



Siltherm SlatFlex

Foldable Microporous Insulation



1000°C



1000x600
mm



10-50
mm



Siltherm SlatFlex is a large sized foldable microporous insulation manufactured in a glass cloth outer envelope, making it clean and easy to handle and manipulate, offering superior insulation properties combined with very good handleability.

This semi-flexible product is produced with a series of made to measure 'slats', enabling the panel to be folded to wrap around circular and conical vessels, pipework and equipment. The formulation is opacified blend of filament reinforced fumed silica. To prevent CUI phenomena and, more in general, where there is a risk of contact with water or condensation, Siltherm SlatFlex is also available in a hydrophobic grade. The unparalleled thermal resistance provided by Siltherm microporous insulation products makes them a realistic alternative and best cost competitive choice on the market to other lightweight insulation solutions, such as low density calcium silicate, vermiculite, temperature resistant fibres or wool based blankets and boards, whilst also delivering benefits in terms of space optimisation and reduced weight.

Features and Benefits

Microporous insulation offers considerable and measurable advantages in terms of thermal management, energy efficiency and reduction of carbon footprint; the integration of microporous insulation in your heat containment systems and equipment provides a set of unique and measurable assets which impact at environmental, operational, social, economic and strategic levels like no other insulation can.

Features

- Extremely low thermal conductivity over a wide temperature range and up to its classification temperature.
- High thermal stability over time, no ageing effect.
- Low shrinkage.
- Thermal shock and vibration resistant.
- Inorganic and non-combustible.
- Wide range of sizes available to order.
- Simple and clean to handle, cut, and shape.
- No harmful respirable fibres.
- Environmentally friendly.
- Resistant to most chemicals.
- Available in hydrophobic grade.

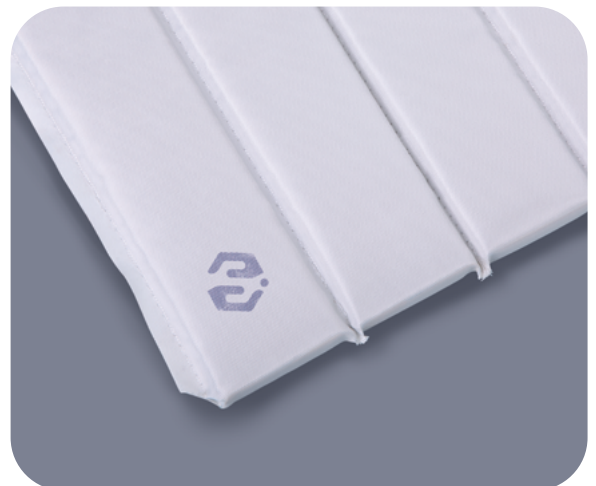
Benefits

- Allows more freedom in engineering at the design stage.
- Increases capacity of existing equipment or reduces external space and weight.
- Reduces carbon footprint and energy consumption.
- Conserves and stores energy, improving efficiency.
- Ideal for curved surface linings, ducts and pipes.
- Fast and clean installation.
- Contributes to a safer working environment.
- Large product range sizes available.
- Alternative grades to suit the application.
- No thermal shift effect.

Typical Applications

As backup insulation in:

- **Oil & Gas, Power Generation, Energy:** process and steam piping, especially large in diameter; inner core of high temperature removable jacketing systems on pipes and valves, or in cassettes and heat shields; reactors.
- **Mobility:** heat shield core and jacketing systems; jet fire certified systems (passive fire protection); exhausts.
- **Kilns & Furnaces:** in crucible furnaces or any circular/cylindrical surface; in refractory lined pipes.
- **Iron & Steel:** tuyeres stocks on blast furnaces; recuperators and hot air piping systems; ducts; heat protection removable jacketing core of electric cables.
- **Fire Protection:** jet fire protection systems for steel pipes; fire barriers and shutters; fire protection of electric cables and wires; air ducts.





Siltherm SlatFlex

Technical Specification

CHARACTERISTICS	TEST METHOD	UNITS	GRADE 1000
Classification Temperature		°C	1000
Nominal Density		kg/m ³	280
Cold Compressive Strength			
10% deformation	ASTM C165	MPa	0.43
Thermal Conductivity ¹			
mean temperature of	ASTM C177	W/m·K	200°C
			400°C
			600°C
			800°C
Specific Heat Capacity			
		kJ/kg·K	200°C
			400°C
			600°C
			800°C
Linear Shrinkage ¹			
24 hr full soak	ASTM C356	%	≤2.5
Typical Chemical Composition			
SiO ₂			55-80
SiC		%	15-30
Others			5-15
Loss on Ignition, dry conditions			<2.0

¹ Pure core tested

Standard Dimensions, Tolerances and Coverings

CHARACTERISTICS	SIZES (mm)	ENCAPSULATION	TOLERANCES (mm)
Standard Sizes (Length x Width) ²	1000 x 600	E-Glass Cloth ³	±3
Standard Thicknesses ²	10-50		±1

² Other sizes and thicknesses are available on demand

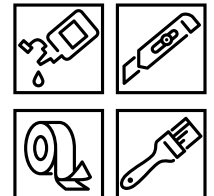
³ Other type of encapsulation cloths are available on demand (S2-Glass, Alumina, Quartz)

Cutting and Fixing

Siltherm SlatFlex can be easily cut with a sharp knife and fixed in a variety of ways similar to most conventional insulations with glue, retaining pins or anchors, straps or wire.

When cut, Siltherm SlatFlex can be sealed with glass fiber tapes or aluminium self-adhesive tapes.

For environmental, health & safety information, please refer to our Material Safety Data Sheet.



ISO9001:2015
CERTIFIED

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