

# Isover ORSIK

## Mineral insulation from stone wool



Specification code: MW - EN 13162 - T2 - MU1

### TECHNICAL SPECIFICATION

Insulating slabs made of Isover mineral wool. The production is based on defibering 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, increased relative inner humidity and condensate (diffusion and vapour-proof foil).

### APPLICATION

Isover ORSIK slabs are suitable for unloaded thermal, acoustic and fire insulation of pitch roofs especially with insertion between rafters and additional frame as well, into partition walls, wood ceilings insulations, false ceilings, and cavities.

### PACKAGING, TRANSPORT, WAREHOUSING

Isover ORSIK 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)	Per package (m <sup>2</sup> )	Declared thermal resistance R <sub>D</sub> (m <sup>2</sup> .K.W <sup>-1</sup> )
Isover ORSIK 4	40	1200 x 600	8.64	1.05
Isover ORSIK 5	50	1200 x 600	7.20	1.30
Isover ORSIK 6	60	1200 x 600	5.76	1.60
Isover ORSIK 8	80	1200 x 600	4.32	2.10
Isover ORSIK 10	100*	1200 x 600	4.32	2.65
Isover ORSIK 12	120*	1200 x 600	3.60	3.20
Isover ORSIK 14	140*	1200 x 600	2.88	3.75
Isover ORSIK 16	160*	1200 x 600	2.88	4.25
Isover ORSIK 18	180*	1200 x 600	2.16	4.80
Isover ORSIK 20	200*	1200 x 600	2.16	5.35

Thickness tolerance classification T2 complies with allowed tolerance according to EN 13162: - 5% or - 5 mm, while the higher numerical value prevails and + 15% or + 15 mm where the lower tolerance numerical value is predominant. \* Compressed packaging

### 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 λ <sub>D</sub>	Wm <sup>-1</sup> .K <sup>-1</sup>	0.038	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>										
Tensile strength in slab level (σ <sub>t</sub> )	kPa	≥ 1	EN 1608							
Specific load value	kN.m <sup>-3</sup>	0,30	EN 1991-1-1, EN 1990							
<b>FIRE SAFETY PROPERTIES</b>										
Reaction to fire class	-	A1	EN 13501-1							
Maximum temperature for use	°C	200	-							
Melting temperature t <sub>t</sub>	°C	≥ 1000	DIN 4102 part 17							
<b>ACOUSTIC PROPERTIES</b>										
The practical sound absorption coefficient α <sub>p</sub> according to EN ISO 354 and EN ISO 11654	Frequency	Hz	125	250	500	1000	2000	4000		
	Thickness	40	mm	0.15	0.40	0.80	0.90	0.95	0.95	
		60	mm	0.20	0.65	1.00	1.00	0.95	1.00	
		80	mm	0.30	0.90	1.00	1.00	1.00	1.00	
		100	mm	0.45	1.00	1.00	1.00	1.00	1.00	
Definition of single number value according to EN ISO 11654	Single number value	-	α <sub>w</sub>			α <sub>stf</sub>			NCR	
	Thickness	40	mm	0.70 (H)			0.75			0.75
		60	mm	0.95			0.90			0.90
		80	mm	1.00			0.99			1.00
		100	mm	1.00			1.04			1.05
<b>OTHER PROPERTIES</b>										
Moisture resistance factor (μ) MU	-	1	EN 12086							

### RELATED DOCUMENTS

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

1. 4. 2012 The information is valid up to date of publishing. The manufacturer reserves right to change the data.