



Siltherm SiliCore

Rigid Microporous Insulation Panel

Siltherm SiliCore is a rigid microporous insulation board, manufactured using a blend of pyrogenic silica and a filament reinforcement.

This product has an optimised density providing relative strength without compromising the thermal performance.

Special process techniques and innovative formulations enable Siltherm SiliCore to deliver excellent thermal performance and R-value coupled with long term durability.

Features and Benefits

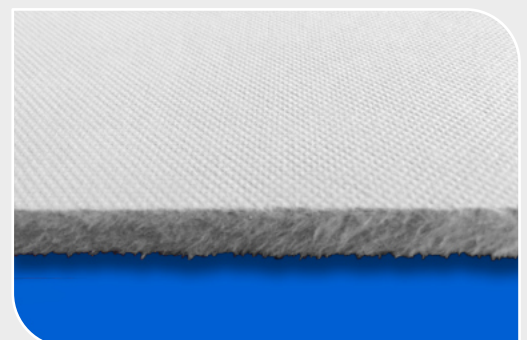
- Optimised density and formulation to provide the required thermal performance and handling characteristics
- Wide range of sizes available to order
- No waste off-cuts due to tailored dimensions



Typical Applications

Siltherm SiliCore can be used as the core insulation for Vacuum Insulation Panels (VIP) for:

- **Building and Construction Industry**
Used to insulate roofs, floors, facades
- **Temperature controlled packaging**
Used to provide insulation for cool transportation of boxes and packets containing drugs, medicines and vaccines
- **Appliances, heating systems**
Water heaters, boilers etc
Refrigerators, chill cabinets, cold storage units
Vending machines, heated food display units
- **Oil and Gas**
Used to maintain the temperature required for Liquid Natural Gas (LNG) to remain in its liquefied form.
- **Transportation (marine, rail, automotive, aerospace)**
Used to maintain cabin comfort, cold storage areas



Technical Specification

| Product SiliCore | | | STANDARD | PLUS |
|--------------------------|---|-------------------|------------|---------------|
| Nominal Density | | kg/m ³ | 160-210 | 160-210 |
| Compressive Strength | @ 10% deformation | kPa | 145 | 145 |
| Thermal Conductivity | @ <1 mbar | W/m.K | 0.0042 | 0.0035 |
| | @ ambient pressure | W/m.K | 0.02 | 0.02 |
| Temperature Stability | (caused by film after vacuum) | kJ/kg.K | -70 to +80 | -70 to +80 |
| Thermal Shock Resistance | Insensitive to heat and cold shock @ given temperatures | | | |
| Humidity Stability | Sensitive to water and moisture (before vacuum packing) | | % | 0-60 |

Standard Dimension and Format Availability*

| Product SiliCore | Length x Width (mm) | Thickness (mm) |
|-------------------------|--|----------------|
| | 1000 x 600 Standard (Maximum 1200 x 650) | 5-50 |
| Tolerance (L*W) | +/- 3 | |
| Thickness Tolerance (T) | | ±1 |
| Colour | Grey | |
| Geometry | Rectangular | |

* Other sizes available upon request



Siltherm Group Holdings Ltd

B-10 Huangpu Science Park
2842 Xingangdong Road
Haizhu District
510000 Guangzhou
People's Republic of China

Tel: +86 (20) 3888 9182
Email: info@siltherm.com
Web: siltherm.com

Siltherm Europe Ltd

Paramount Court
Corrig Road
Sandyford Business Park
Dublin 18, D18 R9C7
Republic of Ireland

Tel: +353 (0) 1 255 1800
Email: info@siltherm.eu
Web: siltherm.eu

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'

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.