

### va-Q-vip B

#### **Details**

va-Q-vip B is a vacuum insulation panel for construction applications.

va-Q-vip B is covered with a high barrier film and an additional black glass fibre textile for mechanical shock protection. The core itself is non-combustible (Fire class A1 in Europe). The va-Q-vip B with black glass fabric is inflammable (Construction materials class DIN 4102-B2).



va-Q-vip B is approved for general construction purposes in accordance with the approval number Z-23.11-1658, of the "Deutsches Institut für Bautechnik (DIBT)".

va-Q-vip B panels have smooth edges and sharp corners due to special "edge fold technique va-Q-seam" so individual panels can therefore be joined almost seamlessly.

#### **Applications**

 va-Q-vip B can be used in building applications for ceilings, walls, floors, flat roofs, top floor ceilings, exterior insulation behind panelling and insulation in wood frame construction.

Planners, installation partners or architects are responsible for the relevant specific insulation system. Application systems for buildings can also be discussed directly with Dynamic Composite Technologies.

#### **Features**

- Official approval for building material with assigned thermal conductivity 0.007
   W/mK
- Significantly reduced heat flows from minimal thickness
- Saves space thus providing a much larger usable floor areas or ceiling heights
- Extra protective layer for reliable installation

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## **Technical Data**

Product Name:	va-Q-vip-B Vacuum insulation panel covered with a high barrier film plus a black glass fibre textile for mechanical shock protection.
Surface Colour:	Black
Geometry:	Rectangular shape with flanges
Density: (bulk, DIN EN 1602)	180-210 kg/m³
Thermal conductivity	
Initial value:	<0.0043 W/(mK) @ 20mm thickness (measured value)
Rated value including aging and edge losses:	0.0070 W/(mK) for 20mm and greater thickness 0.0080 W/(mK) at 10-15mm thickness
If aerated:	0.020 W/(mk)
Temperature stability:	-70°C to +70°C
Thermal shock resistance:	Insensitive to heat and cold shock in the given temperature range
Humidity stability:	0% to 60%
Internal gas pressure:	<5 mbar (at delivery)
Increase of gas pressure:	Approximately 1mbar/year (measure, 20mm thickness)
Standard dimension:	I: 1000mm x 600mm
(LxW) I & II	II: 500mm x 600mm
Nonstandard dimension: III & IV	III: Area > 0,10m <sup>2</sup> and <0,60m <sup>2</sup> IV: Area <0,10m <sup>2</sup>
Special design:	Triangle, trapezium, corner cut, recessed



panel with hole, flanges folding by 10mm/15mm thickness  Nominal Thickness: 10mm to 50mm  Size tolerance:  0 to 500mm		surface and	
Nominal Thickness:  10mm to 50mm  Size tolerance:  0 to 500mm +2 / -4mm 501 to 1000mm +2 / -5mm  Thickness tolerance:  ±1mm  Specific heat:  0.8 kJ (kg K) (at room temperature)  Mass per area:  4 kg/m² (at 20mm thickness)  Compressive strength:  Approximately 150kPa (at 10% compression)  Flammability:  DIN 4102 - B2  Extrapolated, depending on application up		panel with hole, flanges folding by	
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	VICE LITE.	to 60 years.	

<sup>\*</sup> For 10mm and 15mm thicknesses, if a flat edge is required, the flanges are refolded onto the main surface of panel.

All figures are intended as a guide. Please discuss with Dynamic Composite Technologies when preparing specifications.

# Nominal Thickness to R-Value @ 10°C (Assigned by Deutsches Institut fur Bautechnil DBIt)

Nominal Thickness mm	Lambda/K Value/Thermal Conductivity	R Value
10	0.008	1.3
15	0.008	1.9
20	0.007	2.9



25	0.007	3.6
30	0.007	4.3
40	0.007	5.7