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Presspahn Limited
Wharcliffe Works
Harrogate Road
Bradford
BD2 3TB
Tel: +44 (0) 1274 636333
Fax: +44 (0) 1274 626024

Elmtherm

The Elmtherm 1000 range is made from a micro porous material that allows the production of boards with the lowest thermal conductivity of any industrial insulating product. Capable of withstanding temperatures of up to 1000°C, Elmtherm is ideally suited for use in the metal melting industry for such applications as the thermal insulation of transfer ladles, tundishes and industrial furnaces.

The material is simple to machine and can easily be cut with a sharp utility knife. It can be sawn, drilled and punched using standard woodworking tools. It is non toxic, contains no organic binders and requires only the observance of normal dust protection measures when being worked. Care should be taken however to protect the material from moisture, which would adversely affect its performance.

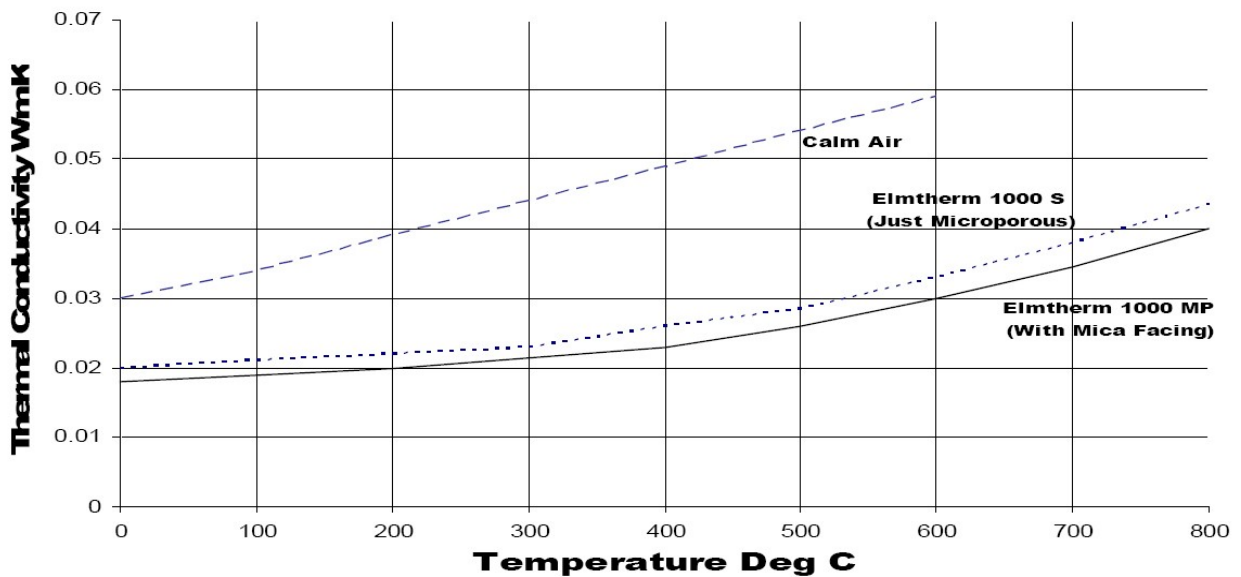
ELMOTHERM 1000 S is a micro porous insulating board encapsulated in heat shrink foil. This is the standard product and is usually supplied for applications where bending is not required.

ELMOTHERM 1000 MP is a micro porous insulating board but faced on one side with phlogopite mica and encapsulated in heat shrink foil. This grade which can be bent to conform to round surfaces, benefits in three ways from the mica facing.

1. It achieves an even higher rate of heat insulation than the "S" grade.
2. The layer of mica adds considerable mechanical and compressive strength to thin boards and protects that side from moisture penetration.
3. The layer of mica allows thin sheets of the material to be bent around a radius of as little as 700mm.

Technical Data

Product	Elmtherm 1000 S	Elmtherm 1000 MP
Temperature Classification	1000 °C	1000 °C
Shrinkage 12 hours @	900 °C < 2%	900 °C < 2%
Density	300 kg/m ³	300 kg/m ³
Bending strength	0.16 N/mm ²	0.5 N/mm ³
Cold compressive strength	1.05 KJ/kg K	1.05 KJ/kg K
Thermal conductivity		
200 °C	0.022 W/m K	0.020 W/m K
400 °C	0.025 W/m K	0.023 W/m K
600 °C	0.035 W/m K	0.033 W/m K
800 °C	0.044 W/m K	0.038 W/m K
Board thickness	7mm to 50mm	5mm to 50mm
Standard Board size	1000 x 610mm	1000 x 610mm
Chemical Analysis		
SiO ₂	77.5%	77.5%
SiC	20%	20%
CaO	2.5%	2.5%



Presspahn cannot be aware of all of a customers applications and users for the product, hence, Presspahn makes no warranty confirming the fitness or suitability of a product for any particular use. Any proposed application of the product should be tested by the customer and satisfactory performance independently confirmed.