



# KEC-TTXM 1708

Fiber Type: Glass/Aramid/Carbon  
 Architecture: 45/90/-45 Weft Triaxial  
 Dry Thickness: 0.047 in. / 1.19 mm  
 Total Weight: 24.91 oz/sq.yd / 845 g/sq.m

**VECTORULTRA™**  
 ADVANCED COMPOSITE REINFORCEMENTS

Roll Specifications			Fiber Architecture Data	
Roll Width: 50 in / 1270 mm	Roll Weight: 180 lb / 82 kg	Roll Length: 80 yd / 73 m	0 ° : n/a	
			45 ° : 4.63 oz/sq.yd / 157 g/sq.m	
			90 ° : 7.55 oz/sq.yd / 256 g/sq.m	
			-45 ° : 4.63 oz/sq.yd / 157 g/sq.m	
			Chopped Mat : 8.10 oz/sq.yd / 275 g/sq.m	

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

## Laminated Properties

0 °

0 °

Laminate Weight				
	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
Fiber	0.17 lb/sq.ft	0.84 kg/sq.m	0.17 lb/sq.ft	0.84 kg/sq.m
Resin	0.08 lb/sq.ft	0.37 kg/sq.m	0.22 lb/sq.ft	1.08 kg/sq.m
Total	0.25 lb/sq.ft	1.22 kg/sq.m	0.39 lb/sq.ft	1.92 kg/sq.m

Physical Properties				
	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
Density	1.01 oz/cu.in	1.74 g/cc	0.86 oz/cu.in	1.49 g/cc
Fiber Content	69% by Wt.	56% by Vol.	44% by Wt.	30% by Vol.
Thickness	0.028 in	0.7 mm	0.051 in	1.3 mm

**Laminate Moduli**

	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
	Ex	2.43 MSI	16.73 GPa	1.46 MSI
Ey	4.92 MSI	33.92 GPa	2.91 MSI	20.06 GPa
Gxy	1.38 MSI	9.49 GPa	0.79 MSI	5.47 GPa
Ex,flex.	2.31 MSI	15.90 GPa	1.39 MSI	9.57 GPa
Ey,flex.	4.67 MSI	32.22 GPa	2.76 MSI	19.05 GPa

**Ultimate Stress**

	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
	Long. Ten.	39.8 KSI	274.4 MPa	24.0 KSI
Long. Comp.	55.3 KSI	381.5 MPa	33.3 KSI	229.7 MPa
Trans. Ten.	68.0 KSI	468.5 MPa	40.2 KSI	277.0 MPa
Trans. Comp.	52.2 KSI	359.9 MPa	30.9 KSI	212.8 MPa
In-Plane Shear	16.2 KSI	111.8 MPa	9.3 KSI	64.5 MPa
Long. Flex.	59.5 KSI	410.1 MPa	35.8 KSI	246.9 MPa
Trans. Flex.	55.7 KSI	383.8 MPa	32.9 KSI	227.0 MPa

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

	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
	(EA)x	66,901 lb/in	11,716 N/mm	74,023 lb/in
(EA)y	135,611 lb/in	23,748 N/mm	147,382 lb/in	25,809 N/mm
(GA)xy	37,926 lb/in	6,642 N/mm	40,192 lb/in	7,038 N/mm

**Ultimate In-Plane Load**

	KEC-TTXM 1708 Resin Infused		KEC-TTXM 1708 Open Mold	
	Long. Ten.	1,097 lb/in	192 N/mm	1,214 lb/in
Long. Comp.	1,525 lb/in	267 N/mm	1,688 lb/in	296 N/mm
Trans. Ten.	1,873 lb/in	328 N/mm	2,036 lb/in	357 N/mm
Trans. Comp.	1,439 lb/in	252 N/mm	1,564 lb/in	274 N/mm
In-Plane Shear	447 lb/in	78 N/mm	474 lb/in	83 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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**Disclaimer:**

As a service to customers, Vectorply Corporation ("VP") may provide computer-generated predictions of the physical performance of a product using a reinforcement fabric produced by VP in combination with other materials or systems.

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.