Lextherm®

TT 3490 fabric

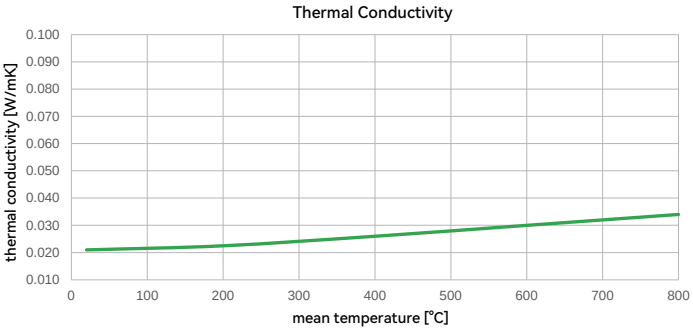
Introduction

TT 3490 fabric is a thin and lightweight insulation panel that comes with a glass cloth outer covering. It can be customized to fit customer requirements. TT 3490 fabric is widely used in elevator landing doors, furnace backup insulation and fire-rated doors due to its excellent fire protection, thermal insulation, and easy handling properties.

Technical Data

Thermal Conductivity

20 °C / 68 °F	0.021 W/m K
200 °C / 392 °F	0.023 W/m K
400 °C / 752 °F	0.026 W/m K
600 °C / 1112 °F	0.030 W/m K
800 °C / 1472 °F	0.034 W/m K



Other Technical Parameters

classification temperature	1000 °C / 1832 °F
continuous application temperature	950 °C / 1742 °F
peak temperature (for fire protection applications up to 4h)	1200 °C / 2192 °F
shrinkage: at 1000 °C / 1832 °F one side 12 h [2]	< 0.5 %
shrinkage: at 950 °C / 1742 °F all sides 12 h	< 2.0 %
nominal density	270 kg/m³
compressive strength at 10 % deformation	≥ 0.27 MPa
microporous core colour	grey

Available Sizes

dimensions	1000 x 600 mm, 1800 x 600 mm, 2000 x 500 mm, more sizes on request
thickness	3-25 mm
tolerances	length and width: 500 - 1000 mm, ± 5 mm; > 1000 mm, ± 6 mm; thickness: ± 1 mm

1. microporous core values.

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.

Other Customized Option

Groovy

The microporous core is enclosed on all sides with hydrophobic E-glass fabric and shaped to fit a groove of the same width, making the panel clean, easy to handle, and flexible. The use of hydrophobic E-glass fabric also enhances the stability of the panel and ensures that the fabric remains attached to the microporous core even after it has been cut with a knife, saw, or laser.

In addition to these features, Unicorn's optimized design significantly reduces the occurrence of heat bridges in insulation compared to other types of slatted products.

Technical Limitation

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

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.

www.lextherm.com
info@lextherm.com

ISO9001:2015
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