

Isover Woodsil

Stone wool insulation



TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. The production is based on the defibring method of the mineral composition melt and additional additives and ingredients. The mineral fibres produced are processed into the final slab shape on the production line. The entire fibre surface is hydrophobic. The slabs in the construction should be protected suitably against the weather (outer cassette sheathing, diffusion and vapour-proof foil).



APPLICATION

Isover Woodsil slabs are suitable for insulation of the outer or inner walls of wood houses and prefabricated construction.

Superior thermal insulation material with $\lambda_b = 0.035 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$.

PACKAGING, TRANSPORT, WAREHOUSING

Isover Woodsil insulation slabs are packed into the PE foil with package height up to 0.5 m. The slabs have to be transported in covered vehicles under conditions preventing their wetting or other degradation. The products are stored indoors or outdoors depending on the conditions specified in the current Isover price list.

BENEFITS

- Very good thermal insulation performance.
- Fire resistance.
- Excellent acoustic properties in terms of noise absorption.
- 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, etc.
- Dimensional stability during temperature change.

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]		
60	1200 × 580	8	5.57	0.33	128.06	1.70
80	1200 × 580	6	4.18	0.33	96.05	2.25
100	1200 × 580	5	3.48	0.35	80.04	2.85
120	1200 × 580	4	2.78	0.33	64.03	3.40
140	1200 × 580	3	2.09	0.29	54.29	4.00
160	1200 × 580	3	2.09	0.33	48.02	4.55
180	1200 × 580	2	1.39	0.25	40.37	5.10

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Geometric shape				
Length l	[% , mm]	EN 822	±2%	
Width b	[% , mm]	EN 822	±1,5%	
Thickness d	[% , mm]	EN 823	-3% or -3 mm ¹⁾ and +5 mm or +5 mm ²⁾	Class of thickness tolerances T4
Deviation from squareness of the edge on length and width S_b	[mm·m ⁻¹]	EN 824	5	
Deviation from flatness S_{max}	[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 (23,90)
Thermal technical properties				
Declared value of thermal conductivity coefficient λ_D ³⁾	[W·m ⁻¹ ·K ⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.035	
Design thermal conductivity λ_D ⁴⁾	[W·m ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	0.038	
Specific heat capacity c_p	[J·kg ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	800	

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Parameter	Unit	Methodology	Value	Designation code
Fire safety properties				
Reaction to fire class	[-]	Declaration according to EN 13501-1+A1	A1	
Maximum temperature for use	[°C]		200	
Melting temperature t_m	[°C]	DIN 4102 part 17	≥ 1000	
Hydrothermal properties				
Water vapour diffusion resistance factor μ	[-]	Declaration according to EN 13162+A1	1	Declared value for water vapour diffusion resistance factor MU1
Other properties				
Density	[kg·m ⁻³]	EN 1602	37	
Acoustic properties⁵⁾				
Specific air flow resistivity r	[kPa·s·m ⁻²]	EN 13162+A1 Measurement according to EN ISO 9053-1		Level of air flow resistivity ≥ 5 AFr

¹⁾ Value with greatest numerical tolerance.

²⁾ Value with lowest numerical tolerance.

³⁾ Declared values were set under the following conditions: (reference temperature 10 °C, humidity u_{dry} reached by drying) according to EN ISO 10456.

⁴⁾ 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.

⁵⁾ Informative non-declared value beyond the scope of CPR, obtained by specific tests.

RELATED DOCUMENTS

- Declaration of Performance
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001



1/10/2023 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.