

# 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.

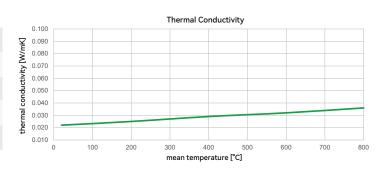
The stitching can be one-directional or two-directional. Our blankets can be offered both as sheets and rolls.



## Technical Data<sup>1</sup>

#### **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.



## TT 1050 sflex

## **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 and 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/EG this material is classified as non-hazardous. The used fibers are not respirable as defined by WHO.



unicorn-insulations.com info@unicorn-insulations.com



**Disclaimer:** The information contained in this brochure and datasheets is intended to assist with the usage of unicorn insulations products. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the result shown in this brochure will be achieves by a user for a particular purpose. The user is responsible for determining the suitability of unicorn insulations products for each application. The user is obliged to check the intended usage of the material in terms of infringement on any intellectual property of a third party.