

# Isover FASSIL

## 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 is based on 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. The entire fibre surface is hydrophobic. The slabs in the construction should be protected suitably against the weather effects (outer sheathing, alternatively diffusion foil).

### APPLICATION

Isover FASSIL slabs are suitable for insulation of the outer walls of ventilated facade systems and are to be inserted into the grid under the cladding, or mechanically bonded into the multi-layer masonry. The slabs can be mechanically bond using the clamps for soft MW insulations. Insulating slabs are not glued to the surface. To harden the surface it is possible to manufacture these slabs coated with black or white mineral non-woven fabric. This possible modification is called Fassil NT. The coating is not adapted to additional adjustments (painting, gluing, etc.). The material is suitable for fire protection system constructions where the density  $\geq 50 \text{ kg.m}^{-3}$  is required.

**Especially the energy saving insulation type  $\lambda_b = 0.035 \text{ W.m}^{-1}.\text{K}^{-1}$ .**

### DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	Per package (m <sup>2</sup> )	Declared thermal resistance R <sub>D</sub> (m <sup>2</sup> .K.W <sup>-1</sup> )
Isover FASSIL 5	50	1200 x 600	7.20	1.40
Isover FASSIL 6	60	1200 x 600	5.76	1.70
Isover FASSIL 8	80	1200 x 600	4.32	2.30
Isover FASSIL 10	100	1200 x 600	3.60	2.85
Isover FASSIL 12	120	1200 x 600	2.88	3.45
Isover FASSIL 14	140	1200 x 600	2.16	4.00
Isover FASSIL 16	160*	1200 x 600	2.16	4.60
Isover FASSIL 18	180*	1200 x 600	1.44	5.15
Isover FASSIL 20	200*	1200 x 600	1.44	5.75

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 l(10°C) and (u <sub>dn</sub> )	-	-	EN ISO 10456						
Declared thermal conductivity coefficient $\lambda_b$	Wm <sup>-1</sup> .K <sup>-1</sup>	0.035	EN 12667						
Specific heat capacity c <sub>d</sub>	J.kg <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 temperature (70 ± 2) °C DS (T+)	%	≤ 1	EN 1604						
Maximum temperature for use	°C	200	-						
Melting temperature t <sub>i</sub>	°C	≥ 1000	DIN 4102 part 17						
<b>ACOUSTIC PROPERTIES</b>									
Acoustic 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
		120	mm	0.49	0.73	0.84	0.89	0.98	0.98
Mean acoustic absorption coefficient in the band of 250 - 4000 Hz $\alpha_{str}$	Thickness	mm	0.83			ISO 10534-1			
	80	mm	0.85						
	100	mm	0.86						
	120	mm	0.90						
<b>OTHER PROPERTIES</b>									
Specific resistance against air flow AF <sub>r</sub>	kPa.s.m <sup>-2</sup>	14.5	EN 29053						
Moisture resistance factor ( $\mu$ ) MU	-	1	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.

### PACKAGING, TRANSPORT, WAREHOUSING

Isover FASSIL 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