

ISOVER Super Profi

Mineral fibreglass insulation



TECHNICAL SPECIFICATION

Rolled insulation mats made of ISOVER fibreglass wool are covered with hydrophobic fibres on the entire surface. The production method is based on the fibering of glass melt and other additives and ingredients. The mineral fibres produced are processed into the final mat shape on the production line.

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

APPLICATION

The fibreglass insulation mats with excellent heat-insulating properties are used as thermal and acoustic insulation of the pitch roofs, ceilings, false ceilings, ventilated facades, timber frame construction and other light sandwich constructions.

Superior energy saving type of insulation $\lambda_0 = 0,032 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$.

PACKAGING, TRANSPORT, WAREHOUSING

The ISOVER rolls are strongly compressed within the package and wrapped with PE foil (1 MPS = 18 Rolls for th. 100-180 mm and 24 Rolls for th. 40-80 mm, volume 4,09 m³). After unpacking, the rolls quickly acquire full thickness. Compressing makes manipulation easier and saves space in warehouses, during transport and on the construction site. Rolls 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.



DIMENSIONS AND PACKAGING

Thickness	[mm]	40	60	80	100	120	140	160	180
Length x width	[mm]	9000 x 1200	7500 x 1200	6000 x 1200	4500 x 1200	4000 x 1200	3500 x 1200	3000 x 1200	2500 x 1200
	[ks]	1	1	1	1	1	1	1	1
Volume per package	[m ²]	10,80	9,00	7,20	5,40	4,80	4,20	3,60	3,00
	[m ³]	0,43	0,54	0,58	0,54	0,58	0,59	0,58	0,54
Quantity per palette	[m ²]	259,20	216,00	172,80	97,20	86,40	75,60	64,80	54,00
Declared thermal resistance R ₀	[m ² ·K·W ⁻¹]	1,25	1,85	2,50	3,10	3,75	4,35	5,00	5,60

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Geometric shape				
Length l	[%, mm]	ČSN EN 822	±2 %	
Width b	[%, mm]	ČSN EN 822	±1.5 %	
Thickness d	[%, mm]	ČSN EN 823	-5 % or -5 mm ¹⁾	Class of thickness tolerances T1
Deviation from squareness of the edge on length and width S _b	[mm·m ⁻¹]	ČSN EN 824	5	
Deviation from flatness S _{max}	[mm]	ČSN EN 825	6	
Thermal technical properties				
Declared value of the thermal conductivity coefficient λ_0 ²⁾	[W·m ⁻¹ ·K ⁻¹]	Declaration according to ČSN EN 13162+A1 Measurement according to ČSN EN 12667	0,032	
Design thermal conductivity λ_D ³⁾	[W·m ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	0,035	
Specific heat capacity c _p	[J·kg ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	840	
Fire safety properties				
Reaction to fire class	[-]	Declaration according to ČSN EN 13501-1+A1	A1	
Maximum temperature for use	[°C]		200	
Melting temperature t _f	[°C]	DIN 4102 dil 17	< 1000	
Hydrothermal properties				
Water vapour diffusion resistance factor μ	[-]	ČSN EN 13162+A1	1	Declared value for water vapour diffusion resistance factor MU1
Other properties				
Density	[kg·m ⁻³]	ČSN EN 1602	26	

¹⁾ Whichever gives the greatest numerical tolerance.

²⁾ Declared values were set under the following conditions (reference temperature 10 °C, humidity u_{dry}, which is reached by drying) according EN ISO 10456.

³⁾ 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 RO-S-032-001
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001

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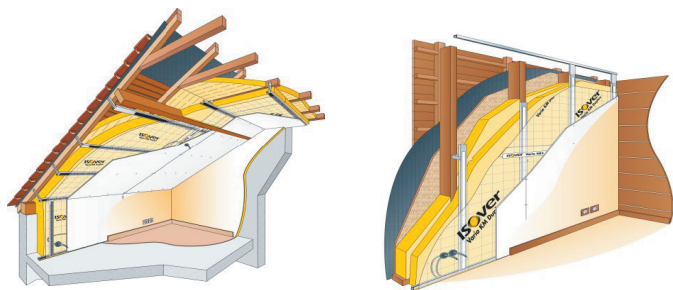
TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Acoustic properties ⁴⁾				
Specific air flow resistivity <i>r</i>		Declaration according to ČSN EN 13162+A1	Level of air flow resistivity	AFr
	[kPa·s·m ⁻²]	Measurement according to ČSN EN ISO 9053-1	≥ 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 ⁵⁾	[kg /FU ⁶⁾]	ČSN EN 15804+A1, ČSN ISO 14025	0,0787	NHWD
Total use of non-renewable primary energy resources	[MJ /FU]	ČSN EN 15804+A1, ČSN ISO 14025	25,9	PENRT
Global Warming Potential	[kg CO ₂ ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	1,50	GWP
Ozone Depletion	[kg CFC 11 ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	1,82 E-07	ODP
Acidification potential	[kg SO ₂ ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	0,00494	AP
Eutrophication potential	[kg PO ₄ ³⁻ ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	0,00118	EP
Photochemical ozone creation	[kg C ₂ H ₄ ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	4,40 E-04	POPC
Abiotic depletion potential for non-fossil resources	[kg Sb ekv. /FU]	ČSN EN 15804+A1, ČSN ISO 14025	5,15 E-05	ADP-elements
Abiotic depletion potential for fossil resources	[MJ (Calorific value) /FU]	ČSN EN 15804+A1, ČSN ISO 14025	23,3	ADP-fossil fuels

⁴⁾ Informative non-declared value beyond scope of CPR, obtained by concrete tests.

⁵⁾ In this case it is standard mixed waste.

⁶⁾ FU = functional unit (1 m² of insulation by 100 mm thick for live cycle phases A1-A3).



Example of product application ISOVER Super Profi

1. 2. 2021 The information is valid up to date of publishing. The manufacturer reserves right to change the data.