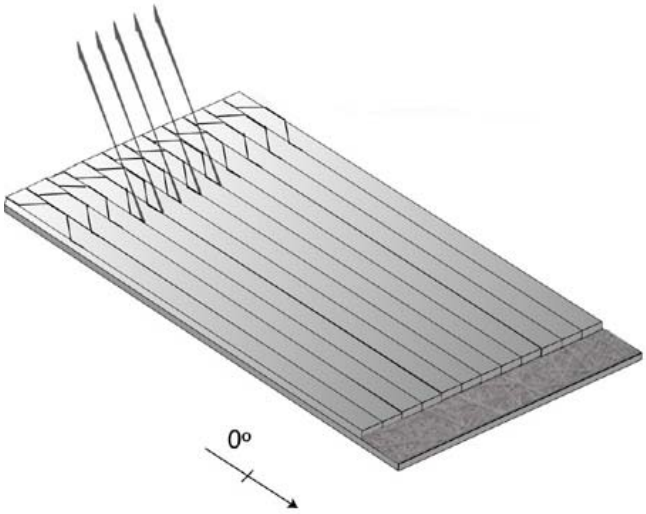
VECTORPLY®
Performance Composite Reinforcements



E-LM 2210

Fiber Type: E-Glass
Architecture: 0 Warp Unidirectional
Dry Thickness: 0.040 in. / 1.02 mm
Total Weight: 30.31 oz/sq.yd / 1028 g/sq.m

Roll Specifications			Fiber Architecture Data	
Roll Width:	Roll Weight:	Roll Length:	0 ° :	21.25 oz/sq.yd / 721 g/sq.m
50 in / 1270 mm	187 lb / 85 kg	70 yd / 64 m	45 ° :	n/a
			90 ° :	n/a
			-45 ° :	n/a
			Chopped Mat :	9.00 oz/sq.yd / 305 g/sq.m

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

Laminated Properties 0 ° 0 °

Laminate Weight	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
Fiber	0.21 lb/sq.ft	1.03 kg/sq.m	0.21 lb/sq.ft	1.03 kg/sq.m
Resin	0.12 lb/sq.ft	0.58 kg/sq.m	0.24 lb/sq.ft	1.18 kg/sq.m
Total	0.33 lb/sq.ft	1.61 kg/sq.m	0.45 lb/sq.ft	2.21 kg/sq.m

Physical Properties	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
Density	1.05 oz/cu.in	1.81 g/cc	0.92 oz/cu.in	1.59 g/cc
Fiber Content	64% by Wt.	46% by Vol.	46% by Wt.	29% by Vol.
Thickness	0.035 in	0.9 mm	0.055 in	1.4 mm

Laminate Modulii

	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
Ex	4.05 MSI	27.91 GPa	2.80 MSI	19.28 GPa
Ey	1.63 MSI	11.26 GPa	1.17 MSI	8.08 GPa
Gxy	0.72 MSI	4.99 GPa	0.50 MSI	3.45 GPa
Ex,flex.	3.85 MSI	26.52 GPa	2.66 MSI	18.32 GPa
Ey,flex.	1.55 MSI	10.70 GPa	1.11 MSI	7.68 GPa

Ultimate Stress

	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
Long. Ten.	66.4 KSI	457.8 MPa	45.9 KSI	316.3 MPa
Long. Comp.	76.6 KSI	528.5 MPa	53.0 KSI	365.1 MPa
Trans. Ten.	26.8 KSI	184.7 MPa	19.2 KSI	132.5 MPa
Trans. Comp.	30.9 KSI	213.3 MPa	22.2 KSI	153.0 MPa
In-Plane Shear	16.5 KSI	113.8 MPa	11.4 KSI	78.6 MPa
Long. Flex.	91.5 KSI	630.8 MPa	63.2 KSI	435.8 MPa
Trans. Flex.	36.9 KSI	254.5 MPa	26.5 KSI	182.6 MPa

In-Plane Stiffness, "EA"

	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
(EA)x	141,585 lb/in	24,794 N/mm	153,182 lb/in	26,825 N/mm
(EA)y	57,133 lb/in	10,005 N/mm	64,193 lb/in	11,241 N/mm
(GA)xy	25,323 lb/in	4,434 N/mm	27,394 lb/in	4,797 N/mm

Ultimate In-Plane Load

	E-LM 2210 Resin Infused		E-LM 2210 Open Mold	
Long. Ten.	2,322 lb/in	407 N/mm	2,512 lb/in	440 N/mm
Long. Comp.	2,681 lb/in	469 N/mm	2,900 lb/in	508 N/mm
Trans. Ten.	937 lb/in	164 N/mm	1,053 lb/in	184 N/mm
Trans. Comp.	1,082 lb/in	189 N/mm	1,215 lb/in	213 N/mm
In-Plane Shear	577 lb/in	101 N/mm	625 lb/in	109 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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