



SLIMVAC® are high performance microporous insulation panels covered in an impermeable polymer outer envelope which is heat sealed under vacuum to optimise the thermal performance.

The core of the SLIMVAC® panel insulation is a blend of filament reinforced silica and an opacifier.

The outer envelope is an ultra-low permeation barrier film that comprises multiple metalised polymer layers. Exact barrier film specification may vary according to the application.

Microtherm SLIMVAC® core material is non-combustible and complies to the requirements of DIN4102. It is environmentally safe and completely recyclable.

Properties & advantages

- Very low TC value of 4.2 mW/m K (centre of panel)
- High R-value (4.8 m²K/W per 20 mm)
- Lightweight & thinnest insulation available
- No need for getter material
- Stable long term thermal performance
- Environmentally safe, contains no respirable fibres
- Excellent resistance to compression

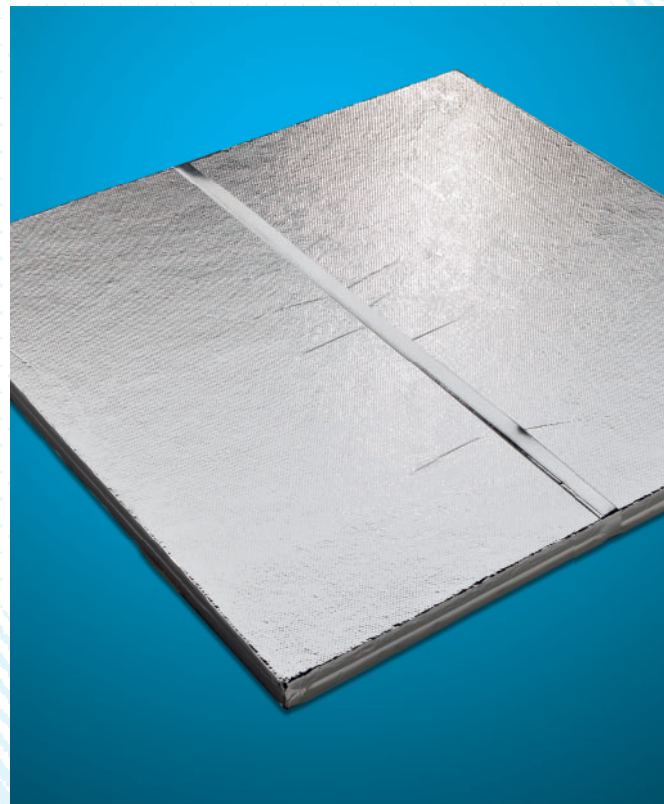
Typical applications

- Building:
 - Facades elements
 - Floor and roof insulation
 - Terrace insulation
 - Doors
 - Thermal bridges
 - Cold rooms
- Refrigerators and freezers
- Temperature controlled packaging
- Refrigerated transport

Standard finish styles

Microtherm SLIMVAC® are rectangular vacuum insulation panels that are as standard size delivered with straight edges and glued flanges.

For non-standard sizes, other finish styles are available on request.

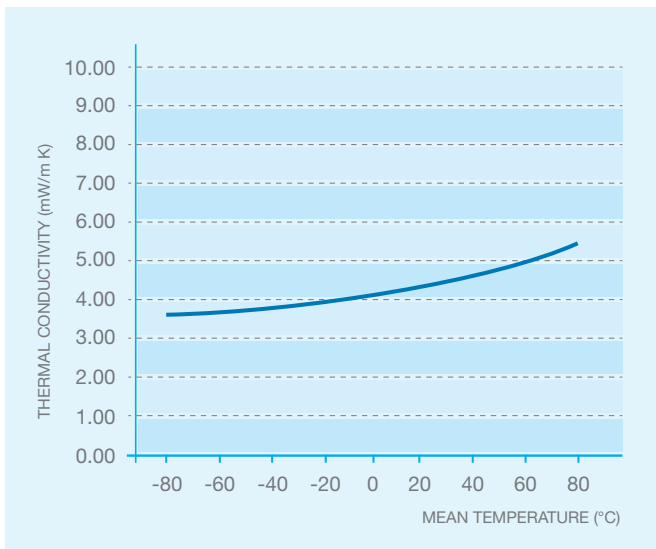




Technical data

Brand	SLIMVAC®	
Thermal conductivity (ASTM C518 & ISO 8301 at 10 °C)	W/m.K	0.0042
Internal pressure	mbar	< 5
Aging (increase in pressure)	mbar/year	1 (at ambient temperature)
Temperature range	°C	-50 up to +80 (limit barrier foil)
Density	kg/m ³	160 - 210
Compressive strength	MPa	0.2
Thermal conductivity (calculation value for building)	W/m K	0.007
Required thickness for passive house standard (TC = 0.007):		
U-value = 0.15 W/m ² K	mm	47
R-value = 6.67 W/m ² K	mm	47

Thermal Conductivity Graph



“These typical product characteristics are applicable for production runs of minimal 200 pieces.”

Product dimensions & standard sizes

Length [mm]	Width [mm]	Thickness [mm]
1300	600	10-15-20-25-30-40
1200	600	
600	600	
600	400	
600	200	
400	300	
600	500	20-25-30

These are the standard sizes.
Other sizes are available on request.

Production tolerances

	Length [mm]	Width [mm]	Thickness [mm]	
			< 20	+/- 1
≤ 1000	+1/-5	+1/-5	20 - 30	+1/- 2
> 1000	+1/-7	+1/-7	> 30 - 40	+1/- 3

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