



ISOLMANT ISOLTILE BV

UNDER SCREED AND UNDER FLOORING INSULATION

ABOUT ISOLTILE

Low thickness elastodynamic resilient acoustic layer that stands out for uncoupling and enforcing features. This product has been designed for under screed and under flooring installations (tile, stone, wooden flooring) when is required protection against vapour. To be installed with the screen-printed side facing upwards.

INSTALLATION

1. UNDER SCREED INSTALLATION

1.1 Installing with low thickness screeds ≤ 3 cm (with or without heating/cooling system).

2. Under Flooring Installation

2. UNDER FLOORING INSTALLATION

2.1 To install with tile, stone, wooden flooring - on screed (with or without heating/cooling system).

2.2 To install with tile, stone, wooden flooring - on low thickness/low inertia radiant system.



*The icons refer to the structures of the "Isolmant Flooring System" (Key on page 5). For further information, please visit our website www.sistemapavimento.com

THE BENEFITS OF ISOLTILE BV

- This product significantly improves the acoustic insulation of impact-related noise, in renovation works and new buildings.
- It is ideal in all environments of the residential and tertiary sectors.
- It is low thickness and it does not require changes to the existing dimensions.
- Low thermal resistance suitable for underfloor heating/cooling systems, even in case of under flooring installation).
- It can be used when installing flooring finishes by means of glue and directly on low thickness/low inertia radiant flooring.
- Integrated protection against vapour.
- Quick and easy installation.
- This product allows installers to avoid carrying over the screed expansion joint from the screed to the flooring.
- It avoids tile cracks.
- It does not contain volatile pollutants (VOC A+).
- The installation does not require any special glues.



NOMINAL THICKNESS	2 mm
UNDER SCREED IMPACT SOUND INSULATION*	$\Delta L_w = 17$ dB (Test Report n.1102/2019 by Isolmant's test labs)
UNDER FLOORING IMPACT SOUND INSULATION*	$\Delta L_w = 16$ dB (Rapporto di prova N. 11-3445-0 09 presso Ri.Cert.)
DRUM SOUND (RWS)	< 25 sone
THERMAL CONDUCTIVITY	$\lambda = 0.037$ W/mK
THERMAL RESISTANCE	$R_t = 0.054$ m ² K/W **
EQUIVALENT AIR LAYER THICKNESS	$S_d > 100$ m
COMPRESSIVE STRENGTH (CS)	127 kPa (0.5 mm deformation)
COMPRESSIVE STRENGTH (%)	10% deformation at 96 kPa 25% deformation at 127 kPa 40% deformation at 229 kPa 50% deformation at 313 kPa
COMPRESSIVE CREEP (CC)	> 50 kPa (0.5 mm deformation)
DYNAMIC LOAD (DL)	200.000 cycles (at 75 kPa)
CONFORMABILITY (PC)	≥ 1.5 mm
SIZE	Rolls of: 1 m x 20 m = 20 m ²
PACKAGE	Single rolls with accessories included
ACCESSORIES	Fascia Per Giunte (joints band) protection against vapour h 7.5 cm x L 20 m Fascia Perimetrale (perimeter strip): h 3 cm x L 20 m

* Other test reports with construction packages available at our website sistemapavimento.com

** Isolmant IsolTile is suitable for under-floor installation even in presence of heating systems in this case verify R_t (floor + mat) ≤ 0,15 m²K/W.



COMPOSITION

Isolmant IsolTile BV is made of Isolmant HD expanded polypropylene which is coated on the upper side with special FIBTEC XP1 (screen-printed and calendered black polypropylene non-woven fabric for technical applications) and on the lower with fibtec XP2 (calendered black polypropylene non-woven fabric for technical applications with protection against vapour - $s_d > 100$ m).

ITEM SPECIFICATIONS

Low thickness elastodynamic resilient acoustic layer that stands out for uncoupling and reinforcing features has been designed for under screed and under flooring installations (tile, stone, wooden flooring.) Isolmant IsolTile BV is made of Isolmant HD expanded polypropylene which is coated on the upper side with special FIBTEC XP1 (screen-printed and calendered black polypropylene non-woven fabric for technical applications) and on the lower with FIBTEC XP2 (calendered black polypropylene non-woven fabric for technical applications with protection against vapour - Isolmant IsolTile BV type). Nominal thickness 2 mm, density 77 kg/m³, thermal conductivity 0.037W/mK, equivalent air thickness $S_d > 100$. To be installed with the screen-printed side facing upwards.

ISOLMANT ISOLTILE BV - INSTALLATION INSTRUCTIONS

INSTALLING WITH LOW THICKNESS SCREEDS ≤ 3 cm (WITH OR WITHOUT HEATING/COOLING SYSTEM)



1

Preparing the screed: the surface where you install the IsolTile BV should be load-bearing, flat, adequately even, clean and free from debris and oil. Nevertheless, the tiler will assess the suitability of the surface when laying glue and sheets.

2

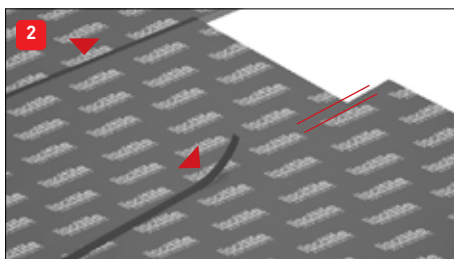
Installing our Fascia Perimetrale: to avoid acoustic bridges, the use of Isolmant Fascia Perimetrale Tecnica Doppio Spessore is recommended, to be applied along the entire perimeter of the room without interruption (Fig.1). Installing Fascia Perimetrale Tecnica Doppio Spessore on the walls is necessary to uncouple screed and finish from the wall.



1

3

Laying the sheets: during installation, the IsolTile BV sheets should be laid close without overlapping in order to ensure a continuous insulation layer and avoid acoustic bridges (Fig.2). Screen-printed side must be laid facing upwards. It is also necessary to install our Fascia Per Giunte along the joints between the sheets. This band comes with the package (Fig.3).



2

4

The screed: the finishing screed must guarantee adequate mechanical resistance according to the actual installation and loading conditions. Appropriate safety measures must be taken in this regard, such as, for example, the assessment of the adequate consistency of the compound, curing times, any support elements (wire mesh or fibres), the consistency of the surface and any surface treatment with consolidating products (as indicated by the manufacturer of the screed and the reference standard).



3

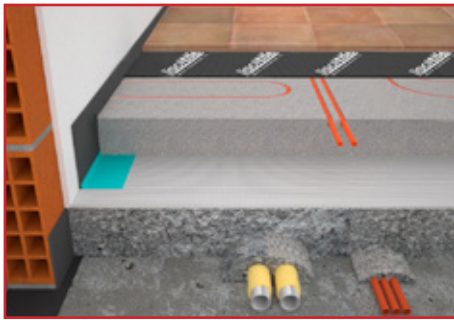
5

Installing flooring and skirting profiles: it is essential to install all the operators at site that the excess of the perimeter strip must be trimmed only at the end of the laying and grouting of the flooring and before the laying of the skirting profile (Fig.4). The direct contact between flooring and walls, in fact, is an acoustic bridge, which hinders the "floating" of the screed on the elastic underlay and that causes a loss of insulation of some decibels. Therefore, the flooring must be installed directly over the perimeter strip, in this way it will ensure the elastic functioning of the system. The ceramic skirting board should not be placed on the flooring but should be kept raised by a few millimetres and grouted with an elastic silicone-based binder or with an additive mortar with flexible behaviour. In case of rigid joint, it would stop the floating action of the flooring that would move from the actual position.



4

INSTALLING WITH TILE, STONE, WOODEN FLOORING - ON SCREED (WITH OR WITHOUT HEATING/COOLING SYSTEM)



1

Preparing the screed: the surface where you install the IsolTile BV should be load-bearing, flat, adequately even, clean and free from debris and oil. Nevertheless, the tiler will assess the suitability of the surface when laying glue and sheets.

2

Installing our Fascia Perimetrale: to avoid acoustic bridges, the use of our Fascia Perimetrale is recommended, to be applied along the entire perimeter of the room without interruption (Fig.1 - 2) (if a perimeter band, tall enough to exceed the floor level has not already been laid). This element is necessary to uncouple the tile or stone finish from the masonry (it is not required in the case of wooden flooring).

3

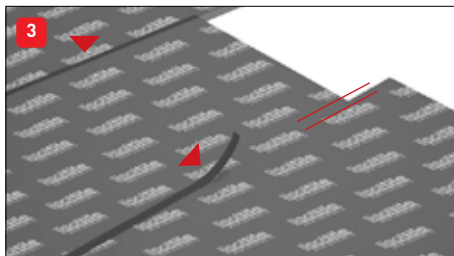
Laying the first layer of glue: IsolTile BV does not require the use of special glues; it is recommended to use products suitable for the laying surface and the finish to be applied; the same product shall be used between the screed and IsolTile BV and between IsolTile BV and the finish (we recommend the use of a class C2E cementitious glue in case of tile and stone finishes and Bicomponent epoxy-polyurethane glues in case of wooden flooring). Apply the first layer of glue in the proper quantity using a fine trowel knife (3/4 mm) following the instructions set out by the technical reference standards. This layer of glue can level out any unevenness of the screed. Be sure to remove any excess glue near the band.

4

Laying the sheets: roll out the IsolTile BV sheets, screen-printed side upwards, on the glue that has been already applied (please consider curing time of the glue). Remove any air bubbles under the IsolTile BV sheets so they adhere perfectly to the surface. To this end, it is recommended you press the sheets by using a roller for flexible flooring. During installation, the IsolTile BV sheets should be laid close without overlapping in order to ensure a continuous insulation layer and avoid acoustic bridges. It is also necessary to tap the joints between the sheets themselves by means of our special Fascia Per Giunte contained in the package to ensure the continuity of the vapour barrier (Fig.3-4).

5

Installing the flooring: in general, you should wait 24 hours after installing the underlay. However, these are only general guidelines and the tiler will figure out how long the procedure takes according to the glue used. Tiles or wooden flooring can be glued directly to IsolTile BV by applying a suitable layer of adhesive (we recommend the use of a class C2E cementitious glue in case of tile and stone finishes and Bicomponent epoxy-polyurethane glues in case of wooden flooring). This adhesive must be properly applied according to the instructions provided by the manufacturer. In particular, the installation of a wooden flooring should be carried out under proper temperature and moisture conditions and in compliance with the wooden flooring installation standard. IsolTile BV is a water and vapour proof barrier: adequate drying times of the glue must be considered in relation to the climatic and building site conditions. 36 to 48 hours are recommended before grouting the joints.



GLUE

When laying tile or stone floors, we recommend the use of cementitious adhesives of class C2E or higher depending on the specific site requirements as per standard EN12004.

When laying wooden flooring, we recommend the use of Bicomponent epoxy-polyurethane glues.

CONNECTIONS

When laying IsolTile BV, it is possible to avoid respecting the fractioning joints in the screed; instead, the structural joints and expansion joints of the flooring must be respected for minimum surface units according to current standards.

JOINTS

Before grouting the joints, make sure that screed and glue are perfectly dry.

It is recommended to fill the joints by using the specific product depending on the type of flooring and the room final use. Class CG2 sealants are suitable for residential environments.

* The under screed and under flooring installations of IsolTile BV that have been presented in this data sheet are marked with an icon that refers to the structures as presented in our "SISTEMA PAVIMENTO ISOLMANT" catalogue and on www.sistemapavimento.com.

KEY:

UNDER SCREED APPLICATIONS



UNDER FLOORING APPLICATIONS



WARNINGS:

* This technical data sheet does not constitute a technical specification and, if it consists of several pages, make sure that you have read the whole document. Although, this information is the result of our best actual 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 acoustic insulation values given in this data sheet are the result of laboratory tests or tests carried out on site: they cannot be considered as predictive values for every situation that may arise at site. Acoustic performance is closely linked to the specific conditions of each site.