

**TECHNICAL DATA OVERVIEW**

# FRATHERNIT® AE3

<b>Material Description</b>	Resin-bonded glass fabric composite material
<b>Colour</b>	red-brown
<b>Uses</b>	Pressure-resistant thermal insulation plates for tool and mold manufacturing
<b>Availability</b>	Panels, blanks and components/assemblies according to drawings

## Physical properties

Properties	Test Standard	Unit	Value
Density	ISO 1183 standard	g/cm <sup>3</sup>	1,9
Water absorption	ISO 62 Standard	%	0,1

## Thermal properties

Properties	Test Standard	Unit	Value
Application temperature, continuous	–	°C	250
Application temperature, short-term	–	°C	260
Coefficient of linear expansion	DIN 51045	10 <sup>-6</sup> x K <sup>-1</sup>	19
Thermal conductivity	–	W/mK	0,21

## Mechanical properties

Properties	Test Standard	Unit	Value
Compressive strength at 23 °C	ISO 604 Standard	N/mm <sup>2</sup>	570
Compressive strength at 250 °C	ISO 604 Standard	N/mm <sup>2</sup>	360
Flexural strength at 23 °C	ISO 178 Standard	N/mm <sup>2</sup>	425
Flexural strength at 250 °C	ISO 178 Standard	N/mm <sup>2</sup>	287

Last Updated: 11/2014

The values shown were determined on standard specimens. The material properties may differ from these values depending on the application and the geometry of the component.

Our consulting engineers and technicians are at your disposal to clarify the exact suitability of the material.