

# Isover FASSIL NT

## Mineral insulation from stone wool



Specification code: MW - EN 13162 - T4 - DS(T+) - MU1

### TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. The production method is based on fibering mineral composition melt and other additives and ingredients. The mineral fibres produced are processed into the final slab shape in the production line. The entire fibre surface is made water repellent. The slabs in the construction should be protected suitably against the weather effects (outer sheathing, alternatively diffusion foil).

### APPLICATION

Isover FASSIL NT slabs are suitable for insulation of outer walls of ventilated facade systems and are to be inserted into the grid under the cladding, or fitted mechanically in the multi-layer masonry. The slabs can be fitted mechanically using clamps for soft MW insulation. Insulating slabs are not glued to the surface. To harden the surface, these slabs are coated with black non-woven fibreglass fabric. It is necessary to protect the coating against an excessive wind impact if used on a ventilated facade. When the material is used to insulate ceilings, it is also necessary to use metal dowel pins with respect to fire security that cannot be positioned at the edge of the slab.

The coating is not suitable for additional treatment (painting, gluing, etc.) The material is suitable for fire protection system constructions where the

volume density  $\geq 50 \text{ kg.m}^{-3}$  is required. Superior energy saving insulation type  $\lambda_D = 0.035 \text{ W.m}^{-1}.\text{K}^{-1}$ .

### PACKAGING, TRANSPORT, WAREHOUSING

Isover FASSIL NT 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. They should be stored flat in sheltered space to maximum layer height of 2 m.

### 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

### DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	Packaging (m <sup>2</sup> )	Declared thermal resistance R <sub>D</sub> (m <sup>2</sup> .K.W <sup>-1</sup> )
Isover FASSIL NT 5	50*	1200 x 600	69.12	1.40
Isover FASSIL NT 6	60	1200 x 600	57.60	1.70
Isover FASSIL NT 8	80	1200 x 600	43.20	2.30
Isover FASSIL NT 10	100	1200 x 600	34.56	2.85
Isover FASSIL NT 12	120	1200 x 600	28.80	3.45
Isover FASSIL NT 14	140	1200 x 600	25.92	4.00
Isover FASSIL NT 16	160	1200 x 600	21.60	4.60

Thickness tolerance classification T4 complies with the allowed tolerance according to EN 13162: -3% or -3 mm, while the higher numerical value prevails, and + 3% or + 5 mm where the lower tolerance numerical value is predominant. \* Manufacturer should be consulted as for the minimum volume.

### TECHNICAL PARAMETERS

Parameter	Unit	Value	Norm
<b>THERMAL INSULATING PROPERTIES</b>			
Condition set for declared values I(10°C) and (u <sub>dry</sub> )	-	-	EN ISO 10456
Declared thermal conductivity coefficient $\lambda_D$	Wm <sup>-1</sup> .K <sup>-1</sup>	0.035	EN 12667
Specific heat capacity c <sub>d</sub>	Jkg <sup>-1</sup> .K <sup>-1</sup>	800	ČSN 73 0540-3
<b>MECHANICAL PROPERTIES</b>			
Specific load value	kN.m <sup>-3</sup>	0.50	EN 1991-1-1, EN 1990
<b>FIRE SAFETY PROPERTIES</b>			
Reaction to fire class	-	A1	EN 13501-1
Dimensional stability at (70±2)°C DS (T+)	%	≤ 1	EN 1604
Maximum temperature for use	°C	200	-
Melting temperature t <sub>f</sub>	°C	≥ 1000	DIN 4102 part 17
<b>OTHER PROPERTIES</b>			
Sound absorption coefficient $\alpha$ for perpendicular impact of acoustic waves (-) according to ISO 10534 - 1	Frequency	Hz	125 250 500 1000 2000 4000
	Thickness	60 mm	0.17 0.33 0.82 0.96 0.95 0.98
		80 mm	0.31 0.55 0.86 0.86 0.94 0.95
		100 mm	0.42 0.62 0.83 0.86 0.94 0.96
Mean sound absorption coefficient in the band of 250 - 4000 Hz $\alpha_{\text{mean}}$	Thickness	60 mm	0.83
	80 mm	0.85	ISO 10534-1
	100 mm	0.86	
Specific resistance to air flow AF <sub>f</sub>	kPa.s.m <sup>-3</sup>	14.5	EN 29053
Vapour resistance coefficient ( $\mu$ ) MU	-	1.0	EN 12086

### RELATED DOCUMENTS

- EC compliance certificate 1390-CPD-0305/11/P

1. 1. 2012 The information is valid up to date of publishing. The manufacturer reserves right to change the data.