



Isover UNI

Mineral insulation from stone wool

TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. 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. The entire fibre surface is hydrophobic. The slabs in the construction should be protected suitably against the weather effects (outer cassette sheathing, diffusion and vapour-proof foil).

APPLICATION

Isover UNI slabs are suitable for unloaded insulations of the outer walls (ventilated facades under the cladding with insulant inserted into cassettes or frames), insulation of the pitch roofs, ceilings, false ceilings and other light sandwich constructions. The material is suitable for fire protection partition walls where the density $\geq 40 \, \text{kg} \cdot \text{m}^{-3}$ is required.

PACKAGING, TRANSPORT, WAREHOUSING

Isover UNI 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

- fire-resistant
- very good thermal insulation performance 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 insect easy workability can be cut, drilled into, etc.
- dimensional stability during temperature change



DIMENSIONS AND PACKAGING

Thickness	[mm]	40	50	60	80	100	120	140	160		
Length × width	[mm]	1200 × 600									
	[ks]	12	10	8	6	5	4	3	3		
Volume per package	[m²]	8.64	7.20	5.76	4.32	3.60	2.88	2.16	2.16		
раскаде											
Quantity per palette	[m²]	86.40	72.00	57.6	43.20	36.00	28.80	25.92	21.60		
Declared thermal resistance R _D	[m²·K·W ⁻¹]	1.15	1.45	1.75	2.35	2.90	3.50	4.10	4.70		

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code		
Geometric shape						
Length /	[%, mm]	EN 822	±2 %			
Width b	[%, mm]	EN 822	±1.5 %			
Thickness d	[%, mm]	EN 823	-3 % or -3 mm ¹⁾ and +5 % 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 $\Delta \varepsilon_b$, in width $\Delta \varepsilon_b$, in thickness $\Delta \varepsilon_d$	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions	DS (70,-)	
Thermal technical properties						
Declared value of the thermal conductivity coefficient $\lambda_{\rm D}{}^{\rm 3)}$	[W·m ⁻¹ ·K ⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.034			
Specific heat capacity c _d	[J·kg ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	800			
Fire safety properties						
Reaction to fire class	[-]	Declaration according to EN 13501- 1+A1	A1			
Maximum temperature for use	[°C]		200			
Melting temperature t_t	[°C]	DIN 4102 part 17	≥ 1000			
Hydrothermal properties						
Water vapour diffusion resistance factor μ	[-]	EN 13162+A1	1	Declared value for water vapour diffusion resistance factor	MU1	
Other properties						
Density	[kg·m ⁻³]	EN 1602	40			

Whichever gives the greatest numerical tolerance.

RELATED DOCUMENTS

■ Declaration of Performance GSW002-002



²⁾ Whichever gives the smallest numerical tolerance.

while lever gives the smallest militarial colleanance.

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

4 It is 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.