

HEALTHY INSULATION CAN NATURALLY DO MORE.

Technical data sheet

OPTIMAL 18kg/m³



Sheep's wool insulation ISOLENA Optimal with biocide-free wool protection Ionic Protect® made from 100% pure sheep's wool without synthetic additives or supporting fibres. The insulating material is renewable, durable, reusable, fully recyclable and certified with the NaturePlus eco-label.



Form of delivery

Article variants according to price list, special dimensions and formats on request.

Thickness mm	Width mm	Length mm
30,00	600,00	12 000,00
40,00	600,00	12 000,00
50,00	600,00	9 000,00
50,00	625,00	9 000,00
50,00	650,00	9 000,00
60,00	600,00	9 000,00
60,00	650,00	9 000,00
80,00	600,00	6 000,00
80,00	625,00	6 000,00
80,00	650,00	6 000,00
100,00	600,00	6 000,00
120,00	600,00	6 000,00
140,00	600,00	3 000,00



CE CE-002/OPI/2020-01-15

Applications

Thermal insulation: Ceiling - not accessible, Top floor ceiling, tie-beam roof, External wall, Facade insulation, Roof insulation, Between rafter insulation, Rafter insulation

Sound insulation: Ceiling insulation, suspended ceiling, Sound proof ceiling, Acoustic ceiling, Floor, Sub floor insulation, Floor insulation

Thermal and sound insulation: Internal wall, Partition wall insulation, Installation level, Partition wall lining, Room air renovation

Technical data: Product

Property	Value	Unit of measurement	Standard
Mould growth intensity	0		EAD 040005-00-1201 Annex B
Eco-label NaturePlus	0103-099-0101		
Thermal conductivity	0,038	λtr W/mK	
Length-related flow resistance kPa s/m ²	4,1	kPa s/m ²	EN 29053-1
Weighted Sound Absorption Coefficient	0,75	α _w	EN ISO 11654
Resistance to insect pests	Klasse 0		EAD 040005-00-1201, Annex C
Vapour diffusion resistance factor μ	1	μ	EN ISO 12572
Water absorption during short-term, partial immersion WS	0,98-2,45	kg/m ²	EN 1609
Specific heat capacity c	1760	J/kg K	
European technical approval	ETA-07/0214		

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Technical data: Product

Property	Value	Unit of measurement	Standard
Water absorption during long-term, partial immersion WL(P)	0,98-2,45	kg/m ²	EN ISO 16535
Borates toxic to reproduction: None			DIN EN 16516
Fire behavior	D-s2, d0		DIN EN 13501-1
Fire behaviour group according to VKF fire protection guidelines (Switzerland)	RF3		SN EN 13501-1

Technical data: System

Proof of property: 007

Property	Value	Unit of measurement	Standard
Fire behavior	B-s1, d0		EN 13501-1

System description
- 12mm perforated acoustic ceiling panel, Hole pattern 8/18 R
- Lined with 40 mm Sheep wool insulation Optimal 18 kg/m³
- 60mm Back ventilation

Proof of property: 038

Property	Value	Unit of measurement	Standard
Fire resistance class	EI90		EN 13501-2

System description
- Non-loadbearing insulated double metal stud frame partition Knauf W115
- Clad on both sides with two layers of 12,5 mm Knauf GKF boards and insulated with two layers of 50 mm Sheep wool insulation Optimal 18 kg/m³

Proof of property: 039

Property	Value	Unit of measurement	Standard
Weighted sound reduction index	47 dB	R _w	ÖNORM EN ISO 717-1

System description
Single clad single metal stud frame partition Knauf W111 with 80 mm Sheep wool insulation Optimal 18 kg/m³

Proof of property: 042

Property	Value	Unit of measurement	Standard
Weighted sound reduction index	54 dB	R _w	ÖNORM EN ISO 717-1

System description
Double clad single metal stud frame partition Knauf W112 with 80 mm Sheep wool insulation Optimal 18 kg/m³

Proof of property: 043

Property	Value	Unit of measurement	Standard
Weighted sound reduction index	67 dB	R _w	ÖNORM EN ISO 10140-2

System description
Double clad double metal stud frame partition Knauf W115 with 80 mm Sheep wool insulation Optimal 18 kg/m³

Ecological indicators

All ecological indicators according to EN-15804 such as GWP total, GWP biogenic, PENRT etc. can be found in the [Environmental Product Declaration \(EPD\)](#).

Test certificates upon request.

