

# REFIAL® -MPI Panel

## *Rigid Microporous Insulation*

REFIAL® -MPI Panel is a large sized microporous insulation panel.

REFIAL® -MPI Panel is manufactured in a glass cloth outer envelope, making the panel clean and easy to handle and manipulate. The microporous insulation core is an opacified blend of pyrogenic silica with a filament reinforcement

### **Features and Benefits**

- Extremely low thermal conductivity over a wide temperature range
- High thermal stability
- Low shrinkage
- Low in weight
- Wide range of sizes available to order
- Inorganic and non-combustible
- Shock and vibration resistant
- Simple to handle, cut, and shape
- No harmful respirable fibres & organic binders
- Large single size for easy installation
- Environmentally friendly

### **Cutting and Fixing**

REFIAL® -MPI Panel can be easily cut with a sharp knife and fixed in a variety of ways similar most conventional insulations with glue, retaining pins or anchors, straps or wire.

### **Typical Applications**

#### **For use as back up insulation in :**

- Steel forging furnaces, reheating furnaces, soaking pit covers, ladles, tundish
- Oil and Gas ( crackers, distillation units, reformers)
- Aluminium holding furnaces, re-melters, launder metal transfer systems
- All types of kilns ( roller, tunnel, Shuttle) Kiln cars
- Glass melting furnaces, regenerators, refiners, forehearths

#### **Night Storage Heaters**

- Used to converse stored energy, improving efficiency

#### **Data Loggers**

- Used to protect and control temperature inside the device, data logger, monitor, portable measurement instruments, temperature recorders.



## Technical Data

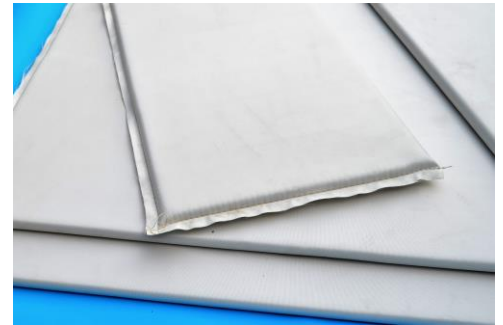
Classification temperature (1)		1000°C
Long-time exposure		950°C
Nominal Density		280 kg/m <sup>3</sup>
Compressive Strength at 10% deformation		0,20 MPa
Thermal Conductivity (ASTM C 177:2013)	200°C	0,022 W/m K
	400°C	0,023 W/m K
	600°C	0,027 W/m K
	800°C	0,034 W/m K
Specific Heat Capacity	200°C	0,93 KJ/kg K
	400°C	1,03 KJ/kg K
	600°C	1,06 KJ/kg K
	800°C	1,10 KJ/kg K
Linear Shrinkage	12h full soak at 1000°C	≤ 0,5 %
	24h full soak at 1000°C	≤ 5 %

(1) Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications operational temperature limits may be significantly reduced. For assistance or clarification please contact REFALTEC office. info@refaltec.com

## Dimension & Size Availability\*

Product Type	Length & Width (mm)	Thickness (mm)
REFIAL®-MPI Panel Flat Edge	1200*1100	10-50
REFIAL®-MPI Panel Curved Edge	2450*650	3-35

\* Other sizes available upon request

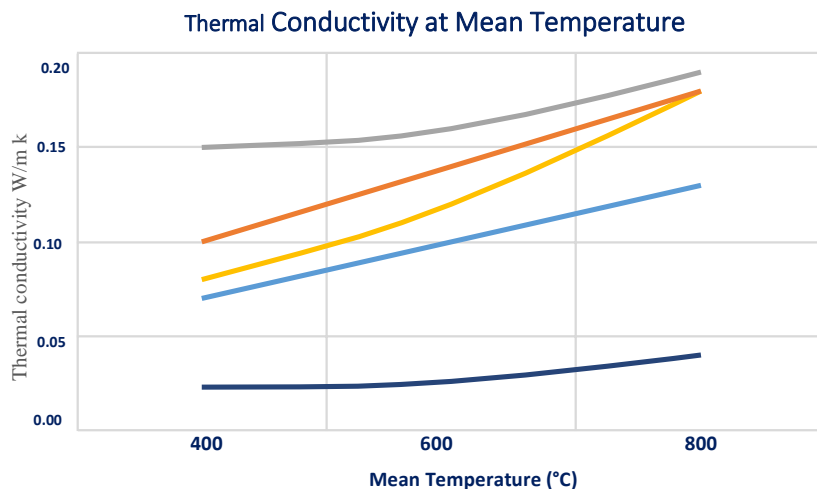


REFIAL® - MPI products reacts sensitively towards all wet materials such as water, oil, gasoline etc., as these materials destroy its pore structure). Therefore , special coverings and Hydrophobic grade are available, which makes the material insensitive to water and humidity ( up to 300°C ).

**REFIAL®-MPI products offer a realistic alternative to other lightweight insulations**

REFIAL®-MPI products offer a realistic alternative compared to other lightweight insulation solutions, such as low density calcium silicate, vermiculite, fibre or wool based blankets and boards.

The thermal resistance provided by REFIAL®-MPI products is a cost competitive alternative to the other lightweight insulation solutions on the market, whilst also delivering benefits in terms of space optimization and reduced weight.



REFIAL® contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. Data is representative of production and are subject to normal production fluctuations, they should not be deemed to constitute or imply any warranty of performance, the user is held responsible for determining the suitability of the products for the given application. Errors and omissions excepted. In case of any doubt if these properties and/or values are matching the application requirements, please contact REFIAL® for advice.