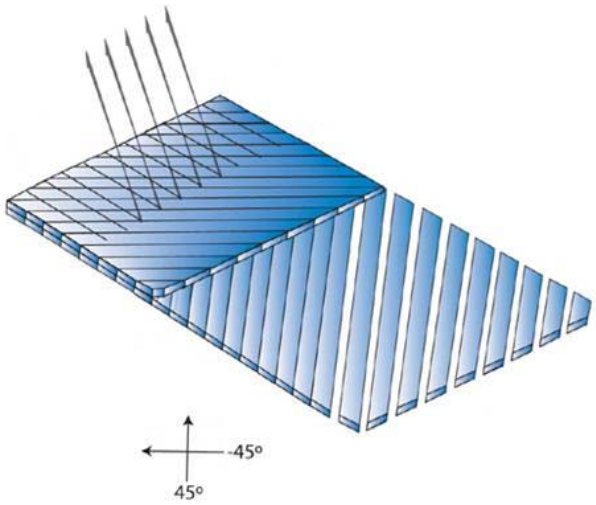
VECTORPLY®
Performance Composite Reinforcements



C-BX 1800

Fiber Type:	Carbon
Architecture:	45/-45 Double Bias
Dry Thickness:	0.036 in. / 0.91 mm
Total Weight:	18.37 oz/sq.yd / 623 g/sq.m

VECTORULTRA™
ADVANCED COMPOSITE REINFORCEMENTS

Roll Specifications			Fiber Architecture Data	
Roll Width:	Roll Weight:	Roll Length:	0 ° :	n/a
50 in / 1270 mm	121 lb / 55 kg	75 yd / 69 m	45 ° :	9.19 oz/sq.yd / 311 g/sq.m
			90 ° :	n/a
			-45 ° :	9.19 oz/sq.yd / 311 g/sq.m
			Chopped Mat :	n/a

1: Packaging: box or bag.
2: Weights do not include polyester stitching.

Laminated Properties

45 °

45 °

Laminate Weight	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
Fiber	0.13 lb/sq.ft	0.62 kg/sq.m	0.13 lb/sq.ft	0.62 kg/sq.m
Resin	0.07 lb/sq.ft	0.35 kg/sq.m	0.16 lb/sq.ft	0.76 kg/sq.m
Total	0.20 lb/sq.ft	0.97 kg/sq.m	0.28 lb/sq.ft	1.38 kg/sq.m

Physical Properties	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
Density	0.88 oz/cu.in	1.53 g/cc	0.82 oz/cu.in	1.41 g/cc
Fiber Content	64% by Wt.	54% by Vol.	45% by Wt.	35% by Vol.
Thickness	0.025 in	0.6 mm	0.039 in	1.0 mm

Laminate Modulii				
	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
Ex	8.40 MSI	57.93 GPa	5.69 MSI	39.24 GPa
Ey	8.40 MSI	57.93 GPa	5.69 MSI	39.24 GPa
Gxy	0.59 MSI	4.09 GPa	0.42 MSI	2.91 GPa
Ex,flex.	7.98 MSI	55.03 GPa	5.41 MSI	37.28 GPa
Ey,flex.	7.98 MSI	55.03 GPa	5.41 MSI	37.28 GPa

Ultimate Stress				
	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
Long. Ten.	79.4 KSI	547.6 MPa	53.8 KSI	371.0 MPa
Long. Comp.	73.4 KSI	506.0 MPa	49.7 KSI	342.8 MPa
Trans. Ten.	79.4 KSI	547.6 MPa	53.8 KSI	371.0 MPa
Trans. Comp.	73.4 KSI	506.0 MPa	49.7 KSI	342.8 MPa
In-Plane Shear	11.9 KSI	81.8 MPa	8.4 KSI	58.2 MPa
Long. Flex.	77.8 KSI	536.6 MPa	52.7 KSI	363.5 MPa
Trans. Flex.	77.8 KSI	536.6 MPa	52.7 KSI	363.5 MPa

In-Plane Stiffness, "EA"				
	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
(EA)x	211,107 lb/in	36,969 N/mm	219,753 lb/in	38,483 N/mm
(EA)y	211,107 lb/in	36,969 N/mm	219,753 lb/in	38,483 N/mm
(GA)xy	14,913 lb/in	2,612 N/mm	16,287 lb/in	2,852 N/mm

Ultimate In-Plane Load				
	C-BX 1800 Resin Infused		C-BX 1800 Open Mold	
Long. Ten.	1,996 lb/in	349 N/mm	2,077 lb/in	364 N/mm
Long. Comp.	1,844 lb/in	323 N/mm	1,920 lb/in	336 N/mm
Trans. Ten.	1,996 lb/in	349 N/mm	2,077 lb/in	364 N/mm
Trans. Comp.	1,844 lb/in	323 N/mm	1,920 lb/in	336 N/mm
In-Plane Shear	298 lb/in	52 N/mm	326 lb/in	57 N/mm

Notes:

1: Resin infused laminate made with a poly / vinyl ester resin blend.

2: Open mold laminate made with poly / vinyl ester resin blend.

3: All standard reinforcements should be infused with a flow aid or Vectorfusion® reinforcements.

4: All properties are given assuming a symmetric or quasisymmetric laminate schedule.

VECTORPLY CORPORATION

3500 Lakewood Dr. Phenix City, AL 36867 tel. 334 291 7704 fax. 334 291 7743

REV: 7/8/2015