiberglass reinforcement with unsaturated polyester resin, UV resistance and other additives.

FINISHED PANEL QUALITY

Panels will have a smooth finish on the front side and are of uniform in color. Blemishes on the rear side which do not affect functional properties are not cause for rejection. Dimensions as specified are subject to the following tolerances:

Width: ±1/8″ (±3.2mm)
Length: ±1/8″ (±3.2mm) up to 8′ (2.4m), ±1/4″ (±6.4mm) up to 40′ (12.2m)
Squareness: 1/8″ (3.2mm) in 48″ (1.2m) of width

FABRICATING RECOMMENDATIONS

Note: Protect your eyes with goggles; cover your nose and mouth with a filter mask; cover exposed skin when cutting Fibrosan® panels.
Cutting: Sheet metal shears or circular saw with reinforced carborundum or carbide-tipped blade.
Stapling: Standard pneumatic stapler.
Fabrication by hand: When drilling use high speed drill bit (60° cutting angle, with 12°-15° clearance) or hole saw.
Production fabrication: Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with 0.002″ [0.05mm] clearance) or sawed. For irregular cuts, use die punch or band saw.

STORAGE REQUIREMENTS

Careful handling during the manufacturing process is important to ensure optimal installation. Avoid excessive clamping, dropping or scraping. Keep dry and store indoors. Storing coiled or flat FRP outdoors may interfere with the installation process.

PLEASE NOTE THE FOLLOWING PRODUCT USE INFORMATION

While products manufactured for Vixen Composites by Fibrosan conform to strict quality criteria, by nature FRP may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site before installation; the coil/tag number should be removed and retained. If any portion of the panel is not acceptable, report the non-conforming product at once to Vixen Composites referencing the coil/tag number. Upon verification, Vixen Composites will replace or refund the purchase price of the unacceptable product at Vixen Composites discretion.

MINIMUM BEND RADIUS

Vixen Composites recommends all radius bends be supported by a solid substrate and does not exceed the minimum bend radius of 5.5″.

COLOR CHANGE

All products, when exposed to weathering and sunlight, change color over time as part of the natural aging process.

NOTE

Neither Fibrosan nor Vixen Composites make any claims as to the combustibility ratings of the products listed on these data sheets. This product is not intended for interior use that requires a Class C fire rating.

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PHYSICAL PROPERTIES (TYPICAL AVERAGE VALUES)			
Product Characteristics	Test Standard	Value (Width)	Value (Length)
COLOR	CIE LAB	00MS	00MS
GLASS CONTENT	ISO 1172 ASTM D2584-01	29.36%	29.36%
BARCOL HARDNESS	ASTM D2583-13	50 °Barcol	50 °Barcol
TENSILE STRENGTH	ISO 527 - 4/2/2 ASTM D638-10	78 N/mm² 11.3 ksi	86 N/mm² 12.5 ksi
TENSILE MODULUS	ISO 527 - 4/2/2 ASTM D638-10	5846 N/mm² 848 ksi	5962 N/mm² 864 ksi
ELONGATION AT BREAK	ISO 527 - 4/2/2 ASTM D638-10	2.65%	2.88%
FLEXURAL STRENGTH	ISO 14125 ASTM D790-10	207 N/mm² 30.0 ksi	262 N/mm² 38.0 ksi
FLEXURAL MODULUS	ISO 14125 ASTM D790-10	8554 N/mm² 1340 ksi	10588 N/mm² 1535 ksi
FLEXURAL STRAIN	ISO 14125 ASTM D790-10	4.02%	4.07%
The indicated values and measurements were taken from one product sampling.			

Nominal Thickness	Nominal Weight	Finish	Width	Length	Minimum Bend Radius
0.050" /1.30mm (± 5%)	0.38 lbs/ft²/ 1.87kg/m² (± 1-5%)	Smooth	36"-120"/ 0.9m - 3.05m	Typical 200'/ 61.0m	6"/152mm

Fibrosan® cam takviyeli polyester sanayi ve ticaret a.ş.

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