

Isover AKU

Mineral insulation from stone wool



Specification code: MW - EN 13162 - T4 - DS(T+) - MU1

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 plasterboard wall systems with 625 mm spacing as an acoustic and thermal insulation. 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. They should be stored flat in sheltered space to maximum layer height of 2 m.

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

Product	Thickness (mm)	Dimensions (mm)	Per package (m ²)	Declared thermal resistance R _D (m ² ·K·W ⁻¹)
Isover AKU 4	40	1000 x 625	7.500	1.10
Isover AKU 6	60	1000 x 625	5.000	1.70
Isover AKU 7	70	1000 x 625	3.750	2.00
Isover AKU 9	90	1000 x 625	3.125	2.55
Isover AKU 10	100	1000 x 625	3.125	2.85

Thickness tolerance classification T4 complies with allowed tolerance according to EN 13162: -3% or -3 mm, while the higher numerical value prevails and +5% or +5 mm where the lower tolerance numerical value is predominant.

TECHNICAL PARAMETERS

Parameter	Unit	Value	Norm	
THERMAL INSULATING PROPERTIES				
Condition set for declared values l(10°C) and (u _{dry})	-	-	EN ISO 10456	
Declared thermal conductivity coefficient λ _D	Wm ⁻¹ K ⁻¹	0.035	EN 12667	
Specific heat capacity c _d	Jkg ⁻¹ K ⁻¹	800	ČSN 73 0540-3	
MECHANICAL PROPERTIES				
Dimensional stability at temperature (70 ± 2) °C DS (T+)	%	≤ 1	EN 1604	
Specific load value	kN·m ⁻³	0.40	EN 1991-1-1, EN 1990	
FIRE SAFETY PROPERTIES				
Reaction to fire class	-	A1	EN 13501-1	
Maximum temperature for use	°C	200	-	
Melting temperature t _f	°C	≥ 1000	DIN 4102 part 17	
ACOUSTIC PROPERTIES				
The practical sound absorption coefficient α _p according to EN ISO 354 and EN ISO 11654	Frequency	Hz	125 250 500 1000 2000 4000	
	Thickness	40	mm	0.15 0.40 0.85 0.95 0.95 1.00
		60	mm	0.25 0.70 1.00 1.00 1.00 1.00
		80	mm	0.35 0.95 1.00 1.00 1.00 1.00
Definition of single number value according to EN ISO 11654	Single number value	-	α _w α _{stf} NCR	
	Thickness	40	mm	0.70 (MH) 0.79 0.80
		60	mm	1.00 0.93 0.95
		80	mm	1.00 1.01 1.00
100	mm	1.00 1.05 1.05		
OTHER PROPERTIES				
Specific resistance against air flow AF _r	kPa·s·m ⁻²	12.3	EN 29053	
Moisture resistance factor (μ) MU	-	1	EN 12086	

RELATED DOCUMENTS

- EC compliance certificate 1390-CPD-0305/11/P

1. 4. 2012 The information is valid up to date of publishing. The manufacturer reserves right to change the data.