EN

INSULIT

Bi+ 9

ΔLw 30 dB

Outstanding performances

Acoustic floor insulation

against impact and shock noises

insulco
Technical products

insulit Bi+9

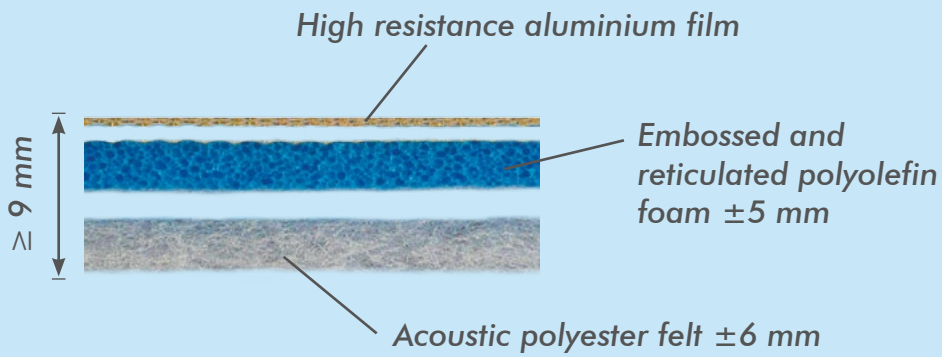
Insulit Bi+9 goes beyond the upper acoustic level demands defined by the european norm EN ISO 717-2. Over the years we developed a unique and exclusive underlay that offers better performances than have ever been achieved at the same thickness ! This thin underlay of ±9 mm has better acoustic results than other panels or bulk materials.

The best thin solution

Insulit Bi+9 is made up of reflective and highly resistant aluminium film, and of double spring structure made up of Foam and Felt, making it more efficient. The felt corrects low frequencies from 100 to 500 Hz and the foam corrects medium and high frequencies from 500 Hz to 5000 Hz.

Supplied in roll with a self-adhesive overlap, insulit Bi+9 is easily unrolled on the floor, felt side down. The laying is convenient, clean and well-done thanks to the self-adhesive foam overlap of ±10 cm.

Structure



Acoustic performances

Δ Lw **30/29 dB**
(according to 2009-2012 CSTC Report)

L'nT,w* **45 dB[1*]**
42 dB[2*]

Acoustic improvement (ΔL) :

±19.7 dB at 250 Hz *±29.4 dB at 500 Hz*
±41.4 dB at 1600 Hz *±45 dB at 4000 Hz*

1* : *Basic floor 350 kg/m² - Lateral walls 150 kg/m² - Receiver room 80 m³*
2* : *Basic floor 450 kg/m² - Lateral walls 150 kg/m² - Receiver room 80 m³*

Simulations done with the CSTC calculation software.

Δ Lw **30 dB**

Foam + felt : unique performances !

Benefits

- ☑ Outstanding performances
- ☑ Tear resistant
- ☑ Thermal confort
- ☑ Self-adhesive overlap included
- ☑ Very low dynamic rigidity
- ☑ Rolls are 1.50 m wide
- ☑ Surpasses all standards
- ☑ Quick and safe laying
- ☑ Double structure / double spring effect
- ☑ Efficient at all frequencies

Characteristics

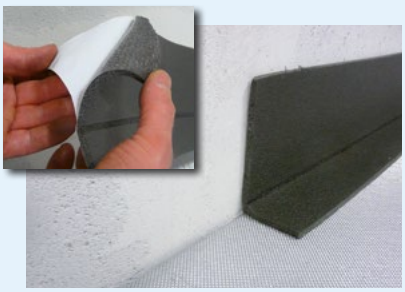
Thickness	≥ 9 mm (0,43'') **
Color	Metallic / blue / white
Material	Physically reticulated polyolefin Non-woven polyester felt
Weigth	±300 g/m²
λ Value	0.0356 W/mk at 10°C (foam) 0.0353 W/mK at 10°C (felt)
Dynamic stiffness	s'_t = 3.17 MN/m³
Compression	±15 % under 2 kPa**
CSTC Report	DE 631x A651b - DE 631x A747 DE 631x A500
Roll size	30 m x 1.50 m (32.8 yd x 1.6 yd)
Overlap	included and self-adhesive (± 10 cm)

** tolerance 10%

Unroll the underlay with the overlap over the lateral roll

Remove the protective yellow band to fix the lateral layer

Stick correctly the two layers together



Cover the junction between the underlay and the wall with the peripheral strip Lfoam

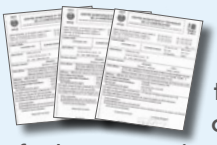
insulit Bi+9

Underfloor heating system

It is possible to use the insulit Bi+9 in combination with an underfloor heating system. In this case, we advise that the heating pipes should be placed above the insulit Bi+9. The pipes will be maintained in a soft structure designed to be put in floating installation. The pipes cannot be fixed under any circumstances through the insulit Bi+9.

Exemple of heating system

CSTC reports



We want to draw your attention on the importance of the choice of the acoustic membrane. The use of underlays without acoustic reports established according to the criteria of the european norm EN ISO 717-2 could present the risk that the building does not meet the stringent acoustic requirements in force.

Insulit Bi+9 has a CE marking and its EU Declaration of Conformity.

CE

DOP/2017-01-31/INSULIT Bi+9 - EN16069

Installation

1 Preparation

Place a first screed in order to cover the tubes and other sheaths if needed. This pre-screed will be executed thanks to a thermal concrete or a similar mix that will bring a thermal insulation between floors. If the placement of this pre-screed is impossible, the concrete slab (1) will have to be flat and carefully brushed. At the crossing of the tubes, flashings and ogees will be needed. In all cases, the vertical tubes, heating and sanitary, will be carefully isolated from the flooring they cross with the help of insulation sleeves made on the spot from the insulit Bi+9 or from the Insulco Stickelfoam self-adhesive foam.

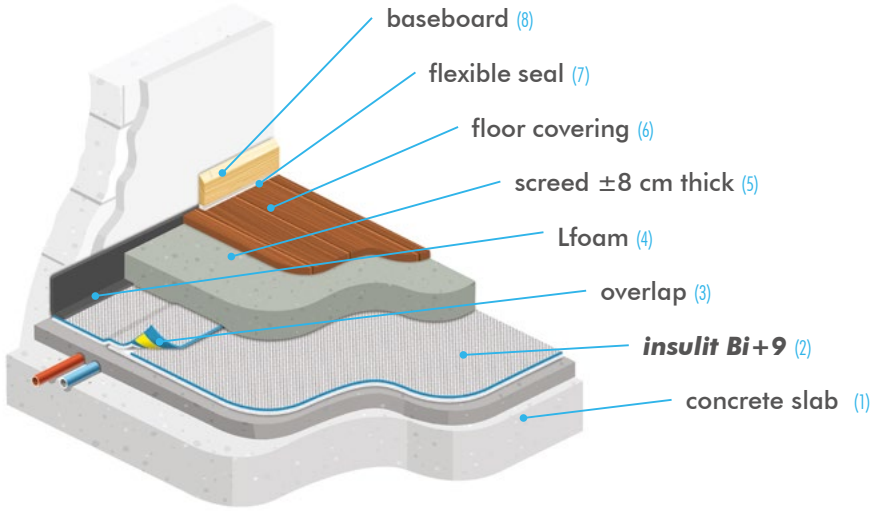
2 Installation of the underlay

The insulit Bi+9 (2) will have to be unrolled, felt side down. An overlap (3) of ±10 cm is made thanks to the surplus of foam provided for that purpose. The protective yellow band will be removed in order to keep the overlap fixed with the lateral layer on the aluminium side.

The insulit Bi+9 should be cut as close as possible to the wall. The junction between the underlay and the wall will be covered by the peripheral strip – Insulco Lfoam (4). This self-adhesive foam is designed in a L-shape, in order to be fixed to the underlay and alongside the wall.

3 Application of the screed

Cover the insulit Bi+9 with a reinforced screed (5) ±8 cm thick. Once the screed is finished and the floor covering (6) laid, the surplus of insulit Bi+9 or L-Foam will have to be cut. The baseboard (8) will be laid slightly higher than the floor covering to avoid any lateral acoustic transmission. Then a flexible seal (7) will be placed under the baseboard.



insulco Technical products *The specialist against impact noises*

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Visit **www.insulit.eu**, our website dedicated to the Insulco underlays