



# POLYIMIDE GLASS LAMINATE

## FIGC 301

Laminates made from layers of fine and plain weave glass fabric, treated with Polyimide Resin system having high temperature index of 180°C.

Material shows excellent mechanical properties even at 250°C.

The material has excellent Electrical properties and confirms to the flammability requirements as per EN45545-2

It confirms to the International standards IEC 60893-3-7.

Sr. No.	Description	Units	Observed Values	Test Method
<b>MECHANICAL PROPERTIES</b>				
1	Density	g/cm <sup>3</sup>	1.85	ISO 1183
2	Water Absorption	%	< 0.5	ISO 62
2	Tensile Strength @ 23 °C	N/mm <sup>2</sup>	> 220	ISO 527
3	Cross Breaking Strength @ 23 °C	N/mm <sup>2</sup>	> 350	ISO 178
4	Cross Breaking Strength @ 180 °C	N/mm <sup>2</sup>	>175	ISO 178
5	Compression Strength	N/mm <sup>2</sup>	> 480	ISO 604
6	Charpy Impact Strength	Kj/m <sup>2</sup>	200	ISO 179
7	Elastic Modulus	N/mm	22500	ISO 178
8	Elastic Modulus @ 180 °C	N/mm	16200	ISO 178
<b>ELECTRIC PROPERTIES</b>				
9	Di-electric Strength - Flatwise	Kv/mm	> 12	IEC 60243
10	Di-electric Strength - Edge Wise	Kv/25 mm	> 70	IEC 60243
11	Insulation Resistance	Ohms	10 <sup>10</sup>	IEC 60093
12	Comparative Tracking Index	Volts	600	IEC 60112
<b>FIRE WORTHINESS PROPERTIES</b>				
13	Flammability	-	V0	UL94
14	Deterioration of Visibility due to smoke	Ds	4	EN 45545-2 (R-23)
15	Limiting Oxygen Index	%	>90	EN 45545-2 (R-23)
16	Toxicity Test	-	0.1	EN 45545-2 (R-23)