




**UNDER
SCREED**


BIFLOOR

Under screed acoustic insulation



Benefits

Excellent integration with radiant heating systems

Thanks to the velcro coating of BIFLOOR panels, radiant system pipes can be affixed directly to the product, eliminating the need for metal grid and manual securing.

Outstanding sound insulation for wooden floor slabs

BIFLOOR panels offer superior acoustic performance, even at lower frequencies, solving noise transmission problems in wooden floor slabs.

Simplified installation

Designed for fast and easy installation, this solution allows to significantly reduce installation costs without sacrificing quality and acoustic performance.

Sound and heat insulation in one solution

By pairing with polyester fiber, BIFLOOR panels delivers outstanding thermal performance, contributing to a more comfortable living environment and better energy efficiency.

TheGreennovation

90%

**recycled
products.**



Under screed acoustic insulation

BIFLOOR: practicality, performance and residential well-being.

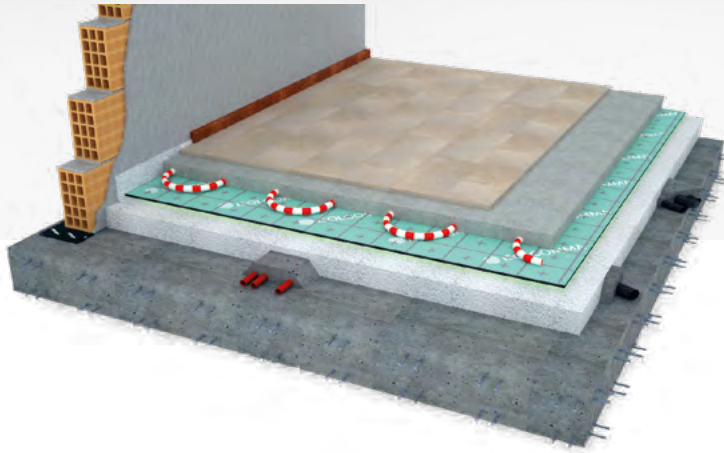
For over 50 years, at Isolgamma we have been committed to designing innovative acoustic insulation solutions, blending elegance, functionality, and convenience to meet the needs of designers, installers, and end users.

BIFLOOR panels embody this philosophy: thanks to their velcro coating, they integrate seamlessly with radiant systems, simplifying installation and cutting both time and costs without sacrificing quality or performance. Perfect for both renovations and new builds, these panels provide acoustic insulation, thermal efficiency, and easy installation. With excellent low-frequency performance, they're also ideal for soundproofing wooden floors, ensuring comfort and residential well-being in every project.



Acoustic insulation in traditional construction

High-performance solution for massive floor slabs

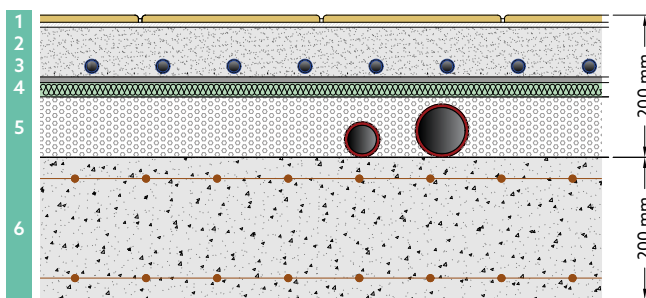


When both acoustic and thermal insulation are required for the floor slab, and compatibility with underfloor heating is essential, BIFLOOR is the optimal solution.

Thanks to its excellent acoustic, thermal, and mechanical performance, BIFLOOR allows you to insulate the floor slab and prepare it for underfloor heating, resulting in significant time and cost saving.

CONCRETE FLOOR SLAB

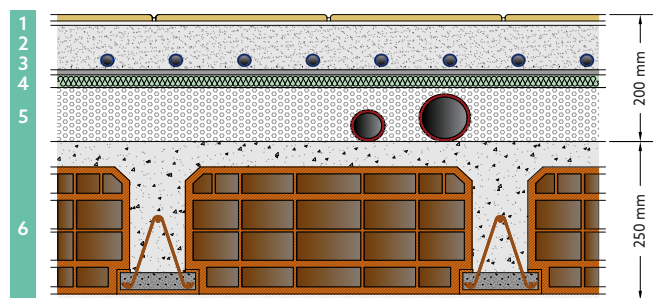
Product	$L_{n,w}$ (dB)	R_w (dB)	U (W/m ² k)
BIFLOOR	43	60	0,457



- 1 Adhered ceramic finishing floor, 15 mm thick.
- 2 Sand-cement layer or similar screed, 50 mm thick.
- 3 Underfloor heating pipes fixed directly to the panel.
- 4 **BIFLOOR thermal-acoustic insulation.**
- 5 Lightweight concrete with expanded polystyrene or air-entraining agents, density 400 kg/m³, 100 mm.
- 6 Reinforced concrete slab poured on-site, 200 mm thick.

BRICK-CONCRETE SLAB

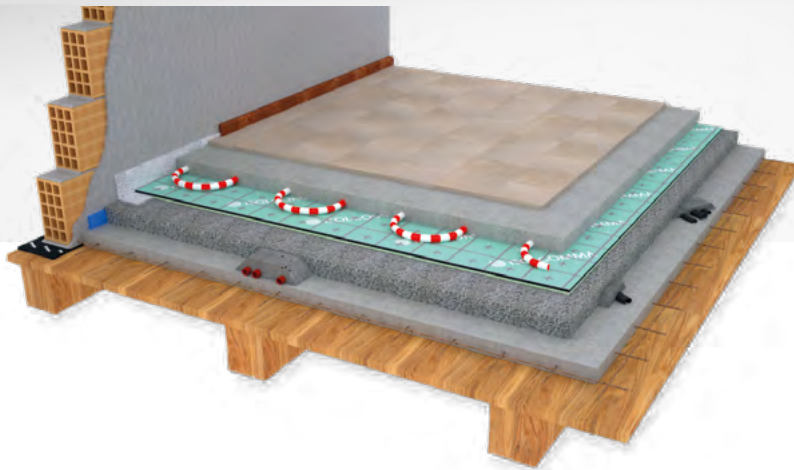
Product	$L_{n,w}$ (dB)	R_w (dB)	U (W/m ² k)
BIFLOOR	47	57	0,415



- 1 Adhered ceramic finishing floor, 15 mm thick.
- 2 Sand-cement layer or similar screed, 50 mm thick.
- 3 Underfloor heating pipes fixed directly to the panel.
- 4 **BIFLOOR thermal-acoustic insulation.**
- 5 Lightweight concrete with expanded polystyrene or air-entraining agents, density 400 kg/m³, 100 mm.
- 6 Cast-in-place brick-concrete slab 20+5, constructed using beams with clay pots or pre-fabricated slabs, 250 mm thick.

Acoustic insulation in wooden structures

High-performance solution for lightweight floor slabs

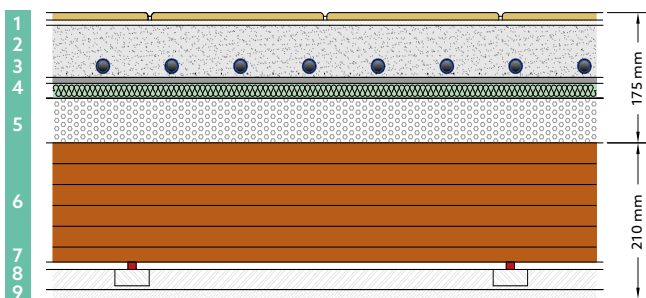


In lightweight floor structures, the performance of acoustic insulation is crucial for ensuring excellent residential comfort. BIFLOOR's unique design and mechanical stability make it effective in both dry and wet applications.

Its thermal performance also enhances the overall system, making it an excellent base for underfloor heating solutions.

CLT FLOOR SLAB

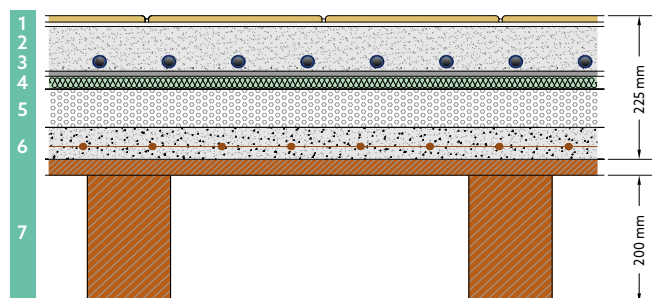
Product	$L_{n,w}$ (dB)	R_w (dB)	U (W/m ² k)
BIFLOOR	53	58	0,372



- 1 Adhered ceramic finishing floor, 15 mm thick.
- 2 Sand-cement layer or similar screed, 50 mm thick.
- 3 Underfloor heating pipes fixed directly to the panel.
- 4 **BIFLOOR thermal-acoustic insulation.**
- 5 Lightened concrete made with polystyrene or aerating agents, 400 kg/m³ density, 60 mm thick.
- 6 CLT floor slab, 160 mm thick.
- 7 REDFIX C28 anti-vibration brackets.
- 8 50/27/0.6 steel profile.
- 9 Plasterboard sheet, 12.5 mm thick.

WOOD-PANELED SLAB

Product	$L_{n,w}$ (dB)	R_w (dB)	U (W/m ² k)
BIFLOOR	56	56	0,470



- 1 Adhered ceramic finishing floor, 15 mm thick.
- 2 Sand-cement layer or similar screed, 50 mm thick.
- 3 Underfloor heating pipes fixed directly to the panel.
- 4 **BIFLOOR thermal-acoustic insulation.**
- 5 Lightened concrete, 80 mm thick.
- 6 Collaborative canopy, 50 mm thick.
- 7 Wood-paneled floor slab, 200 mm thick.



BIFLOOR: applications where it makes a difference

Acoustic and thermal under screed insulation

BIFLOOR is a pre-coupled panel that combines acoustic and thermal insulation with exceptional performance. Composed of a high-density polyester fiber sheet and a semi-rigid layer of SBR rubber granules, the 28 mm thick panel is designed to ensure mechanical stability and excellent acoustic performance.

Ideal for both lightweight floor structures in wood or corrugated metal and traditional concrete or brick-concrete slabs, BIFLOOR is perfect for footfall and thermal insulation.

The upper velcro covering allows easy pipe attachment, making it an excellent solution for applications that include underfloor heating.

APPLICATION FIELDS

- Acoustic insulation of lightweight or traditional floor slabs.
- Projects that require both acoustic performance and mechanical stability.
- Acoustic and thermal insulation solutions for spaces with radiant heating systems.

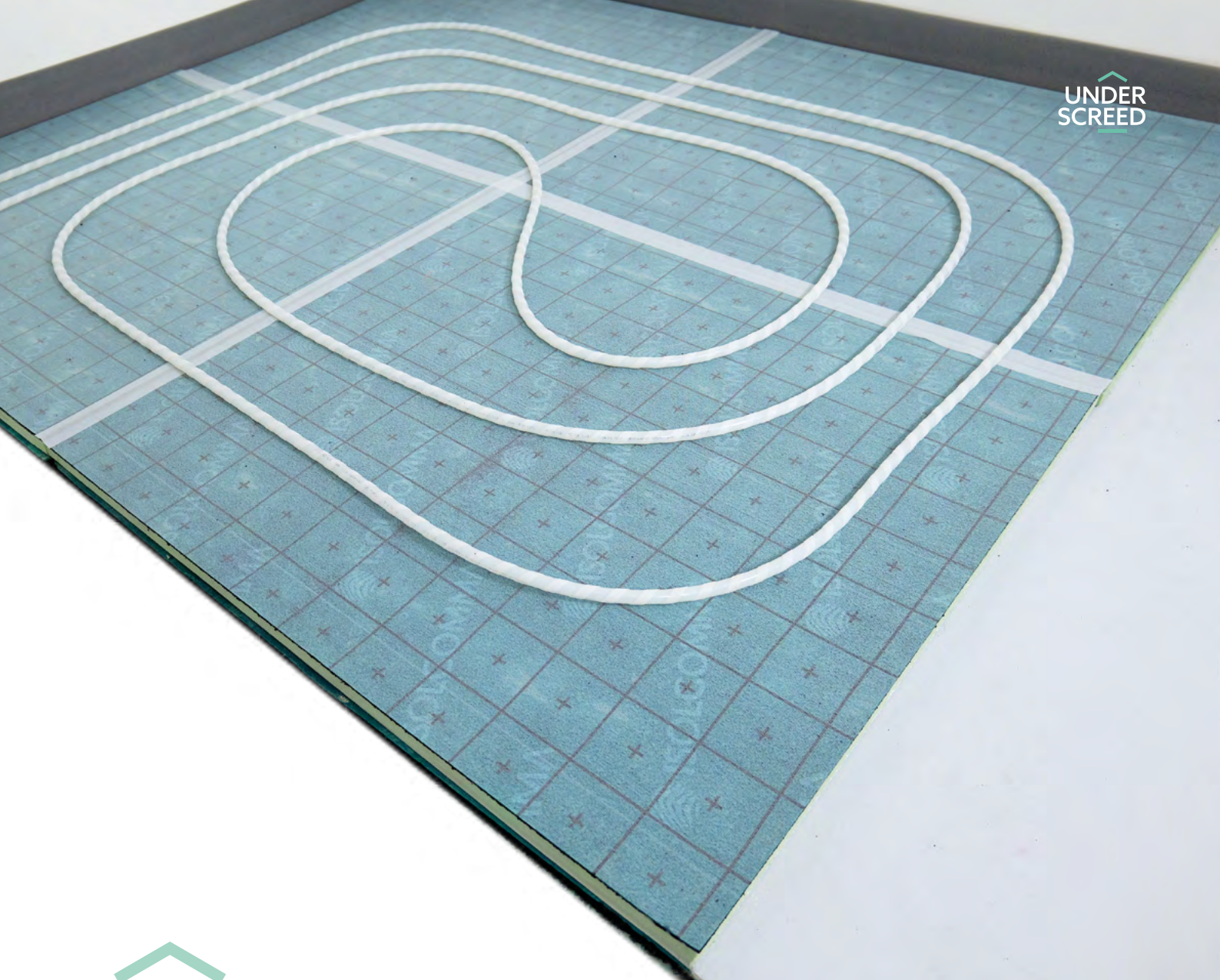
		BIFLOOR
Thickness	mm	28
Dimensions	mm	1200 x 1000
Surface mass	kg/m ²	8,4
Dynamic stiffness	MN/m ³	10
Footfall level attenuation	dB	43
Thermal conductivity coefficient (λ)	W/mK	0,047
Compressibility c	mm	1,6
Reaction to fire		Class E



Historic building renovation
Trieste, Italy



St. Josef nursing home
Bolzano, Italy



Discover all our solutions designed to ensure maximum acoustic comfort in residential and commercial spaces.

The use of BIFLOOR in the acoustic insulation of a prestigious building

The construction company Zaco Costruzioni has recently renovated a prestigious historic building in the center of Trieste, Italy. The project included reconstructing the floors and partition walls to create high-quality apartments and a premium hospitality facility. Given the coexistence of residential and hospitality spaces, ensuring optimal acoustic comfort was essential. The presence of wooden floor slabs further complicated the intervention, requiring a solution that respected the designed thicknesses while providing acoustic insulation and thermal efficiency.

For all these reasons, the BIFLOOR panel was chosen, ensuring both footfall sound insulation and excellent thermal transmittance, as well as supporting the performance of underfloor heating.

The post-intervention acoustic results confirmed the success of the solution: impact noise levels dropped below 50 dB, and the sound insulation power exceeded 64 dB for the wooden floor slabs.

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