



# Siltherm SiliCore

## **Rigid Microporous Insulation Panel**



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

-130°C +85°C

# 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.



#### MAX 1200x650 mm



5-50 mm

### **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.

- 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.
- Transport (marine, rail, automotive, aerospace): used to maintain cabin comfort, cold storage areas.

## Siltherm SiliCore

#### **Technical Specification**

|                                 | UNITS   | STD   | PLUS   |
|---------------------------------|---|---|--|
|                                 | kg/m <sup>3</sup>   | 160-210   | 160-210  |
| th                              | kPa   | 145   | 145  |
| <1 mbar                         | M/mak   | 0.0042  | 0.0035   |
| Ambient pressure                | WINK  | 0.02  | 0.02   |
| Caused by film after vacuum     | °C  | -70°C to +80°C  | -70°C to +80°C   |
| Pure Core                       |   | -130°C to +85°C   | -130°C to +85°C  |
| 2                               | Insensitive to heat and cold shock at given temperatures  |   |  |
| Sensitive to water and moisture | 0/  | 0-60  | 0-60   |
| (before vacuum packing)         | 20  |   |  |
|                                 | th<br><1 mbar<br>Ambient pressure<br>Caused by film after vacuum<br>Pure Core<br>Sensitive to water and moisture<br>(before vacuum packing) | UNITS   kg/m³   kg/m³   kPa   {1mbar   {1mbar   {1mbar   Ambient pressure   Caused by film after vacuum<br>Pure Core   Pure Core   sensitive to water and moisture<br>(before vacuum packing) | UNITSSTDkg/m3160-210khkPa1451mbar<br>(1mbar<br>(1mbar)W/m·K0.0042Ambient pressureW/m·K0.002Caused by film after vacuum<br>Pure Core-70°C to +80°C<br>-130°C to +85°CPure Core0.02-30°C to +85°Csensitive to water and moisture<br>(before vacuum packing)%0-60 |

### **Standard Dimensions and Tolerances**

| CHARACTERISTICS                              |      | SIZES (mm)  | TOLERANCES (mm) |  |
|--|------|-------------|-----------------|--|
| Standard Sizes (Length x Width) <sup>1</sup> |      | Customized  | +3              |  |
| Maximum Sizes (Length x Width)               |      | 1200 x 650  | ī2              |  |
| Standard Thicknesses                         | STD  | 5-50        |                 |  |
|  | PLUS | 20-50       | ±1              |  |
| Standard Geometry 1                          |      | Rectangular |                 |  |

<sup>1</sup> Special design and geometries are available on demand

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



The values given in this datasheet are subject to normal manufacturing variation, they are provided for guidance only and may be 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 shall not be responsible whether in contract or tort or otherwise howsoever for any consequential loss or damage caused by or arising out of your selection of the Siltherm products or for any consequential loss or damage caused by a residue from each to the set of the Siltherm products in activity of the set of the activity of the set. by or arising from any recommendations of use of the Siltherm products in any way whatsoever by you or any other third party.

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