



C-LT 1100

Fiber Type: Carbon
 Architecture: 0/90 Biaxial
 Dry Thickness: 0.020 in. / 0.51 mm
 Total Weight: 11.14 oz/sq.yd / 378 g/sq.m

VECTORULTRA™
 ADVANCED COMPOSITE REINFORCEMENTS

| Roll Specifications | | | Fiber Architecture Data | |
|--------------------------------|--------------------------------|--------------------------------|-----------------------------------|--|
| Roll Width: 50 in / 1270 mm | Roll Weight: 108 lb / 49 kg | Roll Length: 109 yd / 100 m | 0 ° : 5.57 oz/sq.yd / 189 g/sq.m | |
| | | | 45 ° : n/a | |
| | | | 90 ° : 5.57 oz/sq.yd / 189 g/sq.m | |
| | | | -45 ° : n/a | |
| | | | Chopped Mat : n/a | |

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

Laminated Properties

0 °

0 °

| Laminate Weight | | | | |
|-----------------|----------------------------|--------------|------------------------|--------------|
| | C-LT 1100 Resin Infused | | C-LT 1100 Open Mold | |
| Fiber | 0.08 lb/sq.ft | 0.38 kg/sq.m | 0.08 lb/sq.ft | 0.38 kg/sq.m |
| Resin | 0.04 lb/sq.ft | 0.21 kg/sq.m | 0.09 lb/sq.ft | 0.46 kg/sq.m |
| Total | 0.12 lb/sq.ft | 0.59 kg/sq.m | 0.17 lb/sq.ft | 0.84 kg/sq.m |

| Physical Properties | | | | |
|---------------------|----------------------------|-------------|------------------------|-------------|
| | C-LT 1100 Resin Infused | | C-LT 1100 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 | 0.015 in | 0.4 mm | 0.023 in | 0.6 mm |

Laminate Moduli

| | C-LT 1100 Resin Infused | | C-LT 1100 Open Mold | |
|----------|----------------------------|-----------|------------------------|-----------|
| | Ex | 8.97 MSI | 61.85 GPa | 6.06 MSI |
| Ey | 8.97 MSI | 61.85 GPa | 6.06 MSI | 41.80 GPa |
| Gxy | 0.59 MSI | 4.09 GPa | 0.42 MSI | 2.91 GPa |
| Ex,flex. | 8.52 MSI | 58.76 GPa | 5.76 MSI | 39.71 GPa |
| Ey,flex. | 8.52 MSI | 58.76 GPa | 5.76 MSI | 39.71 GPa |

Ultimate Stress

| | C-LT 1100 Resin Infused | | C-LT 1100 Open Mold | |
|----------------|----------------------------|-----------|------------------------|-----------|
| | Long. Ten. | 98.8 KSI | 681.5 MPa | 66.8 KSI |
| Long. Comp. | 70.1 KSI | 483.4 MPa | 47.4 KSI | 326.6 MPa |
| Trans. Ten. | 98.8 KSI | 681.5 MPa | 66.8 KSI | 460.5 MPa |
| Trans. Comp. | 70.1 KSI | 483.4 MPa | 47.4 KSI | 326.6 MPa |
| In-Plane Shear | 11.9 KSI | 81.8 MPa | 8.4 KSI | 58.2 MPa |
| Long. Flex. | 62.3 KSI | 429.2 MPa | 42.1 KSI | 290.0 MPa |
| Trans. Flex. | 62.3 KSI | 429.2 MPa | 42.1 KSI | 290.0 MPa |

In-Plane Stiffness, "EA"

| | C-LT 1100 Resin Infused | | C-LT 1100 Open Mold | |
|--------|----------------------------|---------------|------------------------|---------------|
| | (EA)x | 136,699 lb/in | 23,939 N/mm | 141,946 lb/in |
| (EA)y | 136,699 lb/in | 23,939 N/mm | 141,946 lb/in | 24,857 N/mm |
| (GA)xy | 9,044 lb/in | 1,584 N/mm | 9,877 lb/in | 1,730 N/mm |

Ultimate In-Plane Load

| | C-LT 1100 Resin Infused | | C-LT 1100 Open Mold | |
|----------------|----------------------------|-------------|------------------------|-------------|
| | Long. Ten. | 1,506 lb/in | 264 N/mm | 1,564 lb/in |
| Long. Comp. | 1,068 lb/in | 187 N/mm | 1,109 lb/in | 194 N/mm |
| Trans. Ten. | 1,506 lb/in | 264 N/mm | 1,564 lb/in | 274 N/mm |
| Trans. Comp. | 1,068 lb/in | 187 N/mm | 1,109 lb/in | 194 N/mm |
| In-Plane Shear | 181 lb/in | 32 N/mm | 198 lb/in | 35 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:

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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.