



# ISOLMANT SPECIAL PLUS

## UNDERSCREED INSULATION

High performance product, with special antearing technical fabric fibre-reinforced specific for under screed sound insulation in single-layer structures with finishing screed > 4.


### WHAT IS ISOLMANTSPECIAL PLUS?

High performance resilient layer made of 5 mm second-generation polyethylene Isolmant Special that is featured by a better and calibrated quality of the polyethylene cellulation and it is joined to FIBTEC XT1 (screen printed anti-tearing FIBRE-REINFORCED fibre). Thanks to its intrinsic quality and physical properties, this product ensures long-term performance. It provides excellent impact sound and airborne insulation for horizontal partitions without damaging the product.

### SPECIFIC APPLICATIONS

Isolmant Special Plus is specific for floating screeds as provided by UNI 11516:2013 standards with any type of slab. As well as being suitable for use in two-layer solutions, the fibre-reinforced top layer can also be used as FIBRE-REINFORCED top layer can also be used as a top layer which guarantees the product's high resistance to foot traffic and tearing, makes it particularly suitable for creating floating screeds in single-layer solutions. It needs a finishing screed at least 4 cm thick. In case of disjoining a floating screed from perimeter walls, it is recommended not to turn Isolmant Special Plus upside down but to use Isolmant Fascia Perimetrale.

To install Isolmant Special Plus with the screen-printed side facing upwards.

 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 SPECIAL PLUS

- Manufactured with low environmental impact.
- Contributes to achieve credits for the **environmental certification** of a building according to **LEED or ITACA** standards.
- This product can be disposed of according to EWC n. 170604.

Isolmant Special Plus meets the sustainability criteria of the main environmental protocols as shown in the following table.	
CAM	✓
ITACA	✓
WELL	✓
BREEAM	✓
LEED	✓

**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

- Excellent acoustic impact sound and airborne insulation.
- Suitable for use in both renovation and new construction.
- High resistance to foot traffic and tearing.
- Better load distribution.
- Low thermal conductivity.
- Inalterable in time.
- Unlimited durability.
- Contact with water does not affect performance or characteristics.
- Impervious to mould or insects.

### SPECIFIC APPLICATIONS

- Easy to install products.
- Easy to trim: can be easily cut with a utility knife or box cutter.

## ISOLMANT SPECIAL PLUS > TECHNICAL SPECIFICATIONS

> To be positioned with the screen printed fabric facing upwards.

NOMINAL THICKNESS:	5 mm
DYNAMIC STIFFNESS:	$s_t' = s' = 33 \text{ MN/m}^3$ <sup>(1)</sup>
IMPACT SOUND INSULATION:	$\Delta L_w = 26 \text{ dB}$
COMPRESSION CLASS:	CP2 <sup>(2)</sup>
CONDUCTIVITY:	$\lambda = 0.0325 \text{ W/mK}$
THERMAL RESISTANCE:	$R_t = 0.142 \text{ m}^2\text{K/W}$
SPECIFIC HEAT CAPACITY:	$c = 2100 \text{ J/kgK}$
VAPOUR RESISTANCE:	$\mu = 3600$
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: $1.50 \text{ m} \times 50 \text{ m} \text{ (h} \times \text{L)} = 75 \text{ m}^2$  This product comes with adhesive to seal the overlapping fabric.
PACKAGE:	Single rolls

(1) Istituto Giordano test report no. 353881

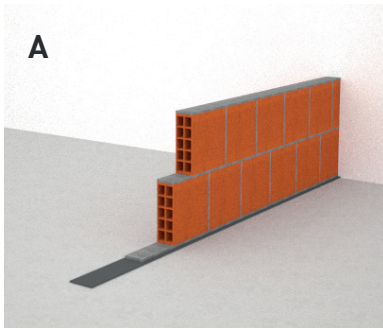
(2) Test Report No. 1009\_1409

## ITEM SPECIFICATIONS

Resilient layer is made of second-generation reticulated expanded closed-cell polyethylene, joined on the upper side with a anti-tearing FIBRE-REINFORCED fabri. This product ensures an even performance and high compressive strength over the time (Isolmant Special Plus type). To be installed with the embossed and screen-printed side facing upwards. Density 30 kg/m<sup>3</sup>. Nominal thickness 5 mm. Dynamic stiffness 60 MN/m<sup>3</sup>.

**STEP 1**

**INSTALLING FASCIA TAGLIAMURO**

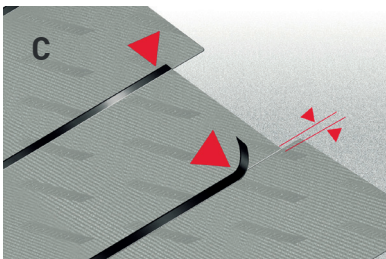


Before installing all the partitions, Isolmant Fascia Tagliamuro must be laid. This high density,reticulated polyethylene foam accessory is specifically designed to disjoint partitions and slabs, thereby helping to reduce the structural sound transmission from the walls to the slab. This product is available in different thicknesses and densities depending on the weight of the partitions (Fig.A)

**STEP 2**

**DISJOINTING OF REINFORCED CONCRETE STRUCTURES**

In the presence of stairwells, elevator compartments and pillars (even if contained within the vertical partitions) that rigidly connect all the structural elements from the foundations to the last floor, it is necessary to cover them with elastic material (such as Isolmant Cemento Armato) and then finish them, where possible, with a 4/5 cm board or with coated plaster panels. With a reduced thickness element, it is possible to fix a strong plaster-holding net directly onto the elastic insulating material with nylon plugs, and then plaster it over, paying particular attention to the cracks (Fig. B).



**INSTALLING ISOLMANT SPECIAL PLUS RESILIENT LAYER**

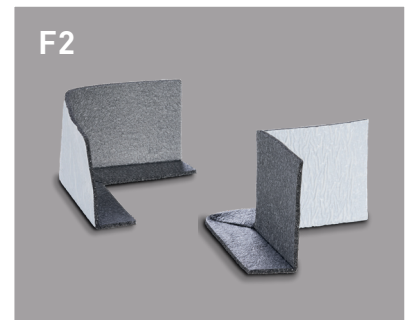
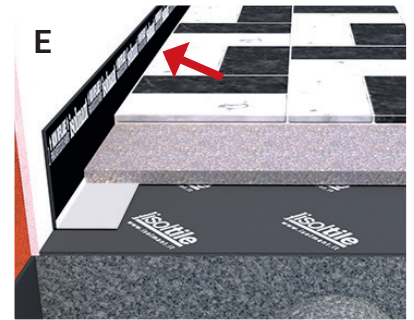
**STEP 3**



Isolmant Special Plus does not have an anti-tearing layer and is therefore not recommended for single-layer bases (in this case, Isolmant BiPlus is recommended). Before installing the underlay, a levelling screed must be laid using suitable materials and recipes to ensure adequate mechanical support and a plain and uneven surface. Then, Isolmant Special Plus sheets can be installed after having carefully joined and sealed them with Isolmant Nastro Telato or Isolmant Fascia Nastro (Fig. C). Isolmant Special, the sheets should be joined using the special overlapping fabric and sealed with Isolmant Nastro Telato or Isolmant Fascia Nastro (Fig. C). It is also necessary to be careful to start flush with the wall with the polyethylene. It is therefore necessary to trim only the fibre flush with the wall in order to guarantee the presence of both layers of product over the entire surface of the floor (Fig. D).

**STEP 4** INSTALLING FASCIA PERIMETRALE

To avoid acoustic bridges, the use of Isolmant Fascia Perimetrale is recommended, to be laid along the entire perimeter of the room without interruption. The height of Isolmant Fascia Perimetrale must be chosen by the designer/contractor, taking into account the actual height at each site, in order to guarantee that the strip is about 2/3 cm higher than the flooring level. This excess must be trimmed after laying the floor (Fig. E). The continuity of the installation must also be ensured along the thresholds of entrance doors and French windows, as well as in technical niches for housing the manifolds of the heating system, pillars, pilasters, doors and other wall movements. Specific accessories are available to facilitate this task: Isolmant Angoli e Spigoli and Isolmant Telaio Porte (Fig. F1 - F2). It is also necessary to avoid a gap between the strip and the walls at the corners (Fig. G) where cementitious material can penetrate, as well as ensuring that the flanking strip also adheres continuously along the slab-wall connection: the formation of the shell (Fig. H) causes a reduction in the thickness of the screed resulting in a lack of flooring support at that point, risking cracking over time. In conclusion, before proceeding with the laying of the finishing screed, the contractor must be reasonably certain that he has created a perfect watertight tank in which the cement screed he is going to lay can "float" without establishing any rigid connection either with the load-bearing layers underneath or with the walls to its sides. Any uncovered points that could constitute an "acoustic bridge" must be covered with Isolmant Fascia Nastro.





### SCREED CONSTRUCTION

## STEP 5

The finishing screed must guarantee adequate mechanical resistance according to the actual laying and loading conditions. Appropriate safety measures must be taken, such as assessing the adequate consistency of the mix, the curing time, the possible need to use collaborating elements (wire mesh or fibres), the sufficient compactness of the surface and the possible surface treatment with consolidating products (as indicated by the manufacturer of the screed and the reference standards). With reference to the thickness of the finishing screed, it is advisable to create a minimum thickness of no less than 4 cm in the case of installing 3- 5 mm Isolmant Special and no less than 7 cm with 10 - 15 mm Isolmant Special. If the thickness is less than 5 cm in some places, it is advisable to reinforce the screed with galvanised electro-welded mesh. In all cases, the screed must be well trodden (especially at the sides and corners), compacted throughout, smoothed and trowelled (by hand or by helicopter) to a high standard (dis. I). When pouring the screed, special care must be taken not to tear or puncture the elastic material.

## STEP 6 INSTALLING FLOORING AND SKIRTING BOARDS

It is essential to inform all site operators that the excess of the strip must be trimmed only after the flooring has been laid and grouted (Fig. L) and before laying the skirting board. 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, the flooring should be joint to the flanking strip, ensuring the system elastic functioning. In particular, a tiled skirting board 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. M). If the joint were rigid, it would prevent the floor from floating and would de-grout.





### 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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