

# Laminate



## VETROTHERM

- Excellent mechanical and electrical properties
- Low thermal conductivity
- Low water absorption
- Excellent parallelism
- Good hydrocarbon stability
- Good chemical stability
- Long life expectancy
- Easy to machine

	Unit	Value	Test norm
<b>Mechanical properties</b>			
Flexural strength at RT	ksi	106	ISO 178
Flexural strength at 400°F	ksi	54	ISO 178
Compressive strength $\perp$ , at RT	ksi	109	ISO 604
Compressive strength $\perp$ , at 400°C	ksi	84	ISO 604
Compressive strength $\perp$ , at 480°C	ksi	60	ISO 604
<b>Electrical properties</b>			
Electric strength $\perp$ , at 194°F in oil	V/mil	25	IEC 60243-1
<b>Thermal properties</b>			
Max. heat resistance (for short periods)	°F	530	
Heat resistance (continuous)	°F	480	
Thermal conductivity	BTU*in/ft <sup>2</sup> ·h·°F	1.7	ISO 8301
Linear expansion coefficient //	1.0E-6/°F	6	ISO 11359-2
<b>Physical properties</b>			
Density	lb/in <sup>3</sup>	0.072 ± 0.004	ISO 1183
Water absorption	%	0.05	ISO 62

### Description

Vetrotherm is a laminate based on a high temperature resistant epoxy resin and a glass roving fabric. Vetrotherm is very well suited as heat insulating material that needs to withstand high to very high mechanical stresses.

### RoHS Directive

Hazardous products listed in the EU-directive 2011/65/EU (RoHS-directive), annex II and amendment 2015/863/EU are not used as ingredients in this material.

### Applications

Insulation of presses, thermal machined insulator parts, insulation of die casting machines and presses, glass industry, cast rubber moulds.

### Form of delivery

Sheet formats:  
81.5" x 42"  
46.0" x 42"  
169" x 51"

Thickness range 0.2" to 1.6"

Thickness tolerance acc. to EN 60893-3-2 or NEMA

### Sanded:

Standard: ± 0.004" (< 0.2"), above ± 1%  
SuperFinish: ± 0.001 mm (on request)

Other dimensions and thicknesses on request.

Also available as panels or machined parts.

### Machining:

Machining with carbide or diamond tools.

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

VRI Composites custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.