



# Isover Top V Final

## Stone wool insulation

### TECHNICAL SPECIFICATION

Insulating slabs with bevelled edges are made of Isover mineral wool with perpendicular fibres. The production is based on the 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 and the edges are then trimmed by bevelling of 20 mm at a 45° angle. The entire fibre surface is hydrophobic and the fibres are perpendicular to the wall plane. Finally it is sprayed with a white or grey topcoat on the front surface of the board to give a smooth finish.



### APPLICATION

Isover Top V Final slabs with bevelled edges are suitable for interior wall and ceiling insulation, where they are fully glued on a sufficiently flat and bearing surface. These slabs placed regularly side by side in bond or broken bond can conceal minor irregularities in the underlay surface and create the effect of bossage. The surface coating is white and highly opaque, thanks to which further surface treatment is only necessary in case of demanding architectural requirements. Another layer of sprayed facade or interior painting may be applied on the existing paint.

### PACKAGING, TRANSPORT, WAREHOUSING

Isover Top V Final insulation boards with bevelled outer edges are packed on pallets. The material must be transported and stored under conditions preventing its exposure to water or other degradation. **The material must be stored in a covered area.**

### BENEFITS

- Up to 50% faster workability than standard laths thanks to 1 200 × 333 mm slabs.
- Surface sprayed with a white or grey topcoat with high paint opacity.
- Can be used without surface adjustment.
- Does not require anchoring.
- Klesser time requirements than ETICS.
- Slabs can cover small surface bumps.
- "Bossage" effect on ceiling.
- High tensile strength (can be applied on ceilings).
- Good thermal insulation.
- Fire resistance.
- Excellent noise absorption properties.
- 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, glued, brushed, etc.

### DIMENSIONS AND PACKAGING

Thickness [mm]	Length × width [mm]	Quantity per pallet [pcs]	Quantity per pallet [m <sup>2</sup> ]	Declared thermal resistance R <sub>D</sub> [m <sup>2</sup> ·K·W <sup>-1</sup> ]
50*	1 200 × 333	120	48.0	1.25
60*	1 200 × 333	99	39.6	1.50
80*	1 200 × 333	75	30.0	2.00
100*	1 200 × 333	60	24.0	2.50
120*	1 200 × 333	48	19.2	3.00
140*	1 200 × 333	42	16.8	3.50
150*	1 200 × 333	39	15.6	3.75
160*	1 200 × 333	36	14.4	4.00
180*	1 200 × 333	33	13.2	4.50
200*	1 200 × 333	30	12.0	5.00

\* Consult the producer for terms of delivery.

### TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
<b>Geometric shape</b>				
Length <i>l</i>	[%, mm]	EN 822	±2 %	
Width <i>b</i>	[%, mm]	EN 822	±1,5 %	
Thickness <i>d</i>	[%, mm]	EN 823	-1 % or -1 mm <sup>9)</sup> and +3 mm	Class of thickness tolerances T5
Deviation from squareness of the edge on length and width <i>S<sub>e</sub></i>	[mm·m <sup>-1</sup> ]	EN 824	5	
Deviation from flatness <i>S<sub>max</sub></i>	[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(70,90)

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Parameter	Unit	Methodology	Value	Designation code
<b>Thermal technical properties</b>				
Declared value of thermal conductivity coefficient $\lambda_D^{2)}$	[W·m <sup>-1</sup> ·K <sup>-1</sup> ]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.040	
Design thermal conductivity $\lambda_D^{3)}$	[W·m <sup>-1</sup> ·K <sup>-1</sup> ]	ČSN 73 0540-3	0.042	
Specific heat capacity $c_p$	[J·kg <sup>-1</sup> ·K <sup>-1</sup> ]	ČSN 73 0540-3	800	
<b>Mechanical properties</b>				
Compressive stress at 10% deformation $\sigma_{10}$	[kPa]	Declaration according to EN 826	30	Declared level of compressive stress at 10% deformation CS(10)30
Tensile strength perpendicular to faces $\sigma_{mt}$	[kPa]	Declaration according to EN 1607	30	Declared level of tensile strength perpendicular to faces TR30
<b>Fire safety properties</b>				
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	
<b>Hydrothermal properties</b>				
Short-term water absorption $W_p$	[kg·m <sup>-2</sup> ]	Declaration according to EN 13162+A1 Measurement according to EN ISO 29767	1	Declared level for short-term water absorption WS
Long-term water absorption by partial immersion $W_{lp}$	[kg·m <sup>-2</sup> ]	Declaration according to EN 13162+A1 Measurement according to EN ISO 16535	3	Declared level for long-term water absorption by partial immersion WL(P)
Water vapour diffusion resistance factor $\mu$	[-]	Declaration according to EN 13162+A1 Measurement according to EN 12086	1	Declared value for water vapour diffusion resistance factor MU1
<b>Other properties</b>				
Bevel of the edge against the walls	[mm]		20 mm ± 3 mm	
Density	[kg·m <sup>-3</sup> ]	EN 1602	70	

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

<sup>2)</sup> Declared values were set under the following conditions: (reference temperature 10 °C, humidity  $u_{dry}$  reached by drying) according to EN ISO 10456.

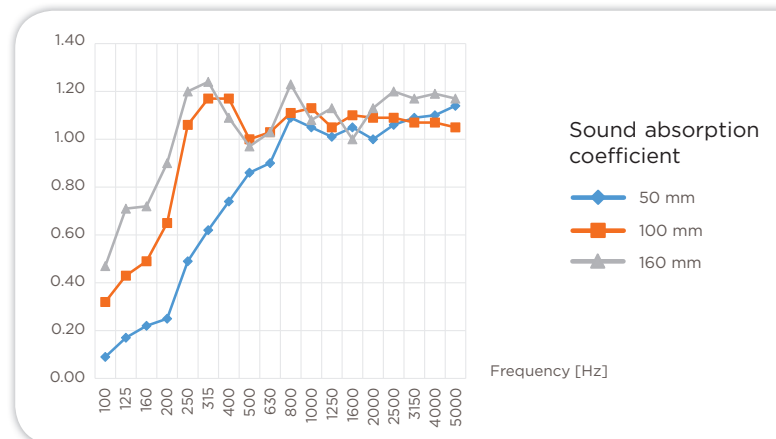
<sup>3)</sup> Valid for typical use in construction with risk of condensation. In the case of construction without any risk of condensation the declared thermal conductivity value can be used.

## ACOUSTICS - SOUND ABSORPTION

Thanks to the open fibre structure and optimum volume weight, the use of Isover Top V Final also has an impact on the room acoustics. The sound is not reflected by the insulated walls, but absorbed.

The use of Isover Top V Final insulation in a minimum thickness of 50 mm already leads to a significant improvement in the spatial acoustics of, for example, underground garages or basement spaces.

Specific values can be calculated based on measured values of practical sound absorption factors.



Parameter	Methodology						Value										Designation code					
Acoustic properties																						
Practical sound absorption coefficient $\alpha_p$		EN 13162+A1																				
		[-]	EN ISO 11654						Level of practical sound absorption coefficient										AP			
		Measurement according to EN ISO 354																				
		Frequency [Hz]	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000		
		Thickness	50 mm	0.09	0.17	0.22	0.25	0.49	0.62	0.74	0.86	0.90	1.09	1.05	1.01	1.05	1.00	1.06	1.09	1.10	1.14	
			100 mm	0.32	0.43	0.49	0.65	1.06	1.17	1.17	1.00	1.03	1.11	1.13	1.05	1.10	1.09	1.09	1.07	1.07	1.05	
		160 mm	0.47	0.71	0.72	0.90	1.20	1.24	1.09	0.97	1.03	1.23	1.08	1.13	1.00	1.13	1.20	1.17	1.19	1.17		
Weighted sound absorption coefficient $\alpha_w$		[-]	EN ISO 11654 (for NRC according ASTM C423)						Level of weighted sound absorption coefficient										AW			
		Single number value						$\alpha_w$						$\alpha_{str}$ (NRC)								
		Thickness	50 mm	0.75 (M. H)												0.84						
			100 mm	1.00												1.05						
			160 mm	1.00												1.10						

## RELATED DOCUMENTS

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

### More about the product

[www.isover.cz/en/products/isover-top-v-final](http://www.isover.cz/en/products/isover-top-v-final)



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