

Optimal

Sheep's wool insulation 18kg/m³

Sheep's wool felt made from and contains 100% pure sheep's wool and needled on one side

Fitted with pesticide-free tested wool protection **lonic Protect**[®]; permanence test in accordance with CUAP/EAD, Nature Plus certificate, ETA; no foreign supporting fibers or mesh

Very good sound absorption properties, very well suited to acoustic ceilings

Very good heat insulation properties for floor, wall, ceiling and roof structures

Very good water absorption characteristics and very good moisture characteristics in moisture-impervious structures with increased risk of condensate formation

Hygroscopic, yet hydrophobic

Especially suitable for all insulation areas with wooden posts or wooden slats as primary structure

Particularly easy to assemble thanks to carrier felt on one side

Application:

Tie-beam ceiling, roof, top floor ceiling, wall, facade, floor, acoustic ceiling, service cavities, wood frame construction, log planks

Handling:

Cutting to length can be done manually without tools. Insert the insulation rolls from bottom to top and fix the surface felt to the rafters by stapling it laterally.

Additional Uses:

Healthy ambient air thanks to the air-cleaning action of sheep's wool

Pleasant indoor climate thanks to the moisture-regulating action of sheep's wool

Technical Data:

Bulk density:	18	kg/m ³					
Heat conductivity λ_{totr}^*	0,0385	W/mK					
Coefficient of vapor diffusion resistance μ :	1						
specific heat capacity c:	1760	J/kgK					
length-based current resistance r:**	4,1	kPa*s/m ²					
Flammability class:***	E s1, do					BKZ in CH: 5,3	
Classification of acoustic ceiling element:****	B s1, do						
Degree of sound absorption: *****	f [Hz]	125	250	500	1000	2000	4000
	α_s	0,43	0,47	0,68	0,76	0,86	0,95

*MA 39 - VFA2036.02/1998 **Quiring Consultants P-841-2001/1-1 ***MA 39 - VFA 2001-0995.01 ****Plasterboard 12mm thickness, punching 18/18-5mm diameter / ISOLENA Optimal (40mm) / 60mm rear ventilation *****Quiring Consultants RB-715-2001/09-1

Art.Nr.: SD OPI 18



Included in shipment:

Form of delivery: Rolls in micro-perforated plastic bags

Sheep's wool insulation OPTIMAL 18 kg/m ³	Ordering thickness in cm	Length in cm*	Width in cm*								
			PU = 3 pcs.		PU = 2 pcs.			PU = 1 pc.			
SD OPI 18	16	300	30	40	50	60	65	70	80	90	120
SD OPI 18	14	300	30	40	50	60	65	70	80	90	120
SD OPI 18	12	600	30	40	50	60	65	70	80	90	120
SD OPI 18	10	600	30	40	50	60	65	70	80	90	120
SD OPI 18	8	600	30	40	50	60	65	70	80	90	120
SD OPI 18	6	900	30	40	50	60	65	70	80	90	120
SD OPI 18	5	900	30	40	50	60	65	70	80	90	120
SD OPI 18	4	900	30	40	50	60	65	70	80	90	120
SD OPI 18	3	900	30	40	50	60	65	70	80	90	120

* Prices and special sizes on request/Delivery time according to delivery schedule or on request

Ecological parameters of ISOLENAWOLLE:

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 Sum of GHG emissions and CO₂ storage (**GWP₁₀₀ total**)

0,83 kg CO₂-equiv. / kg

Acidification potential of soil and water (AP)

4,63E-03 kg SO₂-equiv. / kg

Potential for the formation of tropospheric ozone (**POCP**)

8,04E-04 kg C₂H₄-equiv. / kg

Eutrophication potential (EP)

2,08E-03 kg PO₄³⁻-equiv. / kg

Fire protection classification:

Classification of the fire behavior of an acoustic ceiling element:

- Perforated plasterboard panel, 12 mm thick, perforation 18/18-5 mm diameter
- Isolena Optimal, thickness 40 mm, density 18 kg/m³
- 60 mm rear ventilation

Compliant with Austrian standard EN 13501-1, the construction product described is classified B s1, do with regard to its fire behavior. ISOLENAWOLLE is thoroughly inspected by the accredited bodies.

We reserve the right to make technical changes and correct errors.