Siltherm.
innovative insulation solutions

Metric Units
EN

Siltherm Panel FP

Rigid Fire Rated Microporous Insulation

1000°C

2700x700 mm

15-20 mm

Siltherm Panel FP is a custom made large size rigid insulation product manufactured with a glass cloth outer envelope, making the panel clean and easy to handle and manipulate which offers superior insulation properties combined with very good handleability.

The microporous insulation core of Siltherm Panel FP is an opacified blend of pyrogenic silica with a filament reinforcement. Siltherm Panel FP has been specifically developed to deliver space and weight saving fire rated solutions for elevator landing door and fire door systems, combining the requirements and standards based on EN 81-58. This is a real alternative where requirements are for a thin, low weight insulation solution with a Class A Fire Rating.

Features and Benefits

Microporous insulation offers considerable and measurable advantages in terms of thermal management, energy efficiency, reduction of carbon footprint and effective light and thin fire protection systems; the integration of microporous insulation in your 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.
- High thermal stability over time, no ageing effect.
- Low in weight.
- Thermal shock resistant.
- Inorganic and non-combustible.
- Wide range of sizes available to order.
- Alternative grades available to suit the application.
- 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.
- Allows to design performant thin and light fire resistant systems and enclosures.
- Contributes to a safer working environment.
- Large product range sizes available.
- Alternative grades to suit the application.
- No thermal shift or aging effect.

Typical Applications

As integrated insulation system in:

- **Fire ratings A60, A90, A120 for:**
  - elevator landing doors
  - industrial fire doors
  - fire barriers systems

Product Data Sheet

Siltherm Panel FP

Technical Specification

CHARACTERISTICS		TEST METHOD	UNITS	GRADE 1000 FP
Classification Temperature			°C	1000
Nominal Density			kg/m³	280
Cold Compressive Strength				
10% deformation		ASTM C165	MPa	0.67
Thermal Conductivity [1]				
mean temperature of	200°C			0.022
	400°C	ASTM C177	W/m•K	0.023
	600°C			0.027
	800°C			0.034
Specific Heat Capacity				
	200°C			0.93
	400°C		kJ/kg•K	1.03
	600°C			1.06
	800°C			1.10
Linear Shrinkage [1]				
24 hr full soak	1000°C	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

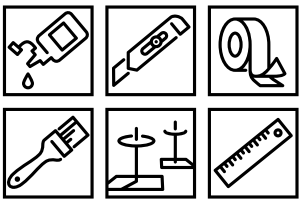
Standard Dimensions, Tolerances and Coverings

CHARACTERISTICS	SIZES (mm)	ENCAPSULATION	TOLERANCES (mm)
Maximum Sizes (Length x Width) [2]	2700 x 700	E-Glass Cloth [3]	±6
Standard Thicknesses	15-20		±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 Panel FP is custom made and generally doesn't require cutting; however it can be cut, shaped, drilled and punched with appropriate hand tools and automatic machinery and fixed as with other similar insulation materials using glue, retaining pins with clips or anchors. When cut, Siltherm Panel FP should be sealed with glass fiber tapes or aluminium self-adhesive tapes.
For enviromental, health & safety information, please refer to our Material Safety Data Sheet.



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