

No.:	va-Q-vip F 26.08.2021
Unique identification code of the product-type:	va-Q-vip F
Intended uses:	Thermal insulation boards for thermal insulation of walls, floors and roofs in buildings
Manufacturer:	va-Q-tec AG, Alfred-Nobel-Str. 33, 97080 Wuerzburg, Germany
System of AVCP:	System 3
European Assessment Document:	EAD 040011-00-1201 December 2017
European Technical Assessment:	ETA-17/0926 from 12 December 2017
Technical Assessment Body:	Deutsches Institut für Bautechnik
Notified Body:	0751 FIW München

Essential characteristic	Performance
Reaction to fire - EN ISO 11925-2	Class E (EN 13501-1:2007 + A1:2009)
Thermal conductivity - EN 12667 acc. to a.m. EAD Nominal thickness: 10 mm to 19 mm Nominal thickness: 20 mm to 50 mm	Declared value of thermal conductivity ^a $\lambda_D = 0.0082 \text{ W/(m·K)}$ $\lambda_D = 0.0069 \text{ W/(m·K)}$ with $\lambda_D = (\lambda_{90/90} + \Delta\lambda_a) \times F_{tb}$
Aging supplement	$\Delta\lambda_a = 0.0015 \text{ W/(m·K)}$
Correcting factor for the thermal bridge effect	$F_{tb} = 1.10$
Thermal conductivity before ageing and without consideration of the thermal bridge effect Nominal thickness: 10 mm to 19 mm Nominal thickness: 20 mm to 50 mm	$\lambda_{90/90} = 0.0059 \text{ W/(m·K)}$ $\lambda_{90/90} = 0.0047 \text{ W/(m·K)}$
Nominal thickness - EN 823	10 mm - 50 mm $\pm 5\%$
Nominal length - EN 822	$\geq 400 \text{ mm}^b \pm 2\%$
Nominal width - EN 822	$\geq 300 \text{ mm}^b \pm 1.5\%$
Squareness - EN 824	$S_b \leq 5 \text{ mm/m}$
Flatness - EN 825	$\leq 6 \text{ mm}$
Density - EN 1602 Nominal thickness: 10 mm to 19 mm Nominal thickness: 20 mm to 50 mm	180 kg/m ³ - 250 kg/m ³ 180 kg/m ³ - 210 kg/m ³
Compressive stress at 10% deformation - EN 826	$\sigma_{10\%} \geq 150 \text{ kPa}$
Mass per unit area of the multilayer high barrier foil of the VIP	No performance assessed
Oxygen permeability of the multilayer high barrier foil of the VIP	No performance assessed
Dimensional stability under specified temperature and humidity - EN 1604 (48 h at 70 °C and 90 % r. h.)	$\leq 1.0\%$
Dimensional stability under specified load and temperature - EN 1605 with test condition 2 (40 kPa / 70 °C / 168 h)	$\leq 3.0\%$
Tensile strength of the multilayer high barrier foil of the VIP	No performance assessed
Internal pressure of the VIP	No performance assessed
Tensile strength perpendicular to the faces of the thermal insulation board - EN 1607	$\geq 30 \text{ kPa}$
Behaviour under point load	No performance assessed
Shear strength of the thermal insulation board	No performance assessed

^a Declared value of the thermal conductivity, representative for at least 90 % of the production with a confidence level of 90 %, including aging and thermal bridge effect of edge area. Influences of fixing elements and supporting structures are not taken into account.

^b Special formats are possible for the use in edge areas and corner areas.

Declaration of Performance va-Q-vip F



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Nominal thickness [mm]	U _p -Value (W/m ² ·K)	R _p -Value (W/m ² ·K)
10	0.82	1.22
15	0.55	1.83
20	0.35	2.90
25	0.28	3.62
30	0.23	4.35
35	0.20	5.07
40	0.17	5.80
45	0.15	6.52
50	0.14	7.25

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

A handwritten signature in blue ink, appearing to read 'Joachim Kuhn', is written over a light blue horizontal line.

Dr. Joachim Kuhn, CEO und Founder
Wuerzburg, 26.08.2021