

TECHNICAL DATA SHEET

Permal
Gloucester

PERMAGLASS MF22HD

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PHENOLIC GLASS LAMINATE

FEATURES

- ◆ Low thermal conductivity
- ◆ Low water absorption
- ◆ Easy to machine
- ◆ Excellent fire resistance, with low smoke and toxic fume emissions
- ◆ Good abrasion resistance

Permaglass MF22HD is manufactured from glass fibre and phenolic resin and offers an excellent balance of mechanical strength and low thermal conductivity. MF22HD exhibits low porosity and water absorption and so can be used to manufacture insulating supports for use in vacuum insulated cryogenic equipment. This material also exhibits good abrasion resistance for applications subject to mechanical wear.

<u>Typical Properties</u>	<u>Value for 10 mm thick specimens</u>	<u>Test Method</u>
Specific Gravity	1.35	
Water Absorption	0.05%	BS.2782 Pt 4 (430A)
Flexural Strength	110 MPa	BS.2782. Pt 10 (1005)
Flexural Modulus	7.7 GPa	BS.2782 Pt 10 (1005)
Compressive Strength	310 MPa	BS.2782 Pt 3 (345A)
Shear Strength	90 MPa	BS.2782 Pt 3 (340B)
Charpy Impact Strength	35 KJ/m ²	BS.2782 Pt 3 (359)
Elec. Insulation Resistance	10 ³ M ohms	BS.2782 Pt 2 (232)
Thermal Conductivity	0.34 W/mK	at 20°C
Flammability	V-0 self extinguishing time	UL94
Surface of Flame Spread	Class 1 with 0 flame spread	BS.476 Pt 7
Ignitability	Designation P, not ignitable	BS.476 Pt 5

STANDARD SHEET SIZE:

1220 x 1220 mm (48" x 48")

4 mm to 50+mm thickness

Other sizes up to 3660 x 1220 mm (144" x 48") available on request

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