ISOLMANT SPECIAL FOSSIL FREE

UNDERSCREED INSULATION

Made from certified renewable sources, specific for
underscreed impact sound in double layer application with finshing screed > 4 cm

WHAT IS ISOLMANT SPECIAL FOSSIL FREE?

Resilient layer made of Isolmant Special **Serie R Fossil Free** polyethylene (from renewable sources) with embossed and screen-printed upper side, featured by a better and calibrated quality of the polyethylene cellulation and dark green coloured that evokes the origin of its raw material components. 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. Available in 5, 10 and 15 mm thicknesses.

SPECIFIC APPLICATIONS

Isolmant Special Fossil Free is specific for floating screeds as provided by UNI 11516:2013 standards with any type of slab. This product is recommended for applications under a finishing screed (double layer solution), it requires a finishing screed at least 4 cm thickness (for Isolmant Special Fossil Free 5 mm) or of at least 7 cm (for Isolmant Special Fossil Free 10 and 15 mm).

In order to disjoint a floating screed from perimeter walls, it is recommended not to turn Isolmant Special Fossil Free upside down but to use Isolmant Fascia Perimetrale (perimeter strips).

Install Isolmant Special Fossil Free with the embossed and screenprinted side facing upwards.

ISCC International Sustainability & Carbon Certification

CAM MINIMUM ENVIRONMENTAL CRITERIA SUSTAINABLE

VOC FREE HEALTHY

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.

Special Fossil Free is REMADE IN ITALY certified [1], product certification, under ACCREDIA accreditation, which attests to the recycled content in the product.

This certification is accepted during the tender and award phase, in accordance with the provisions of the public procurement regulations and the CAM.

RECYCLED CONTENT CERTIFICATE SPECIAL FOSSIL FREE N° IT335452 Issued on 03/09/2024			
Raw material	**% of raw material in the product**	**% of recycled content in 1 kg of raw material**	**% of recycled content in the finished product**
SPECIAL R	100%	80%	**80%**

OTHER SUSTAINABILITY CHARACTERISTICS

Composed of **ISCC PLUS certified** polyethylene made from **bio-circular renewable** material (determination of origin using the mass balance approach).

The renewable source does not compete with the food chain, is **derived from biomass**, is certified and meets the definition of waste or residue according to ISCC PLUSS.

Result to VOC emission test:
- VOC A+

Low environmental impact.

Can be disposed according to **EWC No. 170604** insulation materials NON-HAZARDOUS plastics.

It helps achieve credits for a building's **environmental certification according to the following protocols**:

CAM ✓ ITACA ✓ WELL ✓ BREEAM ✓ LEED ✓

(1) The central aspect of the REMADE® certification is the preparation of a traceability model of material flows in the production process and transparency of the operations carried out and the relevant documentation.
It is an effective tool to respond to the growing attention paid to materials deriving from recycling, recovery and by-products, which comes from the recent global model of sustainable development of the circular economy, characterized by the maintenance, for the longest possible time, of the value of products, materials and resources in the system, which are returned to the product cycle at the end of their use, so that the generation of waste is minimised, to help develop a sustainable, low-carbon, resource efficient and competitive.

ADVANTAGES

ISCC Plus certified and made from bio-circular raw materials.

Excellent acoustic impact sound insulation.

Optimal airborne noise reduction.

Suitable for use in both renovation and new construction.

Low thermal conductivity.

Inalterable over time.

INSTALLATION ADVANTAGES

Easy to install product.

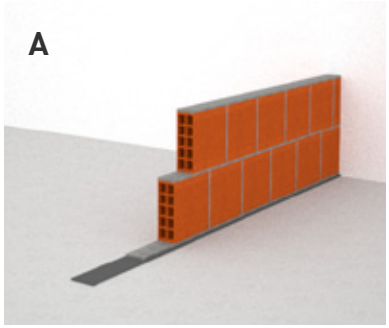
Easy to trim: can be easily cut with a utility knife or box cutter.

NOMINAL THICKNESS:	5 mm	10 mm	15 mm
DYNAMIC STIFFNESS:	$s'_t = s' = 33$ MN/m^3 [1]	$s'_t = s' = 17$ MN/m^3 [2]	$s'_t = s' = 11$ MN/m^3 [3]
IMPACT SOUND INSULATION:	$\Delta L_w = 26$ dB	$\Delta L_w = 31$ dB	$\Delta L_w = 33$ dB
COMPRESSION CLASS:	CP2 [4]		
CONDUCTIVITY:	$\lambda = 0.0325$ W/mK		
THERMAL RESISTANCE:	$R_t = 0.142$ m^{2}K/W	$R_t = 0.284$ m^{2}K/W	$R_t = 0.426$ m^{2}K/W
SPECIFIC HEAT CAPACITY:	c = 2100 J/kgK		
VAPOUR RESISTANCE:	μ = 3600		
EMISSION OF VOLATILE ORGANIC COMPOUNDS:	VOC A+ [5]		
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 DOP (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 m x 50 m (h x L) = 75 m^2		Rolls of: 1.50 m x 30 m (h x L) = 45 m^2
PACKAGE:	Single rolls		

(1) Istituto Giordano test report no. 353881
(2) Test Report No. 1619
(3) Test Report No. 1620
(4) Istituto Giordano test report no. 406562
(5) Istituto Giordano test report no. 376851

VOCE DI CAPITOLATO

Resilient layer is made of second-generation green reticulated expanded closed-cell Isolmant Special Serie R polyethylene from renewable sources and fossil free (ISCC PLUS certified). Nominal thicknesses 5-10 and 15 mm. Dynamic stiffness $s'_t = s' = 33$ MN/m^3 (for the 5 mm version), 17 MN/m^3 (for the 10 mm version) and 11 MN/m^3 (for the 15 mm version).Impact sound insulation ΔL_w=26 dB (for the 5 mm version), 31 dB (for the 10 mm version) and 33 dB (for the 15 mm version). VOC A+ (certified value). Classified A by Remade in Italy for recycled content and compliant with the requirements of the CAM Decree 2022. Product with overlap (for the 10 and 15 mm versions). Fossil Free. To be installed with the embossed and screen-printed side facing upwards.



INSTALLING FASCIA TAGLIAMURO

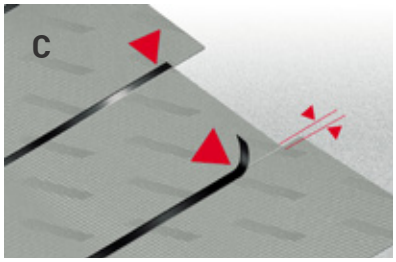
STEP 1

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

DISJOINT 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 plaserboard. 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 cracks (Fig. B).



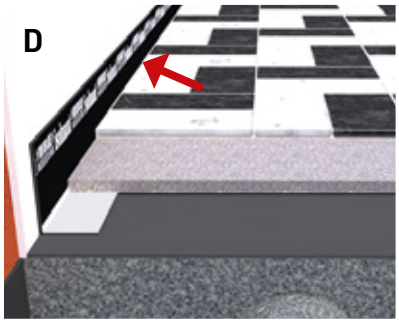
INSTALLING ISOLMANT SPECIAL SERIE R FOSSIL FREE RESILIENT LAYER

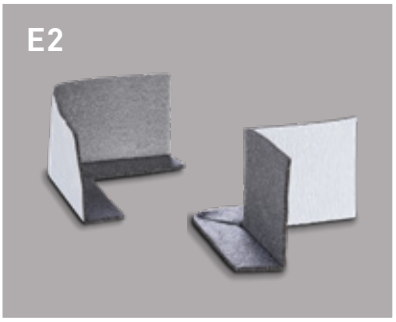
STEP 3

This product has not an anti-tearing layer and is therefore not recommended for single-layer bases (in this case Isolmant Special Plus 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. Isolmant Special Fossil Free sheets can be installed after having carefully joined and sealed them with Isolmant Nastro Telato or Isolmant Fascia Nastro (Fig. C).

STEP 4 INSTALLING FASCIA PERIMETRALE

In order 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. D). 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 gaps between the strip and the walls at the corners (Fig. E) where cementitious material can penetrate, as well as ensuring that the strip also adheres continuously along the slab-wall connection: the formation of the shell (Fg. G) 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 CONTRUCTION

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 regard to the thickness of the finishing screed, we recommend a minimum thickness of no less than 4 cm. 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. H). 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 flanking strip must be trimmed only after the flooring has been laid and grouted (fig. I) 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. L). 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.

Via dell'Industria 12, Località Francolino 20074 Carpiano (Mi) Tel. +39 02 9885701 Fax +39 02 98855702
clienti@isolmant.it - www.isolmant.it - www.sistemapavimento.it - www.isolmant4you.it