



Isover Piano

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 Piano rolls are suitable for thermal, acoustic, no-load insulation which are a part of light construction with metal reinforcement. In residential or administrative buildings, attics, hotels, hospitals, and industry premises, the Isover Piano rolls increase total acoustic absorption of construction and therefore acoustic insulation capacity (improvement in sound reduction of up to 18dB, according to solution for side ways noise travel and the number of holes in the construction), especially if the entire cavity is filled (5-7 dB improvement in sound reduction from cavity only half filled). The improvement in sound reduction depends on how side ways noise travel is limited, i.e. how the carrying frame of partition walls is insulated from the floor, ceiling, and walls with a flexible insulation tape.

BENEFITS

- Fire resistance.
- 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 insects.
- Easy workability – can be cut, drilled into, etc.
- Dimensional stability during temperature change.

PACKAGING, TRANSPORT, WAREHOUSING

The Isover Piano rolls are packaged into PE foil. They come in MPS packs (1MPS = 24 rolls, volume 4.09 m³). Loose packages can be supplied after an agreement with the manufacturer. 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]	Length × width [mm]	Volume per package			Quantity per pallet [m ²]	Declared thermal resistance R _D [m ² ·K·W ⁻¹]
		[pcs]	[m ²]	[m ³]		
TWIN 80/40	7 500 × 625	4	9.38/18.75	0.75	225/450	2.10/1.05
TWIN 100/50	6 000 × 625	4	7.50/15.00	0.75	180/360	2.65/1.30
TWIN 120/60	5 000 × 625	4	6.25/12.50	0.75	150/300	3.20/1.60

Note: Name TWIN 80/40 - in the packing are 2 rolls, same thickness 40 mm, applicable as one roll 80 mm.

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Geometric shape				
Length <i>l</i>	[% , mm]	EN 822	±2 %	
Width <i>b</i>	[% , mm]	EN 822	±1,5 %	
Thickness <i>d</i>	[% , 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 <i>S_e</i>	[mm·m ⁻¹]	EN 824	5	
Deviation from flatness <i>S_{max}</i>	[mm]	EN 825	6	
Relative change in length Δ <i>ε_l</i> , in width Δ <i>ε_b</i> , in thickness Δ <i>ε_d</i>	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions DS(23,90)

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Parameter	Unit	Methodology	Value	Designation code					
Thermal technical properties									
Declared value of thermal conductivity coefficient λ_p ³⁾	[W·m ⁻¹ ·K ⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.037						
Design thermal conductivity λ_d ⁴⁾	[W·m ⁻¹ ·K ⁻¹]	ČSN 73 0540-3	0.040						
Specific heat capacity c_d	[J·kg ⁻¹ ·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_f	[°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	15						
Acoustic properties⁵⁾									
Practical sound absorption coefficient α_p	[-]	Declaration according to EN 13162+A1 Declaration according to 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	
	40 mm		0.15	0.45	0.85	0.95	0.95	1.00	
	60 mm		0.25	0.65	1.00	1.00	1.00	1.00	
	80 mm		0.40	0.95	1.00	1.00	1.00	1.00	
			100 mm		1.00	1.00	1.00	1.00	1.00
Weighted sound absorption coefficient α_w Sound Absorption Average α_{wA} Noise reduction coefficient NRC	[-]	EN ISO 11654 (for NRC according ASTM C423)	Level of weighted sound absorption coefficient			AW			
	Single number value		α_w		α_{wA}	NCR			
	40 mm		0.75 (MH)		0.81	0.80			
	60 mm		0.95		0.91	0.90			
	80 mm		1.00		1.00	1.00			
			100 mm		1.05	1.05			
Specific air flow resistivity r	[kPa·s·m ⁻²]	Declaration according to EN 13162+A1 Measurement according to EN ISO 9053-1	Level of air flow resistivity			AFr			
			≥ 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
- ISO 9001, ISO 14001, ISO 45001

More about the product

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



1/4/2024 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.