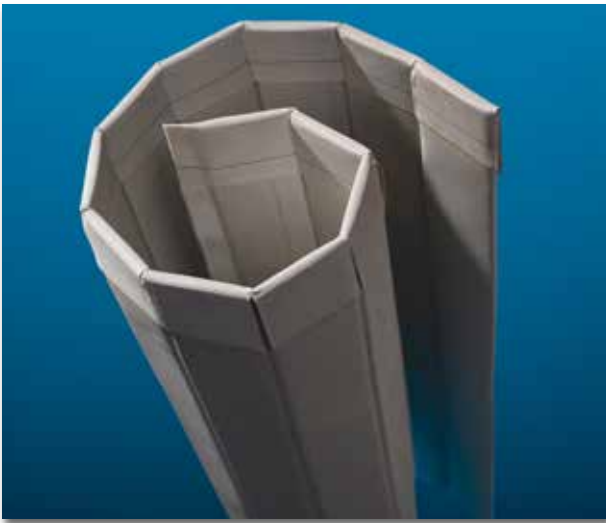


MICROTHERM® SLATTED



High temperature flexible microporous insulation panel

The MICROTHERM® SLATTED range of products are custom made, flexible microporous insulation panels with very good thermal properties.

The panels are produced in a glass cloth outer envelope, making them clean & easy to handle. The bending of the panels is one-directional, suitable for 2D applications. The formulation is an opacified blend of filament reinforced pyrogenic silica.

MICROTHERM® SLATTED-1000R is a flexible, custom made insulation panel.

MICROTHERM® SLATTED-1000R HY is a flexible, custom made insulation panel with a hydrophobic core treatment to repel water. Ideal for installation purposes or where condensation (dew point) might be a risk.

Technical data

Grade		-1000R	-1000R HY
Standard finishing		Glass cloth (E-Glass)	
Classification temperature	°C	1000	1000
Nominal density	kg/m ³	240	260
Compressive strength (ASTM C165)	MPa = N/mm ²	0.15	0.12
Thermal conductivity (ISO 8302, ASTM C177)			
200 °C	W/m K	0.025	0.025
400 °C	W/m K	0.029	0.029
600 °C	W/m K	0.035	0.035
800 °C	W/m K	0.044	0.044
Specific heat capacity			
200 °C	kJ/kg K	0.92	0.92
400 °C	kJ/kg K	1.00	1.00
600 °C	kJ/kg K	1.04	1.04
800 °C	kJ/kg K	1.08	1.08
Shrinkage			
1-sided 12h - 1000 °C	%	< 0.5	< 0.5
Full soak 24h - 1000 °C	%	< 3	< 3

Delivery sizes

Although there are some standard stock sizes available, MICROTHERM® SLATTED can be custom made according to customer specifications. Please contact your regional Promat agency to request your MICROTHERM® SLATTED sizes. The thickness range is from 3 mm up to 25 mm.

Production tolerances

Length	mm	± 3
Width	mm	± 15*
Thickness	mm	T ≤ 10: ± 0.5
	mm	10 < T ≤ 25: ± 0.8

* The shape of MICROTHERM® SLATTED panels offers the possibility to adjust the width on-site.

MICROTHERM[®] SLATTED

Properties & advantages

- custom made and flexible
- extremely low thermal conductivity
- high thermal stability
- available in a hydrophobic version
- non-combustible
- clean and easy to install
(procedure can be found on our website)
- simple to cut and shape
(procedure can be found on our website)
- no harmful respirable fibres
- environmentally friendly, free of organic binders
- resistant to most chemicals

Application areas

Microporous insulation offers an extremely low thermal conductivity, close to the lowest theoretically possible at high temperatures. Microporous materials are the preferred choice when a large temperature reduction is required within a limited space, or when strict heat loss or surface temperature requirements are specified.

OIL AND GAS

- piping insulation (ideal for large diameters)
- back-up insulation in refractory lined pipes
- vessels and reactors

ENERGY

- fuel cells
- piping insulation in power stations

HEAVY INDUSTRY

- hot air valves
- exhaust systems



Working & processing

MICROTHERM[®] SLATTED can be shaped easily with a simple cutter (the procedure can be found on our website). The panels can be fixed in place with glue or by mechanical means such as anchors, pins and clips.

For piping applications, the panels are installed with wire and straps, identical to conventional insulation materials (the procedure can be found on our website).

Thermal conductivity

