

GENERAL DESCRIPTION

Fabric Bakelite F3 is a phenolic rigid laminate reinforced by a fine woven cloth, for use in mechanical and structural applications. The fine weave of the cloth makes it especially useful for use fabricating smaller parts and/or where close machining tolerances are required.

FEATURES & BENEFITS

- Good mechanical strength
- Excellent machinability
- Toughness

APPLICATIONS

- Mechanical and electrical applications
- Close tolerance machining
- Small mechanical parts
- Fixture plates
- Jig models
- Fine gears



GENERAL INFORMATION

Material	Woven Cloth Bonded [fine] with Phenolic Resin
Colour	Brown

TECHNICAL DATA	UNITS	VALUE
Density	g/cm ³	1.4 to 1.5
Flexural Strength	MPa	110
Impact Strength, parallel to laminations (Charpy)	kJ/m ²	7.0
Insulation Resistance after impregnation in water (D-24/23)	MΩ	1
Dielectric strength at 90±2°C in transformer oil perpendicular to laminations (thickness 1mm)	kV/mm	0.82
Breakdown voltage at 90±2°C in transformer oil parallel to laminations	kV	1.0
Water Absorption (D-24/23, thickness 1.6mm)	mg	220

DIMENSIONS

Sheet	Length x Width	mm	1020 x 2040 1220 x 2440
	Thickness	mm	1.5 to 76.0
Tolerances	According to IEC or NEMA standards		

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.