



# ISOLMANT ISOLTILE AD

## UNDER FLOORING INSULATION

Innovative technological product specifically designed for underflooring acoustic insulation in hybrid installation mode. It can be installed over the existing flooring or over smooth, clean surfaces by using its adhesive fabric.

### WHAT IS ISOLTILE AD

Resilient elastodynamic acoustic layer with low thickness, desolidarising and reinforcing, designed for underflooring applications (tile, stone, wooden flooring). Coated on the underside with a positioning adhesive layer, specifically designed to be installed on the existing flooring. To be installed with the screen printed side facing up. Thickness 2 mm.

### SPECIFIC APPLICATIONS

#### 1 UNDER FLOORING APPLICATIONS

- 1.1** Under flooring application (tiles, stone, wooden flooring) on existing flooring
- 1.2** Under flooring application (tiles, stone, wooden flooring) directly on low thickness/low inertia heating system



All our products with the "Guaranteed Green Planet" logo are compliant with the sustainability criteria of the most important environmental protocols and certified according to the major national and international standards.







## GREEN FEATURES OF ISOLMANT ISOLTILE AD


- **Volatile Organic Compounds free (VOC A+).**
- **Manufactured with low environmental impact.**
- Contributes to achieving credits for the **environmental certification** of a building according to the **LEED or ITACA** protocols.
- This product can be disposed of according to CER n. 170604.

Complies with the requirements defined by the Italian CAM Edilizia for acoustic and thermal insulation materials regarding the request for high acoustic insulation performance, the percentage of recycled material and the absence of hazardous substances.

**Green Planet is our sustainable development protocol** that includes all our commitments to increase process, environmental, social and corporate responsibility.

**A set of sustainable actions, goals and behaviors in agreement with** our mission, our ethical choices and the **Sustainable Development Goals from 2030 Agenda.**

-  **PRODUCT AND PRODUCTION PROCESS SUSTAINABILITY**
-  **ENVIRONMENTAL SUSTAINABILITY**
-  **CORPORATE RESPONSIBILITY**
-  **SOCIAL RESPONSIBILITY**



Find out more at [Isolmant.com](https://www.isolmant.com)



### ADVANTAGES

- This product ensures a significant increase in acoustic insulation against impact noise, in case of renovation and new construction.
- It can be used in all environments, in both residential and tertiary contexts.
- Low thickness, does not require modifications to existing levels.
- Low thermal resistance (compatible with underfloor or heating systems, even when laid under the floor). Allows glue installation of finishes directly on radiant floors with low thickness/low inertia.

### ADVANTAGES FOR INSTALLATION

- Easy to install.
- Adhesive layer adheres to the existing floor or other smooth, clean surface without the need to abrade or treat it with adhesives.
- Product supplied with accessories for correct installation.
- This product does not require any special glues to install.
- This product prevents large tiles from cracking.

## ISOLMANT ISOLTILE AD > INFORMAZIONI TECNICHE

To be installed with the screen printed side facing up.

NOMINAL THICKNESS:	2 mm
IMPACT SOUND INSULATION IN UNDERFLOORING APPLICATION:	$\Delta L_w = 16 \text{ dB}^{(2)}$
THERMAL CONDUCTIVITY	$\lambda = 0.037 \text{ W/mK}$
THERMAL RESISTANCE	$R_t = 0.054 \text{ m}^2\text{K/W}$
EQUIVALENT AIR THICKNESS ISOLTILE CLASSIC:	$S_d < 40 \text{ m}$
COMPRESSIVE STRENGTH	127 kPa (0.5 mm deformation)
COMPRESSIVE STRENGTH (%):	deformation 10% at 96 kPa deformation 25% at 127 kPa deformation 40% at 229 kPa deformation 50% at 313 kPa
COMPRESSIVE CREEP:	> 50 kPa (0.5 mm of deformation)
DYNAMIC LOAD (DL):	200000 cycles (at 75 kPa)
CONFORMABILITY (PC):	> 1.5 mm
REACTION TO FIRE CLASS:	$C_{fi-s1}^{(3)}$
EMISSION OF VOLATILE ORGANIC COMPOUNDS:	VOC A+ <sup>(4)</sup>
CE MARKING:	Harmonised standards for CE marking are NOT currently available for acoustic insulation products. This means that Isolmant products are currently NOT subject to CE marking, nor to the drawing up of a PDO (declaration of performance) or DDP (declaration of performance). All Isolmant products are placed on the market in compliance with the regulations in force in the country of destination and with the necessary certifications to guarantee their use in dedicated applications.
SIZE:	Rolls of: 1.00 m x 20 m (h x L) = 20 m <sup>2</sup>
PACKAGE:	Individual rolls including installation kit: Fascia per giunte: h 7.5 cm x L 20 m Fascia perimetrale: h 3 cm x L 20 m

(1) Isolmant laboratory test report No. 1102/2019

(2) Test report Ri.Cert. no.11-3445-0 09

(3) Istituto Giordano test report no. 362272

(4) Istituto Giordano test report no. 379083

### ITEM SPECIFICATIONS

Resilient elastodynamic acoustic layer with low thickness, desolidarising and reinforcing, designed for underflooring installations on tile, stone, wooden flooring. This product is made of HD expanded polypropylene material which is coated on the upper side with special Fibtec XP1 fabric (black screen-printed and calendered polypropylene fabric for technical application) and removable adhesive on the lower side for installations on the existing flooring. (Isolmant IsolTile AD type). Nominal thickness 2 mm, density 77 kg/m<sup>3</sup>, thermal conductivity 0.037 W/mK.

## UNDER FLOORING INSTALLATION (TYLE, STONE, WOODEN FLOORING) ON EXISTING FLOORING OR OTHER SMOOTH AND CLEAN SURFACE.

APPLICAZIONE SOTTO PAVIMENTO (CERAMICA, MATERIALE LAPIDEO, PARQUET) SU PAVIMENTAZIONE ESISTENTE O ALTRA SUPERFICIE LISCIA E PULITA.



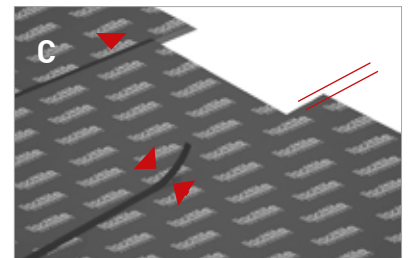
### PREPARING THE SCREED

### STEP 1

The surface to which IsolTile AD is to be applied must be smooth and clean, free from debris or oil, such that the adhesive fiber on the lower side of IsolTile AD can adhere easily. Like existing floors, aluminium or other metal radiant panels. It will be the responsibility of the installer to assess the suitability of the surface, including its flatness and bearing capacity, for the application of IsolTile AD sheets (Fig. A)

### STEP 2 LAYING THE SHEETS

Arrange IsolTile AD, taking care to lay the screen-printed side in visible position, on the previously cleaned base, aligning the sheet with one of the walls and cutting it to size. The adhesive lower side can be installed without using glues and directly on the existing flooring. Remove the silicone-coated film (Fig. B) taking care to maintain alignment and exerting adequate pressure (on the portion of the sheet where the silicone-coated film has been removed) to ensure perfect adhesion to the substrate and remove any air bubbles. It is also necessary to tape the joints between the sheets using the joint strip Fascia per Giunte that comes in the package (Fig. B-C).



### INSTALLING FASCIA PERIMETRALE

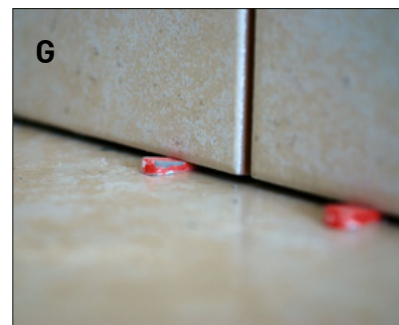
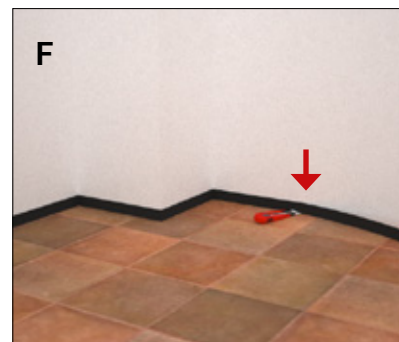
### STEP 3

To prevent acoustic bridges, it is recommended to use the Isolmant Fascia Perimetrale which comes in the package. This should be applied. It should be applied before spreading sheets all around the room perimeter.(Fig.D). Installing Fascia Perimetrale on walls is necessary to separate the finish from the masonry. If the floor to be subsequently installed is a wooden floor, Fascia Perimetrale is not necessary because the expansion gap normally left between the wooden floor and the wall is greater than the thickness of Fascia Perimetrale.

### STEP 4 INSTALLING FLOORING AND SKIRTING BOARDS

Once IsolTile AD has been installed and taped the flooring can be installed immediately. The tiles or parquet can be glued directly onto IsolTile AD by applying a suitable layer of adhesive (we recommend using a class C2E cementitious adhesive with tiles and stone finishes and two-component epoxy-polyurethane glues with parquet) laid according to the rules of the art and according to the instructions provided by the manufacturer. In particular, installation should be carried out under proper temperature and moisture conditions and in compliance with the wooden flooring installation standard.

IsolTile AD is a water-impermeable membrane: adequate drying time of the adhesive must be considered in relation to climatic and site conditions. It is recommended that the adhesive is allowed to dry for 36 to 48 hours before grouting the joints. It is essential to inform all site operators that the excess of the flanking strip must only be trimmed after the tile flooring has been installed and grouted and before the skirting board is laid (Fig. E). The direct contact of the flooring with the walls creates an acoustic bridge, which causes a loss of insulation of several decibels. Therefore, the flooring should be joint to the flanking strip, ensuring the elastic functioning of the system. The tiled skirting board should not be placed on the floor, but should be raised a few millimetres (Fig. F) and grouted with an elastic, silicone-based binder or with an additive mortar with flexible behaviour. If the joint were rigid, it would prevent the floor from floating and would de-grout.



**UNDERFLOOR APPLICATION (TILE, STONE, WOODEN FLOORING) DIRECTLY ON LOW THICKNESS/LOW INERTIA HEATING SYSTEM**

**STEP 1**

**PREPARING THE SCREED**



The surface where IsolTile AD is installed should be load-bearing, flat, adequately even, clean and free from debris and oil. Nevertheless, the installer will assess the suitability of the surface when laying glue and sheets (Fig. A).

**STEP 2** **INSTALLING FASCIA PERIMETRALE**

If a flanking strip of sufficient height to exceed the height of the floor has not already been laid, it is recommended to use Isolmant Fascia Perimetrale IsolTile, already included in the package, to be laid before the sheet along the entire perimeter of the room without interruption (Fig. B). The use of the appropriate Fascia Perimetrale on the walls is necessary to separate the ceramic or stone finish from the masonry (it is not required when laying parquet, as the expansion space normally left between the wooden floor and the wall is greater than the thickness of Fascia Perimetrale).

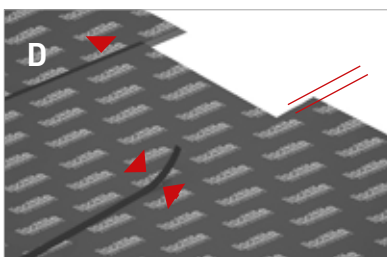


**STEP 3**

**LAYING THE SHEETS**

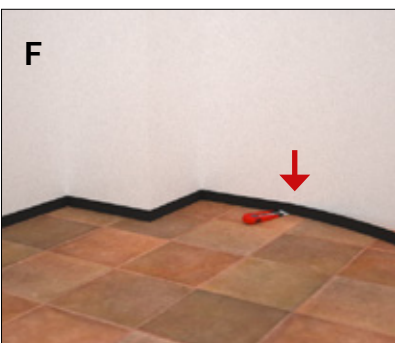


Installing IsolTile AD, taking care to lay the screen-printed side in visible position and the adhesive lower side directly on the radiant panel, aligning the sheet with one of the walls and cutting it to size. Remove the silicone-coated film (Fig.C) taking care to maintain alignment and exerting adequate pressure (on the portion of the sheet where the silicone-coated film has been removed) to ensure perfect adhesion to the substrate and remove any air bubbles. The joints between the sheets must also be taped using Fascia per Giunte provided in the pack (Fig. D).



**STEP 4**    **INSTALLING FLOORING**

Once IsolTile AD has been installed and taped the tiling (Fig. E) can be installed immediately. The tiles or parquet can be glued directly onto IsolTile AD by applying a suitable layer of adhesive (we recommend using a class C2E cementitious adhesive with tiles and stone finishes and two-component epoxy-polyurethane glues with parquet) laid according to the rules of the art and according to the instructions provided by the manufacturer. In particular, the parquet must be laid in suitable temperature and humidity conditions, in strict compliance with the specifications for laying wooden floors. The sector's standards and regulations establish that the laying environment must guarantee environmental conditions within the values of max.RH 45%-60%, T°C 18°C - 25°C, the necessary conditions for maintaining the correct wood/environment balance established by the reference European standard UNI EN 13489:18 (7%+2%). In addition, the screed on which the floor system is laid must have a humidity percentage of no more than <2% in the case of a screed/laying surface without a heating system, <1.7% in the case of underfloor heating. IsolTile AD is a water-impermeable membrane: adequate drying time of the adhesive must be considered in relation to climatic and site conditions. It is recommended to let the adhesive dry 36 to 48 hours before grouting the joints.



**INSTALLING SKIRTING BOARDS**

**STEP 5**

It is essential to inform all site operators that the excess of the perimeter band must be trimmed only after the flooring has been laid and grouted (Fig. F). The direct contact of the flooring with the walls creates an acoustic bridge, which impedes the "floating" of the screed on the elastic underlay and causes a loss of insulation of several decibels. Therefore, tile flooring should be joint to the flanking strip, ensuring the system elastic functioning. a tiled skirting board made of tile should not be laid on the flooring but should be raised by a few millimetres and grouted with an elastic silicone-based binder or a flexible mortar (fig. G). If the joint were rigid, it would prevent the floor from floating and would de-grout.







### GLUE

When laying ceramic or stone floors, it is advisable to use cement adhesives of class C2E or higher, depending on the specific needs of the site, as per EN12004.

When laying wooden floors, we recommend the use of two-component epoxy-polyurethane glues.

### MOVEMENT JOINTS

Existing fractioning joints in the substrate may be avoided when laying IsolTile Classic, but structural joints and expansion joints in the flooring must be respected for minimum units of surface area as per current regulations.

### JOINTS

Before grouting the joints of ceramic floors, make sure that the substrate and the adhesive are completely dry. It is recommended to grout the joints using a specific product according to the type of flooring and the intended use of the room. Class CG2 sealants are suitable for use in residential environments.



## WARNINGS:

\* This data sheet does not constitute a specification and, if it consists of several pages, please ensure that you have consulted the complete document. Although, these instructions are the result of our best expertise they are indicative. The user should establish whether the product is suitable for its intended application. The user will be also in charge of all the responsibility for the use of the product itself.

\*\*The sound insulation values given in this technical data sheet are the result of laboratory tests or tests carried out on site: they cannot be considered a predictive value for every situation that may occur on site. Acoustic performance is closely linked to the specific conditions of each site.

\*\*\*Caution: do not expose the product to direct sunlight and bad weather.



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