SVT code: 246
Product identification code: CZ0001-004
Specification code: MW-EN 13 162-T2-MU1

Isover Orsik

Stone wool insulation

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, increased relative inner humidity and condensate (diffusion and vapour-proof foil).

APPLICATION

Isover Orsik slabs are suitable for unloaded thermal, acoustic and fire insulation of pitch roofs especially with insertion between rafters and additional frame as well, into partition walls, wood ceilings insulations, false ceilings, and cavities.

PACKAGING, TRANSPORT, WAREHOUSING

Isover Orsik 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 resistance.
- 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 insects.
- Easy workability – can be cut, drilled into, etc.

DIMENSIONS AND PACKAGING

Thickness [mm]	Length × width [mm]	Volume per package			Quantity per pallet [m²]	Declared thermal resistance R_D [m²·K·W⁻¹]
		[pcs]	[m²]	[m³]		
40	1 200 × 625	12	9.00	0.36	207.00	1.05
50	1 200 × 625	10	7.50	0.38	165.00	1.35
60	1 200 × 625	8	6.00	0.36	138.00	1.60
70	1 200 × 625	6	4.50	0.32	117.00	1.85
80	1 200 × 625	6	4.50	0.36	103.50	2.15
90	1 200 × 625	4	3.00	0.27	87.00	2.40
100	1 200 × 600	5	3.60	0.36	82.80	2.70
120	1 200 × 600	4	2.88	0.35	66.24	3.20
140	1 200 × 600	4	2.88	0.40	57.60	3.75
160	1 200 × 600	3	2.16	0.35	49.68	4.30
180	1 200 × 600	3	2.16	0.39	43.20	4.85
200	1 200 × 600	2	1.44	0.29	37.44	5.40

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 % or +15 mm[2]	Class of thickness tolerances	T2
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		

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TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code	
Thermal technical properties					
Declared value of thermal conductivity coefficient λ_D [3]	[W·m^{-1}·K^{-1}]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.037		
Design thermal conductivity λ_u [4]	[W·m^{-1}·K^{-1}]	ČSN 73 0540-3	0.039		
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	[-]	Declaration according to EN 13162+A1	1	Declared value for water vapour diffusion resistance factor	MU1
Other properties					
Density	[kg·m^{-3}]	EN 1602	30		
Acoustic properties [5]					

Practical sound absorption coefficient α_p								
	[-]	EN 13162+A1 EN ISO 11654 Measurement according to EN ISO 354		Level of practical sound absorption coefficient				AP
	Frequency		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
	Thickness	40 mm	0.15	0.40	0.80	0.90	0.95	0.95
		60 mm	0.20	0.65	1.00	1.00	0.95	1.00
		80 mm	0.30	0.90	1.00	1.00	1.00	1.00
		100 mm	0.45	1.00	1.00	1.00	1.00	1.00

Weighted sound absorption coefficient α_w Sound Absorption Average $\alpha_{stř}$ Noise reduction coefficient NRC					
	[-]	EN ISO 11654 (for NRC according ASTM C423)	Level of weighted sound absorption coefficient		AW
	Single number value		α_w	$\alpha_{stř}$	NCR
	Thickness	40 mm	0.70 (H)	0.75	0.75
		60 mm	0.95	0.90	0.90
		80 mm	1.00	0.99	1.00
		100 mm	1.00	1.04	1.05

Specific air flow resistivity r				
	[kPa·s·m^{-2}]	EN 13162+A1	Level of air fl ow resistivity	AFr
		Measurement according to EN ISO 9053-1	≥ 5	

[1] Value with greatest numerical tolerance.
[2] Value with lowest numerical tolerance.
[3] Declared values were set under the following conditions: (reference temperature 10 °C, humidity u_{dry} reached by drying) according to EN ISO 10456.
[4] 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.
[5] Informative non-declared value beyond the scope of CPR, obtained by specific tests.

RELATED DOCUMENTS

- Declaration of Performance
- Certificate of constancy of performance
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001, ISO 50001

More about the product

www.isover.cz/en/products/isover-orsik

6/11/2024 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.

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