



THERMOSILENTRock

THERMAL-ACOUSTIC INSULATION IN RIGID PANELS OF WATER-REPELLENT ROCK WOOL FOR THERMALLY INSULATING OUTER WALLS WITH JACKET INSULATION OR ROOFS

CHARACTERISTICS			ENVIRONMENTAL		
ACOUSTIC INSULATION	THERMAL INSULATION	REACTION TO FIRE	ECO GREEN	RECYCLABLE	SAFE WASTE

1 PROBLEM

Wooden roofs, which are particularly light in comparison with clay cement roofs, require insulation with high density fibre panels.

2 SOLUTION

THERMOSILENTRock is a thermal and acoustic insulation panel ideally suited for insulating wooden roofs, whether ventilated or not. It consists of a rigid fireproof panel of high density rock wool treated with thermo-setting resins.

THERMOSILENTRock is fire resistant and is classified A1 pursuant to standard EN 13501-1 and class 0 pursuant to Italian standards. The rock fibre of **THERMOSILENTRock** is insensitive to damp and the panel remains stable as the temperature varies.

APPLICATION FIELDS

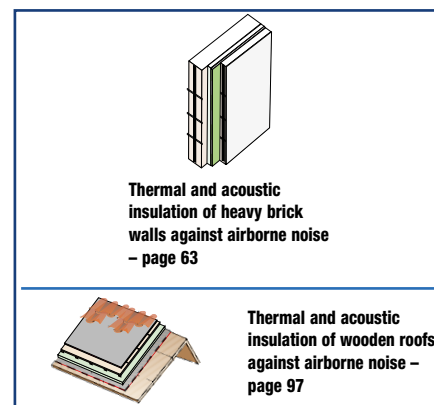
THERMOSILENTRock is used to thermally and acoustically insulate outer walls with the jacket installation method and as thermal and acoustic insulation for low density roofs, such as ventilated and unventilated wooden roofs and sheet metal roofs.

METHOD OF USE

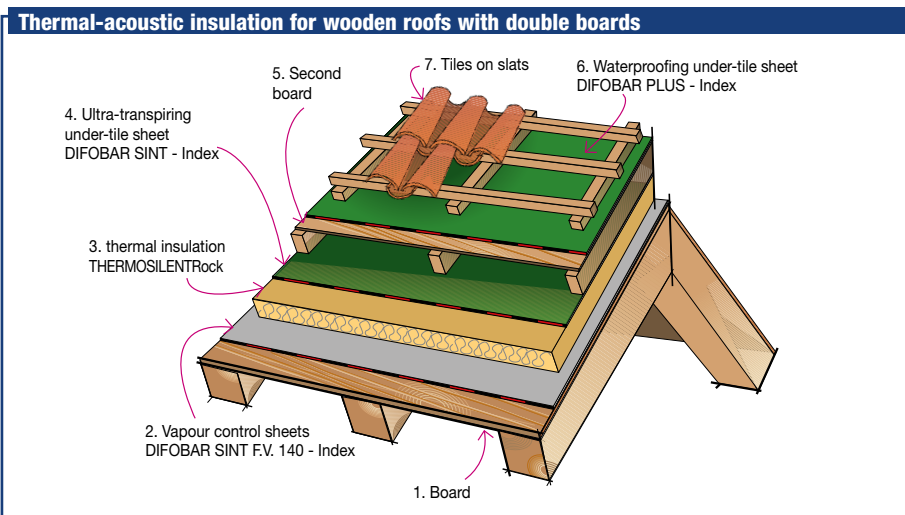
The **THERMOSILENTRock** panel is generally laid directly onto the vapour barrier film over the entire area of the roof, due to its high density and compactness, the tile slats can be installed directly over the **THERMOSILENTRock** panel and secured with nails or mechanical mounting to the underlying board (which thus includes the **THERMOSILENTRock** panels).

The **THERMOSILENTRock** panel is generally installed directly onto the vapour barrier layer, sandwiched between wooden slats of the same thickness as the insulation itself, when constructing wooden roofs, whether ventilated or not. Depending on the thermal and acoustic requirements, the **THERMOSILENTRock** panels may also be installed in several layers to obtain the maximum insulation and energy rating. The **THERMOSILENTRock** panel, due to its high density, is easy to handle and cut as needed on site (a cutter or even a kitchen knife will do the job).


For jacket insulation jobs, the substrate must be clean and free of dust. The laying surface must be flat and regular. Secure the supporting profiles before gluing the panels (the first row of panels, closest to ground level, must be in extruded polystyrene without coating).



It can be glued with cement adhesive or paste (like COATBOND, COATBOND FINE FIBER, RASOFINE ADHESIVE). Apply the adhesive in a strip around the perimeter and several points at the centre or with a toothed trowel, and apply in horizontal layers from the bottom upwards. Wait at least 24 hours for the glue to harden before applying mushroom head anchor bolts.



THERMOSILENTRock

Type		40	50	60	80	100	120	140
Thickness		40 mm	50 mm	60 mm	80 mm	100 mm	120 mm	140 mm
Dimension		1.0x1.2 m	1.0x1.2 m	1.0x1.2 m	1.0x1.2 m	1.0x1.2 m	1.0x1.2 m	1.0x1.2 m
Thermal conductivity λ		0.036 W/mK	0.036 W/mK	0.036 W/mK	0.036 W/mK	0.036 W/mK	0.036 W/mK	0.036 W/mK
Thermal resistance R_D	EN 12667	1.10 m ² K/W	1.35 m ² K/W	1.65 m ² K/W	2.20 m ² K/W	2.75 m ² K/W	3.30 m ² K/W	3.85 m ² K/W
Density.	UNI 9947				120 kg/m ³			
Dynamic stiffness	UNI EN 29052/1				$s' < 20$ MN/m ³			
Resistivity to air flow r					60 KPas/m ²			
Aqueous vapour diffusion coefficient					$\mu = 1$			
Specific heat.					1.03 KJ/kgK			
Lower heating power					21 600 W/mK			
Compressive strength at 10% compression	EN 826				30 kPa [CS(10)30]			
Traction resistance	EN 1607				> 10 KPa			
Shear resistance	EN 12090				> 20 KPa			
Operating temperature range					-40°C ÷ +110°C			
Fire reaction classification	EN 13501-1				Euroclass 1			
 CE thermal insulation code	EN 13162	MW EN 13162-T7-CS(10)30-TR10-PL(5)400-WS-WL(P)-MU1-SD20-CP2-AW0,95-Afr60						

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The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

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