



## C-TTX 1800

Fiber Type: Carbon  
 Architecture: 45/90/-45 Weft Triaxial  
 Dry Thickness: 0.035 in. / 0.89 mm  
 Total Weight: 17.37 oz/sq.yd / 589 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	150 lb / 68 kg	98 yd / 90 m	45 ° :	5.90 oz/sq.yd / 200 g/sq.m
			90 ° :	5.57 oz/sq.yd / 189 g/sq.m
			-45 ° :	5.90 oz/sq.yd / 200 g/sq.m
			Chopped Mat :	n/a

1: Packaging: box or bag.

2: Weights do not include polyester stitching.

### Laminated Properties

0 °

0 °

Laminate Weight				
	C-TTX 1800 Resin Infused		C-TTX 1800 Open Mold	
Fiber	0.12 lb/sq.ft	0.59 kg/sq.m	0.12 lb/sq.ft	0.59 kg/sq.m
Resin	0.07 lb/sq.ft	0.33 kg/sq.m	0.15 lb/sq.ft	0.72 kg/sq.m
Total	0.19 lb/sq.ft	0.92 kg/sq.m	0.27 lb/sq.ft	1.31 kg/sq.m

Physical Properties				
	C-TTX 1800 Resin Infused		C-TTX 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	0.024 in	0.6 mm	0.037 in	0.9 mm

**Laminate Moduli**

	C-TTX 1800 Resin Infused		C-TTX 1800 Open Mold	
	Ex	2.74 MSI	18.89 GPa	1.94 MSI
Ey	6.63 MSI	45.74 GPa	4.48 MSI	30.88 GPa
Gxy	2.98 MSI	20.57 GPa	2.01 MSI	13.85 GPa
Ex,flex.	2.60 MSI	17.94 GPa	1.84 MSI	12.68 GPa
Ey,flex.	6.30 MSI	43.45 GPa	4.25 MSI	29.33 GPa

**Ultimate Stress**

	C-TTX 1800 Resin Infused		C-TTX 1800 Open Mold	
	Long. Ten.	27.4 KSI	188.9 MPa	19.4 KSI
Long. Comp.	27.4 KSI	188.9 MPa	19.4 KSI	133.5 MPa
Trans. Ten.	62.7 KSI	432.4 MPa	42.3 KSI	291.9 MPa
Trans. Comp.	57.9 KSI	399.5 MPa	39.1 KSI	269.7 MPa
In-Plane Shear	49.3 KSI	339.9 MPa	33.0 KSI	227.7 MPa
Long. Flex.	26.0 KSI	179.4 MPa	18.4 KSI	126.8 MPa
Trans. Flex.	61.4 KSI	423.7 MPa	41.5 KSI	286.0 MPa

**In-Plane Stiffness, "EA"**

	C-TTX 1800 Resin Infused		C-TTX 1800 Open Mold	
	(EA)x	65,078 lb/in	11,396 N/mm	70,680 lb/in
(EA)y	157,596 lb/in	27,598 N/mm	163,493 lb/in	28,631 N/mm
(GA)xy	70,882 lb/in	12,413 N/mm	73,311 lb/in	12,838 N/mm

**Ultimate In-Plane Load**

	C-TTX 1800 Resin Infused		C-TTX 1800 Open Mold	
	Long. Ten.	651 lb/in	114 N/mm	707 lb/in
Long. Comp.	651 lb/in	114 N/mm	707 lb/in	124 N/mm
Trans. Ten.	1,490 lb/in	261 N/mm	1,545 lb/in	271 N/mm
Trans. Comp.	1,377 lb/in	241 N/mm	1,428 lb/in	250 N/mm
In-Plane Shear	1,171 lb/in	205 N/mm	1,206 lb/in	211 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.



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VP makes no warranty whatsoever as to the accuracy of any such predicted physical performance, and customer acknowledges that customer is solely responsible for determining the performance and fitness for a particular use of any product produced by customer utilizing a fabric or material produced or manufactured by VP. Specifications of reinforcements may change without notice.