



C-LA 0912

Fiber Type: Carbon
 Architecture: 0 Warp Unidirectional
 Dry Thickness: 0.019 in. / 0.48 mm
 Total Weight: 10.39 oz/sq.yd / 352 g/sq.m

VECTORULTRA™
 ADVANCED COMPOSITE REINFORCEMENTS

Roll Specifications			Fiber Architecture Data	
Roll Width: 50 in / 1270 mm	Roll Weight: 109 lb / 50 kg	Roll Length: 115 yd / 105 m	0 ° : 9.19 oz/sq.yd / 312 g/sq.m	
			45 ° : n/a	
			90 ° : n/a	
			-45 ° : n/a	
			Chopped Mat : 1.20 oz/sq.yd / 41 g/sq.m	

1: Packaging: box or bag.

2: Weights do not include polyester stitching.

Laminated Properties

0 °

0 °

Laminate Weight				
	C-LA 0912 Resin Infused		C-LA 0912 Open Mold	
Fiber	0.07 lb/sq.ft	0.35 kg/sq.m	0.07 lb/sq.ft	0.35 kg/sq.m
Resin	0.04 lb/sq.ft	0.20 kg/sq.m	0.09 lb/sq.ft	0.46 kg/sq.m
Total	0.11 lb/sq.ft	0.55 kg/sq.m	0.17 lb/sq.ft	0.81 kg/sq.m

Physical Properties				
	C-LA 0912 Resin Infused		C-LA 0912 Open Mold	
Density	0.90 oz/cu.in	1.55 g/cc	0.82 oz/cu.in	1.42 g/cc
Fiber Content	64% by Wt.	53% by Vol.	43% by Wt.	33% by Vol.
Thickness	0.014 in	0.4 mm	0.023 in	0.6 mm

Laminate Moduli

	C-LA 0912		C-LA 0912	
	Resin Infused		Open Mold	
Ex	13.69 MSI	94.37 GPa	8.72 MSI	60.11 GPa
Ey	0.84 MSI	5.81 GPa	0.75 MSI	5.17 GPa
Gxy	0.64 MSI	4.39 GPa	0.44 MSI	3.04 GPa
Ex,flex.	13.00 MSI	89.65 GPa	8.28 MSI	57.10 GPa
Ey,flex.	0.80 MSI	5.52 GPa	0.71 MSI	4.91 GPa

Ultimate Stress

	C-LA 0912		C-LA 0912	
	Resin Infused		Open Mold	
Long. Ten.	138.9 KSI	957.7 MPa	88.5 KSI	610.0 MPa
Long. Comp.	116.6 KSI	803.9 MPa	74.3 KSI	512.0 MPa
Trans. Ten.	15.5 KSI	107.1 MPa	13.8 KSI	95.4 MPa
Trans. Comp.	20.4 KSI	141.0 MPa	18.2 KSI	125.5 MPa
In-Plane Shear	15.4 KSI	106.5 MPa	10.7 KSI	73.7 MPa
Long. Flex.	110.8 KSI	763.7 MPa	70.5 KSI	486.4 MPa
Trans. Flex.	29.5 KSI	203.6 MPa	26.3 KSI	181.2 MPa

In-Plane Stiffness, "EA"

	C-LA 0912		C-LA 0912	
	Resin Infused		Open Mold	
(EA)x	191,380 lb/in	33,514 N/mm	196,451 lb/in	34,402 N/mm
(EA)y	11,779 lb/in	2,063 N/mm	16,901 lb/in	2,960 N/mm
(GA)xy	8,897 lb/in	1,558 N/mm	9,924 lb/in	1,738 N/mm

Ultimate In-Plane Load

	C-LA 0912		C-LA 0912	
	Resin Infused		Open Mold	
Long. Ten.	1,942 lb/in	340 N/mm	1,994 lb/in	349 N/mm
Long. Comp.	1,630 lb/in	285 N/mm	1,673 lb/in	293 N/mm
Trans. Ten.	217 lb/in	38 N/mm	312 lb/in	55 N/mm
Trans. Comp.	286 lb/in	50 N/mm	410 lb/in	72 N/mm
In-Plane Shear	216 lb/in	38 N/mm	241 lb/in	42 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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REV: 7/8/2015

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.