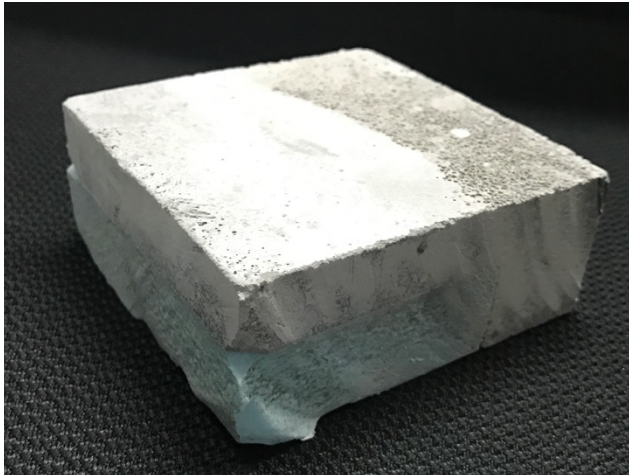


VODAPRUF

vSlab[®]



vSlab

vSlab is a precast prefabricated insulation concrete slab. It is used on reinforced concrete flat roofs as a thermal insulation and sound isolation layer. It also plays the role as a protection screed layer for waterproofing membrane of inverted-roof-system.

Comparison Table

	vSlab	Cast In-Situ Panel
Installation Method	Precast in Factory , Dry Works	In situ casting , Wet Works
Curing Time Before Open to Traffic	Immediate Open to Traffic	Minimum 24 hour
Productivity	125 m ² /man/day	50 m ² /man/day
Total Layer to Install	1 layer (3-in-1)	3 layer <ul style="list-style-type: none"> • Extruded Polystyrene Board • Geotextile Separation Layer • Cement Sand Topping Screed
Cost	Economical	Expensive
Thickness	50mm-100mm	Minimum 100mm
Quality	Consistent	Varies

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times.

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U-Value Calculation

Surface Air Film Resistances for Roofs

Roof Gradient	High Emissivity	Low Emissivity
<u>Inside Surface (R_i)</u>		
Flat roof	0.162	0.801
Sloped roof 22 ½°	0.148	0.595
Sloped roof 45°	0.133	0.391
<u>Outside Surface (R_o)</u>		
Flat roof or Sloped roof	0.55	-

Layer	Thickness, b (m)	Conductivity, k (W/mK)	Resistance, R (m ² K/W)
Outside Surface, (R _o)	-	-	0.0550
50mm thick vSlab	0.050	0.0580	0.8621
2mm thick waterproofing membrane	0.002	0.0826	0.0242
150mm thick concrete slab	0.150	1.4420	0.1040
Inside Surface (R _i)	-	-	0.1620
Total Resistance (R_T)			1.2073

Thermal Transmittance (U-value) of Roof, 1/R_T : 0.83m²K/W

BCA Maximum Allowable U-Value of Roof : 1.20m²K/W

0.83 < 1.20 , Pass!

Technical Data

Size per Panel : 610mm x 610mm x 50mm
 Weight per Panel : 27 kg
 Density : 1100kg/m³
 Thickness : 50mm
 Thermal Conductivity : 0.058 W/mK

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