

**GENERAL DESCRIPTION**

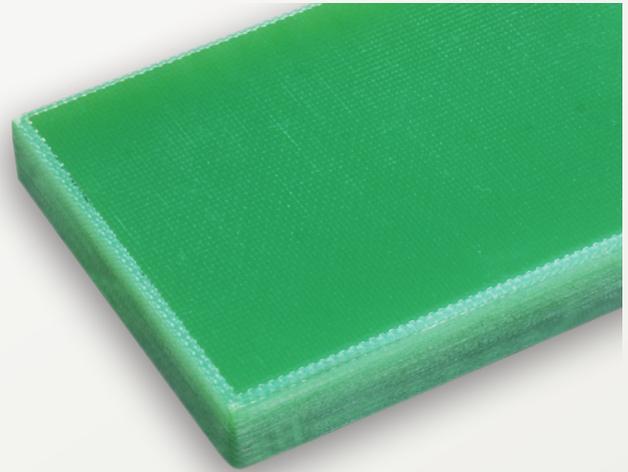
Laminated under high pressure and temperature, Insulect Epoxy Glass Laminate G11 is an extremely versatile product due to its excellent mechanical, electric and thermal properties. It boasts great machinability and moisture and chemical resistance.

**FEATURES & BENEFITS**

- Similar to G10, but more suited to electro-mechanical applications at elevated temperatures
- Maintains more than 50% of its flexural strength at 150°C while maintaining all of its electrical properties.
- Excellent machinability
- Very low moisture absorption

**APPLICATIONS**

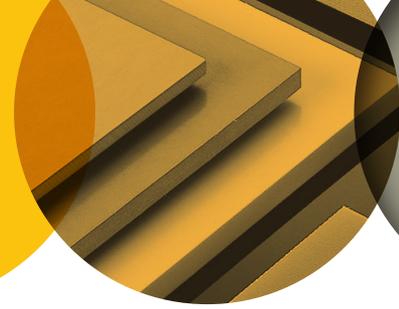
- F-class electrical applications
- Insulating components in electrical equipment such as motors, generators, transformers and switchgear
- Suited to corrosive environments
- Solder frames
- Terminal boards
- Suited to subsea conditions



**GENERAL INFORMATION**

Material	Woven glass cloth impregnated and bonded with an epoxy thermosetting resin
Colour	Natural Green

TECHNICAL DATA		UNITS	VALUE
Density		g/cm <sup>3</sup>	1.7 ~ 1.9
Flexural Strength (perpendicular to laminations)	Lengthwise	MPa	≥340
	Widthwise		≥170
Impact Strength (charpy, notched, lengthwise)		kJ/m <sup>2</sup>	≥37
Insulating Resistance	At room temperature	MΩ	≥1.0x10 <sup>6</sup>
	After 24hr in water		≥5.0x10 <sup>2</sup>
Dissipation Factor, 1MHz, after 24hr in water		-	≤0.05
Withstand Voltage, parallel to laminations, in transformer oil at 90°±2° for 1 min.		kV	≥35
Volume resistivity	At room temperature	MΩ·m	≥1.0x10 <sup>5</sup>
	At 155°±2°		≥1.0x10 <sup>3</sup>
Dielectric strength, perpendicular to laminations, in transformer oil at 90°±2°	0.5mm~1.0mm	MV/m	≥20
	1.1mm~2.0mm		≥18
	2.1mm~3.0mm		≥16



**DIMENSIONS**

Sheet	Length x Width	mm	1020 x 2040
	Thickness	mm	0.2 to 150.0
Rod	Length	mm	up to 1000
	Diameter	mm	30.0 to 80.0
Tube	Length	mm	up to 1000
	Outer Diameter	mm	12.5 to 190.0
	Inner Diameter	mm	6.35 to 155.0
Washer, nuts, bushes	Assorted sizes available		

**SIZING & AVAILABILITY**

The above table shows the most commonly requested products in this range. Should you require something outside of these parameters, please contact your local sales representative or our customer service team.

**MACHINING & FABRICATION**

Insulect's manufacturing capabilities form a key part of the trusted service we offer our customers. Our two modern, well equipped facilities – in Brisbane and Melbourne – work with a wide range of electrical, thermal and mechanical materials – including plastics, composites and cellulose-based products. We offer short run, specialty or volume based machining and fabrication for almost any application and can produce cut-to-order sheets or finished components. Coupled with our highly-trained and experienced team, we are able to deliver on the most complex of customer requirements.