



Siltherm Panel CS

Rigid Microporous Insulation Custom Solutions

Siltherm Siltherm CS (Customised Solution) is a microporous customised insulation panel (or panels), configured to specific geometries and functions to provide the required *fit for purpose and performance characteristics*.

Siltherm CS panels are 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.

A customised insulation solution can be supplied, produced to conform to a very wide variety of shapes and configurations and complementing other Siltherm products as part of the requirement.

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
- Environmentally friendly
- Resistant to most chemicals

Cutting and Fixing

Siltherm CS can be easily cut with a sharp knife, edges can be sealed with glass cloth tape and glue.

Typical Applications

- **Glass Foundry**
Forehearths
Feeder Bowl Kits
- **Aluminium**
Aluminium Transfer Systems
Degassers
- **PPF (passive fire protection)**
Fire Rated Pipe Couplings
- **Data Loggers**
Used to protect and control temperature inside the device, data logger, monitor, portable measurement instruments, temperature recorders



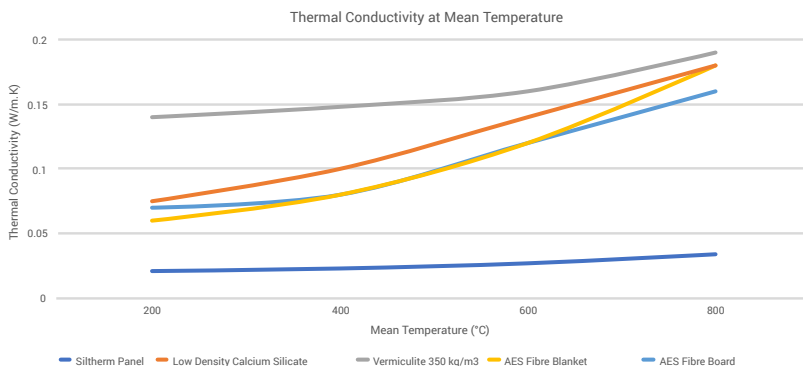
Technical Specification

Product Panel CS			
Classification Temperature		°C	1000
Nominal Density		kg/m ³	280
Compressive Strength @ 10% deformation		MPa	0.20
Thermal Conductivity*	200 °C	W/m.K	0.022
*Core tested according to ASTM C 177 : 2013	400 °C	W/m.K	0.023
	600 °C	W/m.K	0.027
	800 °C	W/m.K	0.034
Specific Heat Capacity	200 °C	kJ/kg.K	0.93
	400 °C	kJ/kg.K	1.03
	600 °C	kJ/kg.K	1.06
	800 °C	kJ/kg.K	1.10
Linear Shrinkage	12h full soak @ 1000 °C	%	≤0.5
Linear Shrinkage	24h full soak @ 1000 °C	%	≤5

Standard Dimension and Format Availability*

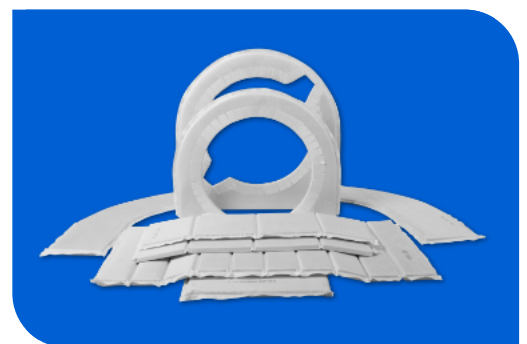
Product Panel CS	Length x Width (mm)	Thickness (mm)
	length and width to order	5-50
Length and Width Tolerance	± 6	
Thickness Tolerance		±1

* *Special coverings and Hydrophobic grade – available upon request*



Siltherm products offer a realistic alternative to other lightweight insulations

Siltherm 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 Siltherm products is a **cost competitive alternative** to the other lightweight insulation solutions on the market, whilst also delivering benefits in terms of space optimisation and reduced weight.



The values given in this datasheet are typical and subject to normal manufacturing variation, they are for guidance only and maybe subject to change without notice. Recommendations for use are not intended to, and do not constitute a warranty, express or implied, of the suitability of the product for a particular use. The user is responsible for determining the suitability of Siltherm products for each application.

SILTHERM

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Siltherm Group Holdings Ltd maintains a Quality Management System to: **ISO 9001: 2015 Certificate Registration Number CN-00219Q20582R1S**
IQNet Certificate Issued by CQM for scope 'Research and development, production and after-sales service of nano thermal insulation materials'