

Isover R

Mineral insulation from stone wool



Specification code: MW - EN 13162 - T4 - DS(70, -) - CS(10)30 - TR1 - WS - WL(P) - 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 have to be protected suitably (vapour-proof foil, water-proofing, flat roof bearing layer, etc.)

APPLICATION

Isover R slabs are designed for thermal, acoustic and fire insulation of the flat warm decks. The slabs are entirely used as an underlayer to another spreading thermal insulative course, e.g. Isover S. Slabs are to be laid on vapour barrier, supporting construction or gravity flow system. The gravity flow system is possible to create from Isover SD gravity flow slabs or as well as from Isover DK double gravity flow wedge blocks in gravity flow up to 15%.

Whole structure is recommended to complete with Isover AK attic wedge blocks which helps to better change the horizontal direction of the water-proofing into the perpendicular direction.

PACKAGING, TRANSPORT, WAREHOUSING

Isover R insulating slabs are packed into the PE foil to the maximum high 1.3 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

- very good thermal insulation performance
- fire resistance
- 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.

DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	Per package (m ²)	Declared thermal resistance R _D (m ² .K.W ⁻¹)
Isover R 3*	30	2000 x 1200	50.40	0.80
Isover R 6	60	2000 x 1200	48.00	1.60
Isover R 8	80	2000 x 1200	38.40	2.15
Isover R 10	100	2000 x 1200	31.20	2.70
Isover R 12	120	2000 x 1200	24.00	3.20
Isover R 14	140	2000 x 1200	19.20	3.75
Isover R 16	160	2000 x 1200	19.20	4.30

Thickness tolerance classification T4 complies with allowed tolerance according to EN 13162: -3% or - 3 mm, while the higher numerical value prevails and +5% or + 5 mm, while the lower numerical value prevails. * Only for Saint-Gobain Combi Roof Systems

TECHNICAL PARAMETERS

Parameter	Unit	Value	Norm
THERMAL INSULATING PROPERTIES			
Condition set for declared values λ (10°C) and (u dry)	-	-	EN ISO 10456
Declared value of the thermal conductivity coefficient λ_D (based on the set of measured values according to EN 12667)	W.m ⁻¹ .K ⁻¹	0.037	EN 13162
Specific heat capacity c_d	J.kg ⁻¹ .K ⁻¹	800	ČSN 73 0540-3
MECHANICAL PROPERTIES			
Compressive stress at 10% deformation (σ_{10}) CS(10)	kPa	≥ 30	EN 826
Perpendicular tensile strength (σ_{mt}) TR	kPa	≥ 1	EN 1607
Dimensional stability within 70 °C and 48 hours	% of the length, thickness, width	1	EN 1604
Specific load value	kN.m ⁻³	1.42 and 1.00 ¹⁾	EN 1991-1-1, EN 1990
FIRE SAFETY PROPERTIES			
Reaction to fire class	-	A1	EN 13501-1
Maximum temperature for use	°C	200	-
Melting temperature t_i	°C	≥ 1000	DIN 4102 part 17
OTHER PROPERTIES			
Diffusion resistance index (μ) MU	-	1	EN 12086
Moisture absorption short term/long term WS / WL(P)	kg.m ⁻²	1 / 3	EN 1609, EN 12087

¹⁾ In term of the roof construction stress the upper or the lower specific value can be considered.

RELATED DOCUMENTS

- EC compliance certificate 1390-CPR-0305/11/P
- Declaration of Performance CZ0001-033 (www.isover.cz/DOP)

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