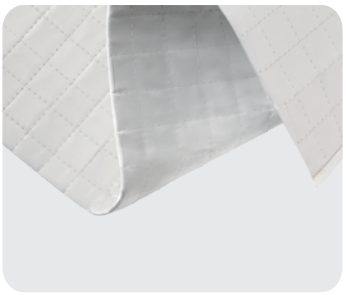
UNICORN INSULATIONS

TT 1050 sflex

Introduction



TT 1050 sflex is a flexible, custom-made microporous insulation blanket. It features good handling and cutting properties, along with outstanding insulation performance in limited thickness.

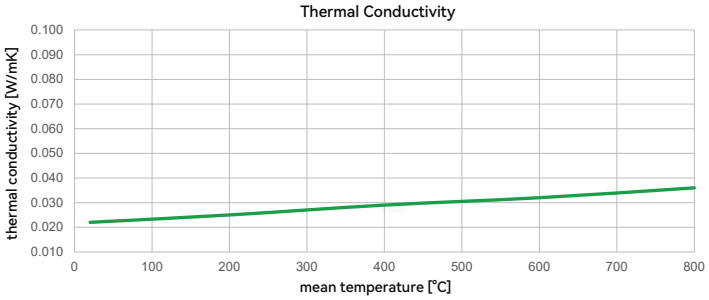
The microporous core is covered from all sides with glass cloth, which is seamed and quilted to achieve flexibility without damaging the microporous core. This process makes the blanket clean and easy to handle, providing flexible insulation in limited spaces.

The stitching can be one-directional or two-directional. Our blankets can be offered both as sheets and rolls.

Technical Data[1]

Thermal Conductivity

20 °C / 68 °F	0.022 W/m K
200 °C / 392 °F	0.025 W/m K
400 °C / 752 °F	0.029 W/m K
600 °C / 1112 °F	0.032 W/m K
800 °C / 1472 °F	0.036 W/m K



Other Technical Parameters

classification temperature	1050 °C / 1922 °F
continuous application temperature	1000 °C / 1832 °F
peak temperature (for fire protection applications up to 4h)	1200 °C / 2192 °F
fire protection class	A1
shrinkage: at 1050 °C / 1922 °F one side 12 h [2]	< 0.5 %
shrinkage: at 1000 °C / 1832 °F all sides 12 h	< 2.0 %
nominal density (core panel)	240 kg/m³
microporous core colour	grey

Available Sizes

dimensions (sheets)	1000 x 600 mm, 1200 x 600 mm, 1200 x 900 mm, more sizes on request (up to 1600 x 1200 mm)
dimensions (rolls)	9000 x 600 mm, 9000 x 1200 mm, more sizes on request
thickness	3–10 mm, more sizes on request
tolerances	length and width: ± 5 mm, thickness: ± 1 mm
stitching pitch size	25 x 25 mm, 50 x 50 mm, more sizes on request

1. the technical data is measured for flat panel without stitching and envelope.

2. measured at 25 mm thickness insulated towards room temperature. The shrinkage value refers to the surface on the hot side. This value represents common usage conditions of an insulation material.

Surface Covering Options

Hydrophobic E-glass Fabric (Standard Covering)

Maximum application temperature: 500 - 550 °C
The fabric enhances the microporous insulation board's functionality by providing dustproof protection, improving handleability and installation, increasing mechanical properties, enhancing appearance, and improving cutting performance. Furthermore, its hydrophobic property offers water repellency to the exterior of the microporous panels.

* Other fabric types are available for request.

High Silica Fabric

Maximum application temperature: 1000-1100 °C
This fabric provides a dustproof and protective function to the microporous insulation board under ultra-high temperature conditions and makes it easy to handle and install the panel.

Technical Limitation

Water and other liquids will irreversibly destroy the microporous structure and as a result the insulation performance of the material.

We are using an organic sewing thread with a maximum application temperature of 260°C. Other sewing threads are available on request. The sewing grid can be customized within a certain range.

Declaration of Non-hazardousness

According to the regulation of the European union 2006/1907/EC this material is classified as non-hazardous. The used fibers are not respirable as defined by WHO.

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