Isover UNI

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 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 ≥ 40 kg.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 (m²)	Declared thermal resistance R_D (m².K.W^{-1})
Isover UNI 4	40	1200 x 600	8.64	1.10
Isover UNI 5	50	1200 x 600	7.20	1.40
Isover UNI 6	60	1200 x 600	5.76	1.65
Isover UNI 8	80	1200 x 600	4.32	2.20
Isover UNI 10	100	1200 x 600	3.60	2.80
Isover UNI 12	120	1200 x 600	2.88	3.35
Isover UNI 14	140	1200 x 600	2.16	3.90
Isover UNI 16	160	1200 x 600	2.16	4.45
Isover UNI 18	180	1200 x 600	1.44	5.00
Isover UNI 20	200	1200 x 600	1.44	5.60

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 I(10°C) and (u_{dry})			-	-			EN ISO 10456		
Declared thermal conductivity coefficient λ_D			W·m^{-1}·K^{-1}	0.035			EN 12667		
Specific heat capacity c_d			J·kg^{-1}·K^{-1}	800			ČSN 73 0540-3		
MECHANICAL PROPERTIES									
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		
Dimensional stability at temperature (70 ± 2) °C DS (T+)			%	≤ 1			EN 1604		
Maximum temperature for use			°C	200			-		
Melting temperature t_t			°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
		100	mm	0.45	1.00	1.00	1.00	1.00	1.00
Definition of single number value according to EN ISO 11654	Single number value		-	α_w		$\alpha_{stř}$	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									
Moisture resistance factor (μ) MU			-	1			EN 12086		
Specific resistance against air flow AF_r			kPa·s·m^{-2}	12.3			EN 29053		

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.

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