ISOVER SAINT-GOBAIN
Assurance in insulation

Specification code: MW-EN 13 162-T2-MU1-AF,5
Identification code of the product-type: 035-WS1-DoP-14-w2, 035-WS2-DoP-14-w2
SVT code: 962

Isover MERINO

Mineral fibreglass insulation

TECHNICAL SPECIFICATION

Insulation slabs made of Isover fibreglass wool. The production is based on defibration of melt of glass and other additives and ingredients. Produced mineral fibres are then shaped into slabs on the production line. Fibres are made water-repellent on their entire surface. Slabs in construction have to be protected suitably (steam protection foil, protection from dust settling, other layers of construction).

APPLICATION

Isover MERINO slabs are flexible and have stable shape but cannot be bear load. They are suitable for any thermal, acoustic, no-load insulation, especially for double construction, ceiling fillings, hanging false ceilings, and cavities (improving the acoustic absorption of the construction, assembled floors with posts), for ventilated facades with frame insulation (maximum two storeys, using timber studs with 300 mm clearance).

PACKAGING, TRANSPORT, WAREHOUSING

Isover MERINO slabs are packaged into PE foil. They come in MPS packs (1MPS = 12 packages). Loose packages can be supplied after an agreement with the manufacturer. Slabs have to be transported in covered vehicles under conditions preventing them from getting wet or being degraded. 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*
Length × width	[mm]	1200 × 625						
Volume per package	[ks]	24	20	16	12	10	8	6
	[m^2]	18.00	15.00	12.00	9.00	7.50	6.00	4.50
	[m^3]	0.34	0.34	0.34	034	0.34	0.34	0.34
Quantity per palette	[m^2]	288	240	240	180	150	120	90
Declared thermal resistance R_D	[$m^2 \cdot K \cdot W^{-1}$]	1.00	1.25	1.50	2.05	2.55	3.05	3.55

* It is necessary to consult with the producer for the terms of delivery.

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	-5 % or -5 mm[1] and +15 mm or +15 mm[2]	Class of thickness tolerances	T2
Deviation from squareness of the edge on length and width S_b	[$mm \cdot m^{-1}$]	EN 824	5		
Deviation from flatness S_{max}	[mm]	EN 825	6		
Relative change in length $\Delta\varepsilon_l$, in width $\Delta\varepsilon_b$, in thickness $\Delta\varepsilon_d$	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions	DS (23,90)
Thermal technical properties					
Declared value of the thermal conductivity coefficient λ_D[3]	[$W \cdot m^{-1} \cdot K^{-1}$]	Declaration according to EN 13162+A1	0.039		
		Measurement according to EN 12667			
Design thermal conductivity λ_u[4]	[$W \cdot m^{-1} \cdot K^{-1}$]	ČSN 73 0540-3	0.042		
Specific heat capacity c_d	[$J \cdot kg^{-1} \cdot K^{-1}$]	ČSN 73 0540-3	840		
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	[$kg \cdot m^{-3}$]	EN 1602	14		

[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 035-WS1-DoP-14-w2, 035-WS2-DoP-14-w2
- Environmental Product Declaration
- ISO 9001, ISO 14001, OHSAS 18001

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SAINT-GOBAIN

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TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Acoustic properties[5]				
The practical sound absorption coefficient α_p	[-]	Declaration according to EN 13162+A1 Declaration according to EN ISO 11654 Measurement according to EN ISO 354	Declared level of practical sound absorption coefficient	AP

Frequency		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Thickness	20 mm	0.10	0.35	0.60	0.75	0.90	0.90
In front of the wall, 60 mm	50 mm	0.25	0.60	0.90	1.00	1.00	1.00
	80 mm	0.45	0.75	1.00	1.00	1.00	1.00
In front of the wall, 150 mm	20 mm	0.20	0.55	0.85	0.85	0.90	0.90
	50 mm	0.40	0.75	1.00	1.00	1.00	1.00
	80 mm	0.65	1.00	1.00	1.00	1.00	1.00

Specific air flow resistivity *r*		Declaration according to EN 13162+A1	Level of air flow resistivity	AFr
	[kPa·s·m^{-2}]	Measurement according to EN 29053	≥ 5	
Environmental properties / impacts				
Volume of Pre-consumer recycled content for production	[%]	ČSN ISO 14021	-	
Volume of Post-consumer recycled content for production	[%]	ČSN ISO 14021	-	
Non-hazardous waste disposed[6]	[kg /FU[7]]	EN 15804+A1, ČSN ISO 14025	0.497	NHWD
Total use of non-renewable primary energy resources	[MJ /FU]	EN 15804+A1, ČSN ISO 14025	45.5	PENRT
Global Warming Potential	[kg CO_2 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	2.59	GWP
Ozone Depletion	[kg CFC 11 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	7.15 E-08	ODP
Acidification potential	[kg SO_2 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.0258	AP
Eutrophication potential	[kg PO_4^{3-} ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.0023	EP
Photochemical ozone creation	[kg C_2H_4 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.00684	POPC
Abiotic depletion potential for non-fossil resources	[kg Sb ekv. /FU]	EN 15804+A1, ČSN ISO 14025	1.56 E-06	ADP-elements
Abiotic depletion potential for fossil resources	[MJ (Calorific value) /FU]	EN 15804+A1, ČSN ISO 14025	50.4	ADP-fossil fuels

[5] Informative non-declared value beyond scope of CPR, obtained by concrete tests.
[6] In this case it is standard mixed waste.
[7] FU = functional unit (1 m² of insulation by 100 mm thick for live cycle phases A1–A3).

Example of product application Isover MERINO

4. 7. 2019 The information is valid up to date of publishing. The manufacturer reserves right to change the data.

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