

## Technical values / product key figures



### VACOSI VARIANT

The core of the vacuum insulation panels, VIP for short, consists of pressure-resistant fumed silica. This is mixed with opacifiers and fibres to reduce the transmission of thermal radiation. The powder is compressed into a supporting core that is non-combustible, environmentally friendly and not hazardous to health. The core is then evacuated in a film and welded. In this process, evacuation is the key to the VIP's high insulating properties. In a special process, the VIP is laminated with a glass fibre reinforced plastic (GRP), this gives the panel its hard surface and protects the VIP from damage. The edge of VACOSI VARIANT consists of approx. 10 mm of conventional insulation material (XPS) and can thus still be processed in the edge area. The VACOSI VARIANT element can be laid or glued directly without any further preparation.

#### Technical data

Characteristics	Unit	Values	Comment
Panel thickness	mm	15/20/25/30	Other thicknesses can be clarified
Sizes	mm	2035 x 1035	max. element size
Custom formats	mm	-	according to order / room layout, designs possible as rectangle, triangle, trapezoid and special shapes, max. element size 2025 x 1025 mm
Colour	-	-	red, special colour upon request
Delivery times			Standard size from stock Special sizes 2-4 weeks

#### Product key figures

u	y	15mm	20mm	25mm	30mm
u	$\lambda^d$			0,007	
u	$\lambda$			$\leq 0.005$	
y	$(\lambda^d)$	0.46	0.35	0.28	0.22
<b>Physical properties</b>					
Application temperature range	T	°C -200 to +100			
Volume weight (core)**	$\rho$	kg/m <sup>3</sup> 180 - 200			
Surface density		approx. 7.2	approx. 7.9	approx. 8.6	approx. 9.3
Compressive load capacity (at 10% compression)		kPa ca. 200			
<b>Tolerances</b>					
Thickness tolerance		mm	± 1.0		
Width tolerance		mm	± 1.0		
Length tolerance		mm	± 1.0		
<b>Other properties</b>					
Surface		smooth or optionally coarse (surcharge)			
Internal pressure *** (upon delivery)		mbar	≤ 5		
Calculated pressure increase			approx. 1 mbar / a		

\*\* depending on panel thickness

\*\*\* Depending on the panel size, the internal pressure can be between 0.5 and 5.0 mbar. The standard internal pressure in the evacuation chamber is <0.5 mbar.