

Isover Top V

Stone wool insulation



TECHNICAL SPECIFICATION

Insulating slabs with bevelled edges are made of Isover mineral wool with perpendicular fibres. The production is based on defibring method of the minerals composition melt and additional additives and ingredients. The mineral fibres produced are processed into the final slab shape on the production line and the edges are then trimmed by bevelling of 15 mm at a 45° angle. The entire fibre surface is hydrophobic and the fibres are perpendicular to the wall plane.



APPLICATION

Isover Top V slabs with bevelled edges are suitable for interior wall and ceilings insulation, where they are fully glued on a sufficiently flat and bearing surface. These slabs placed regularly side by side in bond or broken bond can conceal minor irregularities in the underlay surface and create the effect of bossage. No surface layer is necessary, if dust is removed from the slab surface by vacuum cleaning. If surface treatment is required, exterior or interior paint can be sprayed on cleaned and primed slabs.

PACKAGING, TRANSPORT, WAREHOUSING

Isover Top V insulation slabs are packed into the PE foil covered packets or as the packets on a pallet. Isover Top V is standardly delivered on pallets. Material have to be transported and stocked under conditions preventing their wetting or other degradation.

BENEFITS

- Up to 40% faster workability due to slab dimensions 1000 × 333 mm in comparison with standard lamella.
- Can be used without surface adjustment.
- Does not require anchoring.
- Lesser time requirements than ETICS.
- Slabs can cover small surface bumps.
- "Bossage" effect on ceiling.
- High tensile strength (can be applied on ceilings).
- Good thermal insulation.
- Fire resistance.
- Excellent noise absorption properties.
- Low vapour resistance – good water vapour penetrability.
- Environmentally friendly and hygienic.
- Completely hydrophobic.
- Long life span.
- Resistant to wood-destroying pests, rodents, and insects.
- Easy workability – can be cut, drilled into, glued, brushed, etc.

DIMENSIONS AND PACKAGING

Thickness [mm]	Length × width [mm]	Volume per package			Quantity per pallet [m ²]	Declared thermal resistance R _D [m ² ·K·W ⁻¹]
		[pcs]	[m ²]	[m ³]		
50*	1 000 × 333	12	4.00	0.20	64.00	1.25
60*	1 000 × 333	8	2.66	0.16	53.20	1.50
80*	1 000 × 333	6	2.00	0.16	40.00	2.00
100*	1 000 × 333	6	2.00	0.20	32.00	2.50
120*	1 000 × 333	4	1.33	0.16	26.60	3.00
140*	1 000 × 333	3	1.00	0.14	24.00	3.50
150*	1 000 × 333	4	1.33	0.20	21.28	3.75
160*	1 000 × 333	3	1.00	0.16	20.00	4.00
180*	1 000 × 333	3	1.00	0.18	20.00	4.50
200*	1 000 × 333	3	1.00	0.20	16.00	5.00

* Consult the producer for terms of delivery.

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TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code	
Geometric shape					
Length <i>l</i>	[% , mm]	EN 822	±2 %		
Width <i>b</i>	[% , mm]	EN 822	±1,5 %		
Thickness <i>d</i>	[% , mm]	EN 823	-1 % or -1 mm ¹⁾ and +3 mm	Class of thickness tolerances	T5
Deviation from squareness of the edge on length and width <i>S_b</i>	[mm·m ⁻¹]	EN 824	5		
Deviation from flatness <i>S_{max}</i>	[mm]	EN 825	6		
Relative change in length $\Delta\epsilon_l$, in width $\Delta\epsilon_b$, in thickness $\Delta\epsilon_d$	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions	DS(70,-)
Thermal technical properties					
Declared value of thermal conductivity coefficient λ_D ²⁾	[W·m ⁻¹ ·K ⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.040		
Design thermal conductivity λ_D ³⁾	[W·m ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	0.042		
Specific heat capacity <i>c_d</i>	[J·kg ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	800		
Mechanical properties					
Compressive stress at 10% deformation σ_{10}	[kPa]	Declaration according to EN 826	30	Declared level of compressive stress at 10% deformation	CS(10)30
Tensile strength perpendicular to faces σ_{mt}	[kPa]	Declaration according to EN 1607	30	Declared level of tensile strength perpendicular to faces	TR30
Fire safety properties					
Reaction to fire class	[-]	Declaration according to EN 13501-1+A1	A1		
Maximum temperature for use	[°C]		200		
Melting temperature <i>tt</i>	[°C]	DIN 4102 part 17	≥ 1000		
Hydrothermal properties					
Short-term water absorption <i>W_p</i>	[kg·m ⁻²]	Declaration according to EN 13162+A1 Measurement according to EN ISO 29767	1	Declared level for short-term water absorption	WS
Long-term water absorption by partial immersion <i>W_p</i>	[kg·m ⁻²]	Declaration according to EN 13162+A1 Measurement according to EN ISO 16535	3	Declared level for long-term water absorption by partial immersion	WL(P)
Water vapour diffusion resistance factor μ	[-]	Declaration according to EN 13162+A1 Measurement according to EN 12086	1	Declared value for water vapour diffusion resistance factor	MU1
Other properties					
Density	[kg·m ⁻³]	EN 1602	65-70		
Environmental properties/impacts					
Non-hazardous waste disposed ⁴⁾	[kg /FU ⁵⁾]	EN 15804+A1, ČSN ISO 14025	1.58	NHWD	
Total use of non-renewable primary energy resources	[MJ /FU]	EN 15804+A1, ČSN ISO 14025	87.9	PENRT	
Global warming potential	[kg CO ₂ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	7.96	GWP	
Ozone depletion	[kg CFC 11 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	4.15 E-07	ODP	
Acidification potential	[kg SO ₂ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.0559	AP	
Eutrophication potential	[kg PO ₄ ³⁻ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.00534	EP	
Photochemical ozone creation	[kg C ₂ H ₄ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.00831	POPC	
Abiotic depletion potential for non-fossil resources	[kg Sb ekv. /FU]	EN 15804+A1, ČSN ISO 14025	1.6 E-07	ADP-elements	
Abiotic depletion potential for fossil resources	[MJ (Calorific value) /FU]	EN 15804+A1, ČSN ISO 14025	80.9	ADP-fossil fuels	

¹⁾ Value with greatest numerical tolerance.

²⁾ Declared values were set under the following conditions: (reference temperature 10 °C, humidity *u_{dry}* reached by drying) according to EN ISO 10456.

³⁾ Valid for typical use in construction with risk of condensation. In the case of construction without any risk of condensation, it is possible to use the declared value of thermal conductivity.

⁴⁾ In this case it is standard mixed waste.

⁵⁾ FU = functional unit (1 m² of insulation at a thickness of 25 mm for life cycle phases A1-A3).

RELATED DOCUMENTS

- Declaration of Performance
- Certificate of constancy of performance
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001, ISO 50001



1/11/2023 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.