SVT code: 244
Identification code of the product-type: CZ0001-023
Specification code: MW-EN 13 162-T5-DS(70,90)-CS(10)40-TR80-WS-WL(P)-MU1

Isover NF 333

Stone wool insulation

TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool with perpendicular fibres. The production is based on the defibring method used for the mineral composition of the melt with other additives and ingredients. The mineral fibres that are produced processed into the final slab shape on the production line. The entire surface of the fibre is hydrophobic and the fibres are perpendicular to the wall plane. The slabs in the construction have to be suitably protected (layers of the contact wall insulation system).

APPLICATION

Isover NF 333 slabs are suitable for ETICS facade systems where the insulating slabs are fully glued on a sufficiently flat and bearing surface. The layers of contact insulating systems are applied on the slabs: bond, reinforcement grid, penetration, plaster, and paint. Smaller slab size and perpendicular orientation of fibres enables matching to curved surfaces. Furthermore, there is the possibility to regrind slab surface for keeping its face smooth. There are lesser requirements the for mechanical bond due to full gluing (see manufacturers of the ETICS system anchors for recommended bond plans). Upon agreement can be produced thickness. insulation up to 340 mm.

PACKAGING, TRANSPORT, WAREHOUSING

Insulation slabs are packed in PE film in loose bales or as bales on pallet. Isover NF 333 is supplied as standard on EPS beams including interleaving beams. Thicknesses above 300 mm are only available as loose slabs on a pallet.

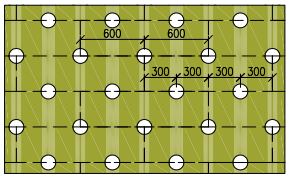
BENEFITS

- Up to 40% faster workability because of the slab dimensions 1 200 × 333 mm compared to normal strips and low consumption of anchors.
- High tensile strength (possibility of gluing heavy ceramic facings, possibility of use on ceilings).
- Possibility of bending the slabs on round walls.
- Lower demands on mechanical anchoring.
- Good thermal insulation performance.
- Fire resistance.
- Low vapour resistance – good water vapour penetrability.
- Environment-friendly and hygienic.
- Completely hydrophobic.
- Excellent acoustic properties in terms of noise absorption.
- Long life span.
- Resistant to wood-destroying pests, rodents, and insects.
- Easy workability – can be cut, drilled into, glued, brushed, etc.

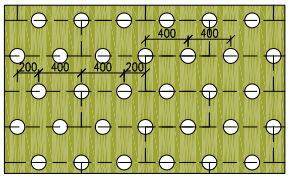
ANCHORING

Anchoring scheme according to TZÚS recommendations (Technical and Testing Institute) and CZB (Guild for Building Insulation).

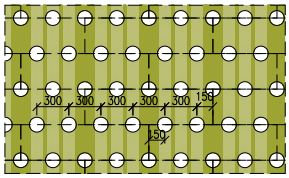
As a rule, it is anchored with facade dowels to with an extension plate ø 140 mm or space-formed dowels which allowto provide the anchor point with a plug.



5 pcs/m²



7,5 pcs/m²



10 pcs/m²

DIMENSIONS AND PACKAGING

Thickness [mm]	Length × width [mm]	Volume per package [pcs]	Volume per package [m²]	Volume per package [m³]	Quantity per pallet [pcs]	Quantity per pallet [m²]	Declared thermal resistance R_D [m²·K·W⁻¹]
30	1 200 × 333	20	8.00	0.240	12	95.99	0.75
40	1 200 × 333	15	6.00	0.240	12	71.99	1.00
50	1 200 × 333	12	4.80	0.240	12	57.59	1.25
60	1 200 × 333	8	3.20	0.192	15	48.00	1.50
80	1 200 × 333	6	2.40	0.192	15	36.00	2.00
100	1 200 × 333	6	2.40	0.240	12	28.80	2.50
120	1 200 × 333	4	1.60	0.192	15	24.00	3.00
140	1 200 × 333	3	1.20	0.168	18	21.60	3.50
150	1 200 × 333	4	1.60	0.240	12	19.20	3.75
160	1 200 × 333	3	1.20	0.192	15	18.00	4.00
180	1 200 × 333	3	1.20	0.216	15	18.00	4.50
200	1 200 × 333	3	1.20	0.240	12	14.40	5.00
220	1 200 × 333	2	0.80	0.176	18	14.40	5.50
240	1 200 × 333	2	0.80	0.192	15	12.00	6.00
260*	1 200 × 333	2	0.80	0.208	15	12.00	6.50
280*	1 200 × 333	1	0.40	0.112	27	10.80	7.00
300*	1 200 × 333	2	0.80	0.240	12	9.60	7.50

* Consult the producer for terms of delivery. Upon agreement can be produced thickness. Insulation up to 340 mm.

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Isover NF 333

Stone wool insulation

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code	
Geometric shape					
Length *l*	[%, mm]	EN 822	±1%		
Width *b*	[%, mm]	EN 822	±1,5%		
Thickness *d*	[%, mm]	EN 823	-1 % or -1 mm[1] and +3 mm	Class of thickness tolerances	T5
Deviation from squareness of the edge on length and width S_b	[mm·m^{-1}]	EN 824	2		
Deviation from flatness S_{max}	[mm]	EN 825	5		
Relative change in length $\Delta\varepsilon_l$, in width $\Delta\varepsilon_b$, in thickness $\Delta\varepsilon_d$	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions	DS(70/90)
Thermal technical properties					
Declared value of thermal conductivity coefficient λ_D[2]	[W·m^{-1}·K^{-1}]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.040		
Design thermal conductivity λ_u[3]	[W·m^{-1}·K^{-1}]	ČSN 73 0540-3	0.042		
Specific heat capacity c_d	[J·kg^{-1}·K^{-1}]	ČSN 73 0540-3	800		
Mechanical properties					
Compressive stress at 10% deformation σ_{10}	[kPa]	Declaration according to EN 826	40	Declared level of compressive stress at 10% deformation	CS(10)40
Tensile strength perpendicular to faces σ_{mt}	[kPa]	Declaration according to EN 1607	80	Declared level of tensile strength perpendicular to faces	TR80
Shear strength τ	[kPa]	Declaration according to EN 12090	20[4]	Level of shear strength	SS20
The point load at a given deformationi F_p	[N]	Declaration according to EN 12430	1000[4]		
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					
Short-term water absorption W_p	[kg·m^{-2}]	Declaration according to EN 13162+A1 Measurement according to EN 1609	1	Declared level for short-term water absorption	WS
Long-term water absorption by partial immersion W_{lp}	[kg·m^{-2}]	Declaration according to EN 13162+A1 Measurement according to EN 12087	3	Declared level for long-term water absorption by partial immersion	WL(P)
Water vapour diffusion resistance factor μ	[-]	Declaration according to EN 13162+A1 Measurement according to EN 12086	1	Declared value for water vapour diffusion resistance factor	MU1
Other properties					
Density	[kg·m^{-3}]	EN 1602	80–90		
Acoustic properties					

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	60 mm	0.20	0.70	1.00	1.00	0.95	0.95
	100 mm	0.45	1.00	1.00	1.00	1.00	1.00
	140 mm	0.65	1.00	1.00	1.00	1.00	1.00

Weighted sound absorption coefficient α_w
Sound Absorption Average α_{stf}
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_{stf}	NCR
Thickness	60 mm	0.95	-	0.90
	100 mm	1.00	-	1.00
	140 mm	1.00	-	1.00

Specific air flow resistivity *r*

	EN 13162+A1	Level of air flow resistivity						
[mm]	Measurement according to EN ISO 9053-1	100	120[5]	140[5]	150[5]	160	180[5]	200[5]
[kPa·s·m^{-2}]		11.5	11.5	11.5	11.5	11.5	11.5	11.5

Dynamic rigidity *s'*

[MN·m^{-3}]	EN 13162+A1	Value of dynamic rigidity						SD
[mm]		100	120[5]	140[5]	150[5]	160	180[5]	200[5]
[MN·m^{-3}]	Measurement according to ČSN ISO 9052-1 (idt. EN 29052-1	81.5	73.4	65.4	61.3	57.3	49.2	41.2

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

RELATED DOCUMENTS

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

More about the product

www.isover.cz/en/products/isover-nf-333

2/1/2025 The information provided herein is valid at the time of publication. The manufacturer reserves the right to change the data.

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