

HEALTHY INSULATION CAN NATURALLY DO MORE.

ISOLENA

Technical data sheet

OPTIMAL PLUS 22kg/m³



Sheep's wool insulation ISOLENA Optimal Plus 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	600	9 000
30	625	9 000
60	600	6 000



CE CE-001/OPP/2022-08-03

Applications

Sound insulation: Ceiling insulation, suspended ceiling, Sound proof ceiling, Acoustic ceiling

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	0,035	λtr W/mK	EN 12667, ISO 8302
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		
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
Length-related flow resistance	> 5	kPa s/m ²	EN 29053-1



SCAN QR CODE FOR THE SHEEPWOOL PLUS POINTS!

Technical data: System

Proof of property: 032

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,75	α _w	EN ISO 11654

System description

- 25 mm Heradesign® superfine, area mass density m"≈12,5 kg/m² system W-AK01, Panel format 1200x600 mm
- 30 mm Wooden laths along the panel joints, in between 30 mm Sheep wool insulation Optimal Plus 22 kg/m³

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Technical data: System

- 145 mm Airspace with substructure, Reverberation chamber
- Construction E200

Proof of property: 034

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,80	α_{wv}	EN ISO 11654

System description

- 25 mm Heradesign® superfine, area mass density $m'' \approx 12,5 \text{ kg/m}^2$ system W-AK01, Panel format 1200x600 mm
- 2 x 30 mm Wooden laths along the panel joints, in between 2 x 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- 115 mm Airspace with substructure, Reverberation chamber
- Construction E200

Proof of property: 047

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,75	α_{wv}	EN ISO 11654

System description

- 12,5mm Vogl perforated ceiling panel, Hole pattern 8/18R with acoustic fleece AV 2010, mass density = 8,5 kg/m³, Perforated area percentage 15,5 %
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 048

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,80	α_{wv}	EN ISO 11654

System description

- 12,5mm Vogl perforated ceiling panel, Hole pattern 12/25Q with acoustic fleece AV 2010, mass density = 7,7 kg/m³, Perforated area percentage 20,0 %
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 059

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,70	α_{wv}	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/18 R with acoustic fleece, Perforated area percentage 15,5 %
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 060

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,70	α_{wv}	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/18 R with acoustic fleece, Perforated area percentage 15,5 %
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E400

Proof of property: 061

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,75	α_{wv}	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/18 Q with acoustic fleece, Perforated area percentage 19,8%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 062

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,75	α_{wv}	EN ISO 11654

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Technical data: System

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/18 Q with acoustic fleece, Perforated area percentage 19,8%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E400

Proof of property: 063

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,70	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 12/25 R with acoustic fleece, Perforated area percentage 18,1%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 064

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,70	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 12/25 R with acoustic fleece, Perforated area percentage 18,1%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E400

Proof of property: 065

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,75	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 12/25 Q with acoustic fleece, Perforated area percentage 23%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 066

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,80	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 12/25 Q with acoustic fleece, Perforated area percentage 23%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E400

Proof of property: 067

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,50	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/15/20 R with acoustic fleece, Perforated area percentage 9,9%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E200

Proof of property: 068

Property	Value	Unit of measurement	Standard
Weighted Sound Absorption Coefficient	0,55	α_w	EN ISO 11654

System description

- 12,5mm Knauf Cleaneo perforated acoustic ceiling panel, Hole pattern 8/15/20 R with acoustic fleece, Perforated area percentage 9,9%
- Lined with 30 mm Sheep wool insulation Optimal Plus 22 kg/m³
- Construction E400

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Sound absorption coefficient: System

	α_p , f [Hz] 125	α_p , f [Hz] 250	α_p , f [Hz] 500	α_p , f [Hz] 1000	α_p , f [Hz] 2000	α_p , f [Hz] 4000
032	0,45	0,90	0,75	0,65	0,75	0,90
034	0,55	1,00	0,80	0,75	0,80	0,90
047	0,40	0,65	0,85	0,70	0,70	0,65
048	0,40	0,70	0,90	0,75	0,80	0,75
059	0,35	0,65	0,80	0,70	0,60	0,65
060	0,50	0,65	0,70	0,70	0,60	0,65
061	0,35	0,70	0,85	0,75	0,65	0,70
062	0,55	0,70	0,75	0,75	0,70	0,75
063	0,35	0,70	0,80	0,70	0,65	0,60
064	0,55	0,70	0,70	0,75	0,65	0,65
065	0,35	0,75	0,90	0,75	0,70	0,65
066	0,55	0,75	0,75	0,80	0,75	0,70
067	0,35	0,55	0,60	0,55	0,40	0,45
068	0,45	0,55	0,55	0,60	0,00	0,45

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).

Useful additional documents such as tender texts, links to building material databases etc. can be found in compact form in the [download area](#) of our website

Test certificates upon request.