



# Isover Woodsil

## Stone wool insulation

### TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. The production is based on the defibring method of the mineral 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 (outer cassette sheathing, diffusion and vapour-proof foil).



### APPLICATION

Isover Woodsil slabs are suitable for insulation of the outer or inner walls of wood houses and prefabricated construction.

**Superior thermal insulation material with  $\lambda_0 = 0.035 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ .**

### PACKAGING, TRANSPORT, WAREHOUSING

Isover Woodsil 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.
- Dimensional stability during temperature change.

### DIMENSIONS AND PACKAGING

Thickness [mm]	Length × width [mm]	Volume per package			Quantity per pallet [m <sup>2</sup> ]	Declared thermal resistance $R_d$ [m <sup>2</sup> ·K·W <sup>-1</sup> ]
		[pcs]	[m <sup>2</sup> ]	[m <sup>3</sup> ]		
60	1200 × 580	8	5.57	0.33	128.06	1.70
80	1200 × 580	6	4.18	0.33	96.05	2.25
100	1200 × 580	5	3.48	0.35	80.04	2.85
120	1200 × 580	4	2.78	0.33	64.03	3.40
140	1200 × 580	3	2.09	0.29	54.29	4.00
160	1200 × 580	3	2.09	0.33	48.02	4.55
180	1200 × 580	2	1.39	0.25	40.37	5.10

### 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	-3% or -3 mm <sup>1)</sup> and +5 mm or +5 mm <sup>2)</sup>	Class of thickness tolerances	T4
Deviation from squareness of the edge on length and width $S_b$	[mm·m <sup>-1</sup> ]	EN 824	5		
Deviation from flatness $S_{max}$	[mm]	EN 825	6		
Relative change in length $\Delta\epsilon_l$ , in width $\Delta\epsilon_b$ , in thickness $\Delta\epsilon_d$	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions	DS(70,-)
Thermal technical properties					
Declared value of thermal conductivity coefficient $\lambda_{0,3}$	[W·m <sup>-1</sup> ·K <sup>-1</sup> ]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.035		
Design thermal conductivity $\lambda_{0,4}$	[W·m <sup>-1</sup> ·K <sup>-1</sup> ]	ČSN 73 0540-3	0.038		
Specific heat capacity $c_d$	[J·kg <sup>-1</sup> ·K <sup>-1</sup> ]	ČSN 73 0540-3	800		

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Parameter	Unit	Methodology	Value	Designation code					
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 $\mu$	[-]	Declaration according to EN 13162+A1		1	Declared value for water vapour diffusion resistance factor MU1				
Other properties									
Density	[kg·m <sup>-3</sup> ]	EN 1602		37					
Acoustic properties <sup>5)</sup>									
Practical sound absorption coefficient $\alpha_p$	[-]	EN 13162+A1			Level of practical sound absorption coefficient				AP
		EN ISO 11654							
		Measurement according to EN ISO 354							
	Frequency	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
	Thickness	60 mm	0.20	0.60	0.95	1.00	1.00	1.00	
		80 mm	0.30	0.85	1.00	1.00	1.00	1.00	
100 mm		0.45	0.95	1.00	1.00	1.00	1.00		
Weighted sound absorption coefficient $\alpha_w$	[-]	EN ISO 11654 (for NRC according ASTM C423)			Level of weighted sound absorption coefficient				AW
		Single number value	$\alpha_w$		$\alpha_{str}$		NCR		
Sound Absorption Average $\alpha_{av}$		60 mm	0.90		1.00		0.92		
Noise reduction coefficient NRC	Thickness	80 mm	1.00		1.08		1.02		
		100 mm	1.00		1.08		1.03		
Specific air flow resistivity $r$	[kPa·s·m <sup>-2</sup> ]	EN 13162+A1			Level of air flow resistivity				AFr
		Measurement according to EN ISO 9053-1			≥ 5				

<sup>1)</sup> Value with greatest numerical tolerance.

<sup>2)</sup> Value with lowest numerical tolerance.

<sup>3)</sup> Declared values were set under the following conditions: (reference temperature 10 °C, humidity  $u_{dry}$  reached by drying) according to EN ISO 10456.

<sup>4)</sup> 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.

<sup>5)</sup> Informative non-declared value beyond the scope of CPR, obtained by specific tests.

## RELATED DOCUMENTS

- Declaration of Performance
- Environmental Product Declaration
- ISO 9001, ISO 14001, ISO 45001

## More about the product

[www.isover.cz/en/products/mineralni-vlna/isover-woodsil](http://www.isover.cz/en/products/mineralni-vlna/isover-woodsil)



1/8/2025 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.