



Isover FASSIL

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 sheathing, alternatively diffusion foil).

APPLICATION

Isover FASSIL slabs are suitable for insulation of the outer walls of ventilated facade systems and are to be inserted into the grid under the cladding, or mechanically bonded into the multi-layer masonry. The slabs can be mechanically bond using the clamps for soft MW insulations. Insulating slabs are not glued to the surface. To harden the surface it is possible to manufacture these slabs coated with black or white mineral non-woven fabric. This possible modification is called Fassil NT. The coating is not adapted to additional adjustments (painting, gluing, etc.). The material is suitable for fire protection system constructions where the density $\geq 50 \text{ kg}\cdot\text{m}^{-3}$ is required.

Especially the energy saving insulation type $\lambda_0 = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$.

PACKAGING, TRANSPORT, WAREHOUSING

Isover FASSIL 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-resistant
- 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 x width	[mm]	1200 x 600 (625*)									
Volume per package	[ks]	12	10	8	6	5	4	3	3		
	[m³]	8.64	7.20	5.76	4.32	3.60	2.88	2.16	2.16		
Quantity per palette	[m²]	0.35	0.36	0.35	0.35	0.36	0.35	0.30	0.35		
	[m²]	86,40	72,00	57,60	43,20	36,00	28,80	25,92	21,60		
Declared thermal resistance R_0	[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 l	[% , mm]	EN 822	$\pm 2 \%$	
Width b	[% , mm]	EN 822	$\pm 1.5 \%$	
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 $\Delta\epsilon_l$ 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 the thermal conductivity coefficient λ_0 ³⁾	[W·m⁻¹·K⁻¹]	Declaration according to EN 13162+A1	0.034	
		Measurement according to EN 12667		
Specific heat capacity c_a	[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_f	[°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	50	

¹⁾ Whichever gives the greatest numerical tolerance.

²⁾ Whichever gives the smallest numerical tolerance.

³⁾ Declared values were set under the following conditions (reference temperature 10 °C, humidity u_{dry} 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.

RELATED DOCUMENTS

- Declaration of Performance CSW002-002