



## va-Q-vip F

### Details

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

The core itself is non-combustible (fire class A1 in Europe), va-Q-vip F is inflammable (Construction materials class DIN 4102-B2).

va-Q-vip F 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 F 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 F can be used in buildings in accordance with application areas interior applications for ceilings, walls, floors, flat roofs, top floor ceilings, exterior insulation behind panelling, insulation in wood frame construction to the standard DIN 4108-10, Table 1. Planners, installation partners or architects are responsible for the relevant specific insulation system. Application systems for buildings can also be discussed directly with va-Q-tec.

### Features

- Official approval for building material with assigned thermal conductivity 0.007 W/mK
- Significantly reduced heat flows and thickness
- Saves space providing more larger usable room area

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### Technical Data

|                                             |                                                                                        |
|---------------------------------------------|----------------------------------------------------------------------------------------|
| Product Name:                               | <b>va-Q-vip F</b>                                                                      |
| Surface Colour:                             | Silver                                                                                 |
| Geometry:                                   | Rectangular shape (without protruding flanges*)                                        |
| Density: (bulk, DIN EN 1602)                | 180-210 kg/m <sup>3</sup>                                                              |
| Thermal conductivity:                       |                                                                                        |
| Initial value                               | <0.0043 W/(mK) @ 20mm thickness<br>(measured value)                                    |
| Rated value including aging and edge losses | 0.0080 W/(mK) at 10-15mm thickness<br>0.0070 W/(mK) for 20mm and greater thickness     |
| If aerated                                  | 0.020 W/(mK)                                                                           |
| Temperature stability:                      | -70°C to +70°C (due to the film)                                                       |
| Thermal shock resistance:                   | Not sensitive 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<br>(at 20mm thickness and normal room conditions)             |
| Standard dimension:<br>(LxW) I & II         | I: 1000mm x 600mm<br>II: 500mm x 600mm                                                 |
| Nonstandard dimension:<br>III & IV          | III: Area > 0,10m <sup>2</sup> and <0,60m <sup>2</sup><br>IV: Area <0,10m <sup>2</sup> |
| Special form:                               | Triangle, trapezium, special shape, cornet cut, hole cut and recessed surface          |



|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| Nominal Thickness:      | 10mm to 50mm                                           |
| Size tolerance:         |                                                        |
| 0 to 500mm              | +2 / -4mm                                              |
| 501 to 1000mm           | +2 / -5mm                                              |
| Thickness tolerance:    | ±1mm                                                   |
| Specific heat capacity: | 0.8 kJ (kg K) (at normal room temperature)             |
| Mass per area:          | 4 kg/m <sup>2</sup> (at 20mm thickness)                |
| Compressive strength:   | Approximately 150kPa (at 10% compression)              |
| Service Life:           | Extrapolated, depending on application up to 60 years. |

*\* 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 and should not be used for preparing specifications.*

**Nominal Thickness to R-Value @ 10°C**  
**(Assigned by Deutsches Institut für Bautechnik DIBt)**

| <b>Nominal Thickness<br/>mm</b> | <b>Lambda/K<br/>Value/Thermal<br/>Conductivity</b> | <b>R Value</b> |
|---------------------------------|----------------------------------------------------|----------------|
| 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            |