OPTIMAL

Product data sheet

Lehner 100% WOOL ISOLENA

ecomat.be info@

Item number	OPI01800BR24
Density	18 kg/m³
Raw material	100% wool sustainable, durable, recylable, without synthetic additives
Application	Roof extension, Ceiling – overhead insulation, Interior wall, Interior room air renovation: partition walls, installation level, wooden construction

PRODUCT DESCRIPTION

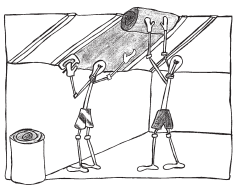
- The multiflexible thermal and sound insulation is the best solution for standard constructions with up to 140 mm insulation thickness. The thickness is elastic and also encloses cable ducts without further processing.
- The insulation roll with the beam felt for quick mechanical fixing into the horizontal and inclined supporting structures (rafters, frames, transoms, etc.).
- Small excesses in width flexibly adapt to the construction.

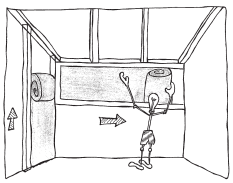
WOOL PROTECTION

- Biocide-free wool protection, long-term tested by EAD/CUAP standards and patented procedure.
- **IONIC PROTECT®** is a slight alteration of the molecular protein structure of the wool fibre through a plasma-ion treatment. This specific process is unique as it permanently prevents the wool from being a nutritional source for wool parasiteslinge.
- Through the wool protection, our products have an **unlimited shelf-life.**

INSTALLATION

- **Quick installation,** no waste and dust collect. Ideally suited for working overhead.
- Insert the insulation rolls from bottom to top and fix the surface felt to the rafters by stapling it laterally.
- The rolls can be cut to length by **tearing by hand** or with the **ISOLENA** cutting device.





PROPERTIES

Sheep wool insulation

Air purification

Humidity regulation

Sound insulation Fire protection

Sustainable

Wool protection

OPTIMAL

Product data sheet

ISOLENA NEWSLETTER
Receive relevant news every three weeks:
https://bit.ly/3iKhtKg

Subscribe now!

FORM OF DELIVERY

DIMENSIONS*

Width: 250 – 2.300 mm in 50 mm increments (250, 300, 350, 400 mm,…)
Thickness: 30 – 140 mm in 10 mm increments (30, 40, 50, 60 mm,…)

Article	kg/m³	Thickness (mm)	Width (mm)	Lenghts (mm)	Item/PU	m²/PU	PU/Pal	m²/Pal
OPI18	18	30	600	12.000	2	14,40	20	288,00
OPI18	18	40	600	12.000	2	14,40	20	288,00
OPI18	18	40	650	12.000	2	11,70	20	234,00
OPI18	18	50	600	9.000	2	10,80	18	194,40
OPI18	18	60	600	9.000	2	10,80	16	172,80
OPI18	18	80	600	6.000	2	7,20	18	129,60
OPI18	18	80	650	6.000	2	7,80	18	140,40
OPI18	18	100	600	6.000	2	7,20	14	100,80
OPI18	18	120	600	6.000	2	7,20	12	86,40
OPI18	18	140	600	3.000	2	3,60	20	72,00

*Special sizes available from a minimum production quantity of one pallet approx. 10,30 m³ at no extra charge.

TECHNICAL DATA

European technical approval	ETA-07/0214						
Nature Plus®	0103-1006-099-1						
Thermal conductivity λ_{tr}	0,038 W/mK						
Vapour diffusion resistance factor μ	1						
Specific heat capacity c	1760 J/kgK						
Length-related flow resistance according to EN 29053	r = 4,1 kPa s/m²						
Fire behaviour according to EN 13501-1	D-s2, d0; CH: RF3						
Fire behaviour according to acoustic ceiling element according to EN 13501-1*	B-s1, d0						
Degree of sound absorption with a thickness of 50 mm according to ISO 354	f [Hz]	125	250	500	1.000	2.000	4.000
	α_S	0,43	0,47	0,68	0,76	0,86	0,95
Assessed degree of sound absorption D. 50 mm according to ÖNORM EN ISO 11654	αw = 0,75						
Mould growth intensity according to EN ISO 846	0						

*__Perforated Plasterboard__ thickness 12 mm, perforation Ø 18/18 – 5 mm, __ISOLENA Optimal__ thickness 40 mm, 60 mm back ventilation.

ECOLOGICAL PARAMETERS

Compliant with the NaturePlus® Life cycle assessment **ISOLENA**

Use of non-renewable **primary energy** without the non-renewable primary energy carriers used as raw material (**PENRE [MJ, lower calorific value]**)	23,44	MJ/kg
Global warming potential Total of GHG emissions and CO_2 storage (**GWP** 100 total)	0,83	kg $CO_{2\text{-äquiv.}}$/kg
Acidification potential of soil and water (AP)	4,63E-03	kg $SO_{2\text{-äquiv.}}$/kg
Potential for the formation of tropospheric ozone (**POCP**)	8,04E-04	kg $C_2H_{4\text{-äquiv.}}$/kg
Eutrophication potential (EP)	2,08E-03	kg PO_4^{3} $_{\text{-äquiv.}}$/kg

ecomat eco bouwen & wonen

klimaaktiv partner

Wir sind Klimabündnis Betrieb

THE CAMPAIGN FOR WOOL

TECHNICAL APPROVAL EUROPEAN No. 07/0214

natureplus No. 0103-1006-099-1

CE

Energy Globe Award

Dubomat ecomat

ISOLENA NATURFASERVLIESE GMBH | KLOSTERSTRASSE 20 | AT-4730 WAIZENKIRCHEN
TEL +43 7277 2496-198 | OFFICE@ISOLENA.AT | ISOLENA.AT

isolena.at @lehnerwool