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ABOUT ISOLMANT

LEADER IN ACOUSTIC & THERMAL INSULATION

Since 1976, Isolmant has been a successful player in the construction market: a leader in acoustic & thermal insulation.

Always devoted to develop innovative products for the construction industry, Isolmant made significant efforts to conceive concepts that so far are very renowned.

OUR OWN STRENGTHS

- Production and logistics center: the driving force at Isolmant
- Daily side by side collaboration with designers, companies or end-clients
- Sustainable solutions and people’s well-being
- Global support: from the design phase to the final installation
- Isolmant’s Marketing department serves the market to contribute to the cultural growth in the sector
- A complete and versatile range of soundproofing products

isolmant
OVER 40 YEARS
OF EXPERIENCE IN THE SECTOR

OVER 70
PRODUCTS IN THE RANGE

7000 m²
OF WAREHOUSE SPACE

20 countries
SERVED WORLDWIDE

OVER 100 million m²
OF HORIZONTAL INSULATION UNDERLAY SOLD

OVER 10
PRODUCT INNOVATIONS INTRODUCED TO THE MARKET

BREAKDOWN OF SALES REVENUE
FROM 1980 TO TODAY

- horizontal insulation: 55%
- vertical insulation: 15%
- wooden floors: 15%
- accessories: 10%
- plasterboard: 5%

1980: 95%
1990: 80%
2000: 70%
2016: 55%
The acoustic and thermal insulation of buildings has laid many issues that relate to health, energy consumption and climate changes. In this respect, also the rise of cost of real estate in urban areas and a deeper awareness for sprawling and land consumption have influenced. To date, noise is the fastest growing type of pollution in modern cities, and its effect on our mental and emotional health has a direct influence on our physical well-being – from the lack of sleep to increasing stress. Noise annoyance in buildings, which is caused by sound transmission from adjoining dwellings or from the outside environment, is a crucial concern. Among the problem that beset apartment owners and take first-time high-rise dwellers by surprise, noise is the most common complaint.

Exposure to noise relates to sleep deprivation, annoyance and health issues such as hypertension or heart diseases. Living in block of flats is difficult and with excessive noise which penetrates through windows, floors, ceiling, walls, doors and even through water pipes, this condition becomes extremely unpleasant. But, what could happen if that noise comes from people who live under the same roof?

A sustainable design takes care of health, well-being and privacy. Therefore, innovation, technological systems, as well as the selection of quality insulation materials and their proper installation, could give a great improvement in the quality of life. Different apartments can be built with different standards and Tecnasfalti Isolmant is able to offer sustainable solutions which are featured by insulating materials and the technical expertise for the acoustic and thermal insulation of building.
Sound insulation, otherwise known as sound reduction, is the prevention of sound being transmitted from one part of a building to another, for example by erecting a partition or a wall or installing a floating screed. When considering the sound insulation of constructions, various types of sound may need to be considered: airborne sound, impact sound and flanking sound. There are two basic mechanisms whereby sound can transfer. Noise can pass from one room to another either through the surrounding air (airborne noise) or the building structure itself (structure-borne noise and flanking sound).

**IMPACT SOUND**

Impact sound is generated by direct physical excitation of a part of a building. Examples include slamming doors, stamping on the floor and vibrating washing machines. With impact sound, a relatively small impact can result in a loud sound being transmitted through the structure, often over long distances.

**AIRBORNE SOUND**

Airborne sound sources produce noise by vibrating the air immediately around them. Typical sources include the human voice, musical instruments, home entertainment systems and barking dogs.

**FLANKING SOUND (SPECIAL/DAMPING PRODUCT)**

Flanking sound transmission usually refers to sound that travels through ‘flanking’ structural elements, such as an external wall that flanks a separating element between two dwellings. Flanking sound can also include sound that travels along unintended air paths, such as unsealed gaps in the structure and around service penetrations.
The floating screed is a technological system (not a single product but a system) to provide impact and airborne sound insulation. It consists of a load-bearing layer (screed and finishing) completely disconnected from the other building elements (partitions, surrounding walls, floors, and plants or installations) through a resilient separating layer of Isolmant.

### Floating screed system

The floating screed construction is made of screed and finishing that are being separated from the surrounding structures by both a horizontal resilient layer (Isolmant sheets) and vertical flanking strips. This “resilient container” should be continuous and perfectly sealed to avoid any residual or accidental rigid connection between the screed and the supporting floor, as that would negatively affect the acoustic performance of the system (Figure 1).

A floating screed system, acting as a mass/spring/mass system, is the ideal solution for impact sound insulation and to improve airborne sound protection. The screed is designed in order to obtain “mass” over the resilient layer. This latter is acting as a “spring” producing a mitigation effect transforming all vibration and sound into micro movements of the upper floating screed.

The floating screed can be directly laid on the base slab (Figure 2) or alternatively on the levelling screed (Figure 3). If the floating screed is installed on the base slab, service plants and pipes can interrupt flanking strips (Figure 5) generating rigid connection and loss of acoustic insulation. Installation on plants and pipes in a levelling layer (Figure 4) is preferred because it is easier and more logical to implement, and thereby less prone to workmanship variability. Good to consider all the key aspects such as flanking transmission.
ONE PRODUCT FOR EVERY SITUATION

For a professional and efficient acoustic insulation, Isolmant proposes two types of products that are designed to fit for the different construction conditions. Isolmant defines these ranges as non-coated products, for a basic construction condition (i.e. a floating screed installed on the levelling screed or conditions in which no particularly resistant product is required), and coated products in case resistant products are needed (i.e. when plants and pipes are installed over the resilient material). Each category comprises an entry-level product and a high-performance one. In addition, Isolmant provides some coated products that are specifically conceived for under-floor heating.

PRODUCTS AND APPLICATIONS

<table>
<thead>
<tr>
<th></th>
<th>NON COATED</th>
<th>COATED</th>
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</thead>
<tbody>
<tr>
<td>BASIC PRODUCT</td>
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<td>UnderPlus Black.E</td>
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<tr>
<td>HIGH PERFORMING PRODUCT</td>
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<tr>
<td></td>
<td>UnderSpecial</td>
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<tr>
<td>SPECIAL APPLICATION</td>
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<td></td>
<td></td>
<td>Radiante</td>
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</tbody>
</table>

Figure 6. Through the frequency spectrum, the figure above shows how a floating screed with Isolmant MonoPlus or Isolmant UnderPlus Black.E (yellow line) or Isolmant BiPlus or Isolmant UnderSpecial (red line) can improve impact sound insulation of a bare hollow clay slab (blu line) or a traditional bounded screed (cyan line).
<table>
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<tr>
<th>Needs</th>
<th>Technical solution</th>
<th>Construction technique</th>
<th>Recommended product and accessories</th>
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<tr>
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<td>Floating screed comprising a resilient layer under</td>
<td>Resilient material laid on levelling screed</td>
<td>UnderPlus Black.E</td>
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<tr>
<td>floors</td>
<td>cementitious screed</td>
<td></td>
<td>Fascia Nastro</td>
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<td>Tecnica Reticolata</td>
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<td></td>
<td>Fascia Tagliamuro</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resilient material laid on base slab (installation of services in the screed)</td>
<td>MonoPlus</td>
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<tr>
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<td>Fascia Perimetrale</td>
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<td>Tecnica Reticolata</td>
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<td></td>
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<td></td>
<td>Fascia Tagliamuro</td>
</tr>
<tr>
<td>High performance airborne and impact sound</td>
<td>Floating screed with a resilient layer under</td>
<td>Resilient material laid on levelling screed</td>
<td>UnderSpecial</td>
</tr>
<tr>
<td>sound insulation of floors</td>
<td>cementitious screed</td>
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<td>Fascia Nastro</td>
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<td>Fascia Perimetrale</td>
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<tr>
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<td></td>
<td>Resilient material laid on base slab (installation of services in the screed)</td>
<td>BiPlus</td>
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<tr>
<td>Special application with heating and</td>
<td>Floating heating screed</td>
<td>Resilient material under castellated panel</td>
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<td>cooling underfloor system</td>
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<td>Nastro Telato</td>
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<td></td>
<td>Fascia Perimetrale</td>
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<td>Tecnica Doppio Spessore</td>
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<td></td>
<td></td>
<td>Fascia Tagliamuro</td>
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</tbody>
</table>
Product made of a cross-linked closed-cell polyethylene foam layer about 2.5 mm thick, joined on the underside to FIBTEC XF1.E (special needled fibre produced according to technical specifications and designed to provide optimum noise reduction).

To be positioned with the fibre side facing down.

**THICKNESS**
- Approx. 7 mm

**IMPACT SOUND INSULATION**
- $\Delta L_w = 26$ dB Value certified according to UNI EN ISO 140/8

**DYNAMIC STIFFNESS**
- $s' = 19$ MN/m³ Value tested according to current standards UNI EN 29052/1

**THERMAL RESISTANCE**
- $R_t = 0.171$ m²K/W

**SIZE**
- Rolls of:
  - 1.50 m x 50 m (h x L) = 75 m²
  - Product with overlaps
  - Once overlapped, the sheets should be sealed by means of Isolmant Fascia Nastro or Isolmant Nastro Telato

**PACKAGING**
- Single rolls

**TRANSPORT DATA**
- Roll size 1.60 m x 50 m (h x L) = 80 m²
  - Ø 0.66 m - weight 25 kg - volume 0.7 m³
  - n. 82 = 6150 m²  n. 38 = 2850 m²

**Conditions of use**

Isolmant UnderPlus Black.E guarantees high impact noise insulation and also high quality airborne noise reduction. Isolmant UnderPlus Black.E is particularly suitable for two-layer structures, with the floating screed installed on the levelling layer. It requires finishing screed thickness of at least 5 cm; for lower thickness it is recommended to reinforce the screed with suitable mesh or fibre. Care must be taken when applying with “freshly” laid ceramic floor.
Isolmant MonoPlus is recommended for impact sound insulations with floating screed. It is also suitable for single-layer application when the direct installation of building plants on the resilient layer requires tear resistance and protection to avoid damaging the insulating material. The product can be installed with low thickness screed (at least 5 cm).

**Conditions of use**

Isolmant MonoPlus is recommended for impact sound insulations with floating screed. It is also suitable for single-layer application when the direct installation of building plants on the resilient layer requires tear resistance and protection to avoid damaging the insulating material. The product can be installed with low thickness screed (at least 5 cm).

**Product data**

- **THICKNESS**: Approx. 6 mm
- **IMPACT SOUND INSULATION**: $\Delta L_w = 28$ dB (Value calculated according to EN ISO 12354-2)
- **DYNAMIC STIFFNESS**: $s' = 19$ MN/m³
- **THERMAL RESISTANCE**: $R_t = 0.171$ m²K/W
- **SIZE**: Rolls of:
  - 1.50 m x 50 m (h x L) = 75 m²
  - This product comes with adhesive flap to seal the overlapping fabric
- **PACKAGING**: Single rolls
- **TRANSPORT DATA**: Roll size 1.60 m x 50 m (h x L) = 80 m²
  - Ø 0.65 m - weight 35 kg - volume 0.633 m³
  - n. 82 = 6150 m²
  - n. 38 = 2850 m²

**Isolmant MonoPlus long term compressive creep behaviour under a static load of 2 KPa**

![Graph](image)
**GLOSSARY**

**THICKNESS**
Approximately 8 - 13 mm

**IMPACT SOUND INSULATION**
$\Delta L_w = 34 \text{ dB}$

**DYNAMIC STIFFNESS**
$s' = 11 \text{ MN/m}^3$

**THERMAL RESISTANCE**
$R_t = 0.234 \text{ m}^2K/W$

**SIZE**
Rolls of: 1.50 m x 50 m (h x L) = 75 m$^2$ (Version 9 mm)
1.50 m x 25 m (h x L) = 37.5 m$^2$ (Version 13 mm)

Product with overlaps
Once overlapped, the sheets should be sealed by means of Isolmant Fascia Nastro or Isolmant Nastro Telato

**PACKAGING**
Single rolls

**TRANSPORT DATA**

<table>
<thead>
<tr>
<th>Version 9 mm:</th>
<th>Version 13 mm:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll size 1.60 m x 50 m (h x L) = 75 m$^2$</td>
<td>Roll size 1.60 m x 25 m (h x L) = 37.5 m$^2$</td>
</tr>
</tbody>
</table>
| Ø 0.73 m - weight 25.6 kg - volume 0.85 m$^3$ | Ø 0.66 m - weight 19.25 kg - volume 0.697 m$^3$

| Version 9 mm $\rightarrow$ n. 71 = 5325 m$^2$ | Version 13 mm $\rightarrow$ n. 35 = 2625 m$^2$
| Version 14 mm $\rightarrow$ n. 88 = 3300 m$^2$ | Version 14 mm $\rightarrow$ n. 40 = 1500 m$^2$

**Allowed Container Sizes**

- **40''**
  - Container size: 2.31 m x 12.1 m x 2.36 m
  - Weight: 25.6 kg
  - Volume: 0.85 m$^3$

- **20''**
  - Container size: 2.31 m x 5.86 m x 2.36 m
  - Weight: 19.25 kg
  - Volume: 0.697 m$^3$

**Conditions of use**

Isolmant UnderSpecial ensures high impact sound insulation in floating screed application. It is suitable when a higher airborne sound insulation is required. In particular, this product is recommended in double-layer application. It needs a 6 cm screed. Screeds with lower thickness should be reinforced by means of a suitable metal mesh or fibres. Attention must be paid in case of dry shake installation of ceramic tiles.

**LIFE TIME**

Isolmant UnderSpecial long term compressive creep behaviour under a static load of 2 KPa
Isolmant BiPlus is recommended for high impact sound insulations with floating screed. It is also suitable for single layer application when the direct installation of building plants on the resilient layer requires tear resistance and protection to avoid damaging the insulating material. It needs at least a 6 cm screed. Screeds with lower thickness should be reinforced by means of a suitable metal mesh or fibres. Attention must be paid in case of dry shake installation of ceramic tiles.

<table>
<thead>
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<th>CONDITIONS OF USE</th>
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<tr>
<td>THICKNESS</td>
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<tr>
<td>IMPACT SOUND INSULATION</td>
</tr>
<tr>
<td>DYNAMIC STIFFNESS</td>
</tr>
<tr>
<td>THERMAL RESISTANCE</td>
</tr>
</tbody>
</table>
| SIZE | Rolls of: 1.50 m x 50 m (h x L) = 75 m$^2$ (Version 9 mm)
1.60 m x 25 m (h x L) = 37.5 m$^2$ (Version 14 mm)
This product comes with a top adhesive profile to seal the overlapping flaps |
| PACKAGING | Single rolls |
| TRANSPORT DATA | Version 9 mm:
Roll size 1.50 m x 50 m (h x L) = 75 m$^2$
Ø 0.75 m - weight 42 kg - volume 0.9 / 1 m$^3$

Version 9 mm $\rightarrow$ n. 69 = 5175 m$^2$  n. 34 = 2550 m$^2$

Version 14 mm $\rightarrow$ n. 71 = 2662 m$^2$  n. 35 = 1312 m$^2$

| Container size 40’’ |
| Container size 20’’ |

Isolmant BiPlus long term compressive creep behaviour under a static load of 2 KPa
Isolmant Radiante is specific for applications with underfloor heating or cooling systems. Thanks to its aluminet reflective film, it can block any downward loss of heat. This product fits for low thickness screed installations with thin thermal insulation panels. An acoustic resilient layer is always required, because thermal panels do not provide acoustic insulation (except in specific cases).

### Conditions of use

Isolmant Radiante is specific for applications with underfloor heating or cooling systems. Thanks to its aluminet reflective film, it can block any downward loss of heat. This product fits for low thickness screed installations with thin thermal insulation panels. An acoustic resilient layer is always required, because thermal panels do not provide acoustic insulation (except in specific cases).

To be installed with the aluminet-coated side facing upwards.

### Isolmant Radiante

> COATED

Product made of 2 mm HD Isolmant Special with the upper side bonded to a radiant, embossed aluminet coated film and the lower side bonded to FIBTEC XF2 [special needle-punched fibre produced according to technical specifications, designed to provide a high quality noise reduction].

### Specifications

<table>
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<th>Specification</th>
<th>Version 5 mm</th>
<th>Version 8 mm</th>
</tr>
</thead>
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<tr>
<td><strong>THICKNESS</strong></td>
<td>Approx. 5 mm - 8 mm</td>
<td></td>
</tr>
<tr>
<td><strong>IMPACT SOUND INSULATION</strong></td>
<td>( \Delta L_w = 25 \text{ dB} ) (version 5 mm)</td>
<td>( \Delta L_w = 30 \text{ dB} ) (version 8 mm)</td>
</tr>
<tr>
<td></td>
<td>Value certified according to the EN ISO 140/8</td>
<td>Value certified according to the EN ISO 12354-2 e UNI/TR 11175</td>
</tr>
<tr>
<td><strong>DYNAMIC STIFFNESS</strong></td>
<td>( s' = 21 \text{ MN/m}^3 ) (version 5 mm)</td>
<td>( s' = 15 \text{ MN/m}^3 ) (version 8 mm)</td>
</tr>
<tr>
<td><strong>THERMAL RESISTANCE</strong></td>
<td>( R_t = 0.168 \text{ m}^2\text{K/W} ) (version 5 mm)</td>
<td>( R_t = 0.254 \text{ m}^2\text{K/W} ) (version 8 mm)</td>
</tr>
<tr>
<td><strong>SIZE</strong></td>
<td>Rolls of: ( 1.50 \times 50 \text{ m} ) (h x L) = 75 \text{ m}^2 ) (version 5 mm)</td>
<td>( 1.50 \times 25 \text{ m} ) (h x L) = 37,5 \text{ m}^2 ) (version 8 mm)</td>
</tr>
<tr>
<td></td>
<td>Product with overlaps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once overlapped, the sheets should be sealed by means of Isolmant Nastro Telato or Isolmant Fascia Nastro</td>
<td></td>
</tr>
<tr>
<td><strong>PACKAGING</strong></td>
<td>Single rolls</td>
<td></td>
</tr>
<tr>
<td><strong>TRANSPORT DATA</strong></td>
<td>Version 5 mm: Roll size 1.60 \text{ m} \times 50 \text{ m} (h x L)</td>
<td>( \varnothing 0.55 \text{ m} ) - weight 27 \text{ kg} - volume 0.484 \text{ m}^3</td>
</tr>
<tr>
<td></td>
<td>Version 8 mm: Roll size 1.60 \text{ m} \times 25 \text{ m} (h x L) = 37,5 \text{ m}^2</td>
<td>( \varnothing 0.54 \text{ m} ) - weight 15 \text{ kg} - volume 0.467 \text{ m}^3</td>
</tr>
<tr>
<td><strong>PRODUCTS</strong></td>
<td>Version 5 mm: ( \text{n. 118 = 8850 m}^2 )</td>
<td>( \text{n. 56 =4200 m}^2 )</td>
</tr>
<tr>
<td></td>
<td>Version 8 mm: ( \text{n. 118 = 4225 m}^2 )</td>
<td>( \text{n. 56 =2100 m}^2 )</td>
</tr>
</tbody>
</table>

**Conditions of use**

Isolmant Radiante is specific for applications with underfloor heating or cooling systems. Thanks to its aluminet reflective film, it can block any downward loss of heat. This product fits for low thickness screed installations with thin thermal insulation panels. An acoustic resilient layer is always required, because thermal panels do not provide acoustic insulation (except in specific cases).
PRODUCTS

ISOLMANT FASCIA PERIMETRALE TECNICA DOPPIO SPESSORE

Adhesive perimeter strips designed for an easy installation. They have a vertical part made of expanded cross-linked polyethylene with 5 mm thickness. This side is partially adhesive and it is conceived to be installed on the wall. The horizontal part is made of an HDPE film with 0.1 mm thickness and silicone adhesive paper on both sides. These strips come with a screen-printed side with installation instructions. This product is available in two versions:
- h 20 cm (12.5 cm wall + 7.5 cm floor);
- h 25 cm (17.5 cm wall + 7.5 cm floor).

<table>
<thead>
<tr>
<th>THICKNESS</th>
<th>Approx. 5 mm (vertical part) - approx. 0.1 mm (horizontal part)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLANKING PATH NOISE REDUCTION</td>
<td>Avoiding the installation of Isolmant Fascia Perimetrale causes an acoustic bridge and a consequent decibel loss</td>
</tr>
<tr>
<td>INSTALLATION</td>
<td>Due to its silicone adhesive paper film on both sides, Isolmant Fascia Perimetrale Tecnica doppio spessore is suitable for installation under or over the resilient layer. Trim the extra length only after laying and grouting tiles and before installing the skirting boards.</td>
</tr>
<tr>
<td>SIZE</td>
<td>20 - 25 cm x 50 m strips</td>
</tr>
<tr>
<td>PACKAGING</td>
<td>4 rolls equal to 200 m</td>
</tr>
<tr>
<td>TRANSPORT DATA</td>
<td>Roll size (Strip h 20 cm)</td>
</tr>
<tr>
<td></td>
<td>Ø 0.56 m - weight 12 kg - volume 0.25 m³</td>
</tr>
<tr>
<td></td>
<td>Roll size (Strip h 25 cm)</td>
</tr>
<tr>
<td></td>
<td>Ø 0.56 m - weight 14 kg - volume 0.31 m³</td>
</tr>
</tbody>
</table>

Conditions of use

In order to ensure floating flooring acoustic performances, the vertical surfaces of the screed should also be disconnected from surrounding building elements. In addition, as an alternative to turn up and bend the resilient layer along the edges of the floating screed (which is sometimes difficult during installation), it is possible to apply Isolmant Fascia Perimetrale along the room perimeter.
Isolmant Fascia Perimetrale Radiante avoids flanking noise and vibration transmission from floating screed to the partition wall. To ensure the proper functioning of the floating floor it is necessary that the whole system resting on the resilient layer could move freely. Flanking strips avoid any rigid contacts between the screed and walls, pillars and façades. It can substitute the elastic material used for expansion joints. In case of underfloor heating systems, Isolmant Fascia Perimetrale Radiante can be used as expansion joint and thermal break.

Isolmant Fascia Perimetrale Tecnica Reticolata

Expanded cross-linked closed-cell polyethylene strips designed for easy installation. These strips come with a screen-printed side with installation instructions. This product is available in three versions:
- h 12.5 cm (7.5 cm wall + 5 cm floor);
- h 18.5 cm (11 cm wall + 7.5 cm floor);
- h 25 cm (17.5 cm wall + 7.5 cm floor).

Isolmant Fascia Perimetrale Radiante

Vertical strips made of expanded closed-cell cross-linked polyethylene with 15 cm height. These strips have a 10 cm of reusable adhesive flap to overlap the radiant panel starting from the lower edge. In addition, the strips are screen-printed with installation instructions.

**Conditions of use**

Isolmant Fascia Perimetrale Radiante avoids flanking noise and vibration transmission from floating screed to the partition wall. To ensure the proper functioning of the floating floor it is necessary that the whole system resting on the resilient layer could move freely. Flanking strips avoid any rigid contacts between the screed and walls, pillars and façades. It can substitute the elastic material used for expansion joints. In case of underfloor heating systems, Isolmant Fascia Perimetrale Radiante can be used as expansion joint and thermal break.
**THICKNESS**

Approx. 4 mm (Standard version)
Approx. 6 mm (Strong version)

**FLANKING PATH NOISE REDUCTION**

Enhance the impact sound insulation of the wall

**MECHANICAL FEATURES**

<table>
<thead>
<tr>
<th>Density</th>
<th>Standard 50 kg/m³</th>
<th>Strong 70 kg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitudinal: TENSILE STRENGTH:</td>
<td>kPa 675</td>
<td>kPa 835</td>
</tr>
<tr>
<td>Cross:</td>
<td>kPa 465</td>
<td>kPa 735</td>
</tr>
<tr>
<td>COMRESSIVE STRENGTH:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% compression:</td>
<td>kPa 30</td>
<td>kPa 85</td>
</tr>
<tr>
<td>25% compression:</td>
<td>kPa 55</td>
<td>kPa 115</td>
</tr>
<tr>
<td>50% compression:</td>
<td>kPa 125</td>
<td>kPa 185</td>
</tr>
<tr>
<td>COMRESSION SET: 22h. load, 25°C. compression at 25%: 0.5h. after discharge:</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>25h. after discharge: 7%</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

**SIZE**

10 - 15 - 30 cm x 50 m strips

**PACKAGING**

Version h 10 cm: 15 rolls equal to 750 m
Version h 15 cm: 10 rolls equal to 500 m
Version h 30 cm: 5 rolls equal to 250 m

**TRANSPORT DATA**

Roll size (Standard strip): Ø 0.5 m - weight 16.4 kg - volume 0.375 m³
Roll size (Strong strip): Ø 0.62 m - weight 33 kg - volume 0.578 m³

**Conditions of use**

Isolmant Fascia Tagliamuro is recommended to disconnect vertical partitions, including the internal partition of the perimeter wall to avoid rigid connections between the building elements. Thanks to its balanced density, Isolmant Fascia Tagliamuro ensures the right mechanical strength (to avoid the cracking of partitions) and the necessary anti-vibration isolation (to avoid acoustic bridges).

**ISOLMANT FASCIA NASTRO**

Adhesive strip made of 7.5 cm high Isolmant, suitable for sealing together Isolmant sheets.

**THICKNESS**

Approximately 3 mm

**IMPACT SOUND INSULATION**

Avoiding the installation of Isolmant Fascia Nastro causes a decibel loss occurring when Isolmant sheets are not properly sealed.

**INSTALLATION**

Install Isolmant Fascia Nastro after trimming it with a cutter.

**SIZE**

Strips of 7.5 cm x 50 m

**PACKAGING**

4 rolls equal to 200 m

**TRANSPORT DATA**

Roll size
Ø 0.44 m - weight 12 kg - volume 0.277 m³

**Conditions of use**

Ideal for sealing together Isolmant sheets (especially if they have no adhesive overlapping flaps), thus preventing the passage of noise and humidity. Isolmant Fascia Nastro ensures continuity of both the resilient material and the layer protecting from the risk of humidity. It can also be useful to repair the insulating layer and ensure continuity of the resilient layer to complete the acoustic insulation of the floor before installing the screed.
A lack of good practice can lead to workmanship errors. Bad practice and poor workmanship may lead to very different results from those expected in the design phase. In order to provide acoustically more robust constructions, the knowledge of good and bad practices and the possible influence of workmanship are also of primary importance in the design phase. Good design is easier and more logical to implement, thereby being less prone to workmanship variability. Good workmanship involves thought and care, with an appreciation of key aspects such as flanking transmission.

Floating screed installation process

Poor acoustic performances can result from the lack of a floating floor on the ground floor of multi-storey buildings as well as the lack of a floating floor in row dwellings with a continuous slab connecting each other. Impact sound can also be transmitted horizontally through the slabs and noticed in adjacent rooms. A floating floor should be considered whenever there are quiet rooms, even if they are located on the ground floor. A interruption of the screed is needed to avoid horizontal transmission of impact sound between quiet and busy areas (corridors/bedrooms). To ensure more comfort and privacy it is suggest that the resilient layer should be installed after the partition walls. A base floor directly bearing partition walls (lay Isolmant after installing partitions) enables the creation of a floating screed in each room. It gives the following advantages:
- reduction of the acoustic bridge between the wall and the screed;
- more comfort and privacy between adjoining rooms.

When laying Isolmant products for noise and thermal insulation of horizontal structures, make sure that continuity of resilient material is provided to create a real watertight tank and resilient container, built according to the following main specifications:

1. Dry lay Isolmant resilient material on the hardened concrete slab;
2. Install flanking strips;
3. Plants, pipes and installations (if not laid in the levelling screed);
4. Pour/cast cement screed;
5. Lay finishing surface with adhesive after screed has dried out;
6. Trim the exceeding flanking strips after the flooring has been laid and filled with tile grout.
Direct contact between partition wall and slab should be avoided using a resilient layer (Isolmant Fascia Tagliamuro) in order to reduce flanking transmission. This resilient material provides adequate load bearing characteristics maintaining and elastic behaviour under wall weight. Isolmant Tagliamuro can be used only for partition walls (inner or perimetral partition). It should be installed directly over the slab under the first row of mortar.

Isolmant products are composed of Isolmant polyethylene foam joined to a special needle-punched fibre manufactured to calibrated specifications for enhanced impact sound insulation. Polyethylene foam and fibre must be always superimposed; the selvage for the overlap must be trimmed flush with the wall.

Isolmant covered products are coupled on the top surface with a special tear resistant fabric. Pipes can be installed over Isolmant resilient material (MonoPlus or BiPlus) but they should be fixed with a plot of mortar. No mechanical fixing should be used in order to avoid rigid connection and to maintain integrity of Isolmant sheets.
Joints between Isolmant resilient material sheets should be sealed with tape such as Isolmant Fascia Nastro after overlaying the selvedge.

From the technical point of view, the functioning of a floating screed is to guarantee that no connection exists between the screed and any other structural element or building plant. Flanking strips avoid any rigid contacts between the screed and the surrounding walls, pillars and façades.

Flanking strips must be placed in the joint between the screed and the surrounding walls, trapped to the wall and horizontally sealed above or below the Isolmant sheet. It is necessary to avoid the formation of air bubbles while applying the strip. Strip height should exceed the screed thickness, including floor finishing such as tile or wood.
IN-SITU GOOD PRACTICE AND ADVICE

The pre-moulded polyethylene flanking strip enables a faster laying of the product and reduces construction time. When applying the adhesive to the vertical part on the wall, the flanking strip should be bend into L shape taking care that it perfectly adhere both horizontally and vertically.

In the corners, strips must be bent at 90 degrees avoiding any curve. That will prevent installation errors and the formation of acoustic bridges. If the material does not completely adhere to the edge, the screed could be damaged or broken. In this points, the air bubble reduces thickness and mechanical strength of the screed, so it should be avoided in order to ensure a good noise isolation.

The exceeding flanking strip should be trimmed only after that the flooring has been laid and filled with tile grout.

To guarantee proper operation of the floating floor, it is necessary that the entire system resting on the underlay can move freely. This is why it is also essential that the skirting board is disconnected from the surface finish of the floor. The rigid connection caused by grouting the skirting board with mortar might result in a loss of impact noise insulation of many decibel.
Standard castellated panel do not provide impact sound insulation, consequently it should be pointed out that a resilient acoustic layer is always required to ensure compliance with acoustic requirements. Isolmant resilient mat can be installed under panel of underfloor heating system.

To ensure the proper functioning of the floating floor it is necessary that the whole system resting on the resilient layer could move freely. Flanking strips avoid any rigid contacts between the screed and walls, pillars and façades. Special edging insulation strips fulfill two important functions. Prevent acoustic bridges around the border Joints whilst providing sufficient freedom of movement to the screed (at least 5 mm) in compliance with standard specifications and the manufacturer’s specifications for self-leveling screed.

Isolmant supplies the special edging insulation strips in two versions:
- Fascia Perimetrale Radiante. This strip comes with a polyethylene flap to overlap the castellated underfloor insulation panels. The foil should be pressed into the first row of studs and then fixed by pipe.
- Fascia Perimetrale Tecnica Doppio Spessore. For self-leveling screed additionally features foil with an adhesive strip on both sides to provide improved sealing of border joints.

Special attention should be paid to acoustic insulation of manifold cabinet. Any rigid connection must be avoided: flanking strips must be installed running along the inner perimeter of flush-mounting manifold cabinets. Resilient mat should butt up against the perimeter isolation strip snugly even in the depth of manifold cabinet.
AIRBORNE SOUND INSULATION

AIRBORNE NOISE INSULATION SYSTEM

Improving the sound insulation performance of a separating wall between dwellings is the main way thought which airborne noise can be reduced. The acoustic design of the partition wall between dwellings should ensure adequate comfort and privacy to users.

When designing the separating walls, there are two main aspects to be considered:
- choosing the right partition to meet users’ requirements and real needs;
- designing the right junction details to avoid or minimize flanking transmission.

In addition to users’ needs of acoustic insulation, a structure with the right sound insulation properties should also fulfil space and construction type requirements.

Separating walls can be single heavy walls, cavity walls, light steel frame walls, etc., and each of these construction types needs different skills and care.

HEAVY WALLS

Heavy single walls

This type of wall comprises concrete or limestone blocks with a weight of 400 to 575 kg/m².

The insulating acoustic property of heavy walls increases with their mass, according to the law of “+ 6 dB/ octave” (mass-frequency law). Lack of insulation occurs in the lower frequency part of the spectrum, in correspondence of the resonance frequency, and in the higher part of the spectrum, at the coincidence frequency (critical frequency).
For blocks and heavy bricks, resonance frequency is very low, and not comprised in the measured frequency spectrum, while the coincidence frequency occurs in the middle frequency part of the spectrum and can significantly affect the sound reduction index of the wall.

Heavy cavity walls

An increase in mass (and thickness) of a single wall is not the only - and the most efficient - way to increase sound insulation: a better solution is a double wall with air gap. If the cavity is filled with fibrous insulating material, this system acts both according to the mass-frequency law, and as a mass-spring-mass model. Care must be put on wall design, to avoid that both layers have the same resonant frequency.
The level of sound insulation between dwellings using cavity separating walls is highly dependent on the isolation provided by the cavity between the wall leaves: the largest is the cavity, the better is the sound reduction index.

Cavity wall composed of two masonry, hollow bricks, concrete or limestone leaves (ca 200 kg/m²) separated by a cavity at least 40 mm wide should be insulated with a fibrous sound absorbing material to improve airborne sound insulation. This material absorbs the cavity sound field in the inner air gap, and reduces the sound energy flux from the noise source to the receiving side. Sound absorbing material should be installed continuously in the cavity.
Light steel frame walls or metal stud walls commonly consist of several gypsum-based boards attached to two independent steel frames. They are most commonly used in multistorey developments although they are also popular in refurbishment projects of existing buildings. False walls are also very common to increase acoustic insulation of existing structures.

Sound insulation is most effective when the faces are structurally isolated with resilient material. When the two layers forming the wall cavity do not have rigid connections between them (double frame lightweight wall), the addition of sound absorbing material to the cavity increases the $R_w$ by about 10 points. The sound absorbing material should be placed into the cavity between the steel frame structures and then coated with plasterboard panels.

The mass of plasterboard per unit area is very important in determining airborne sound insulation: the heavier the layers, the better the insulation. Due to handling limitations, multiple layers are often the preferred solution. A layer of insulating material can be installed between two plasterboards in order to reduce the resonance frequency and to improve low frequency insulation performances. Joints should be staggered in multiple layer applications.
Insulating panel made of IsoFIBTEC FLC fibre (recycled and thermo-bonded fibre of polyester for technical application). These panels provide high sound and thermal performances/insulation. Non-toxic, ecological, with unlimited duration. Isolmant Fibra LC provides credits for green building certification according to LEED and ITACA rating system.

### Conditions of use
Isolmant Fibra LC is a versatile product. It is recommended for acoustic and thermal insulation of masonry cavity wall or drywall that are perimeter partition and between different dwelling units. Isolmant Fibra LC is conceived for applications inside cavity walls that are made of standard blocks and without evident acoustic bridges, to provide a better airborne sound insulation (higher than 50 dB).

### Specifications
- **Thickness**: Approx. 40 - 60 - 80 mm
- **Thermal Conductivity**: $\lambda = 0.039 \text{ W/mK}$
- **Thermal Resistance**: $R_t = 1.026 \text{ m}^2\text{K/W (40 mm ver)}$
- **Specific Heat Capacity**: $c = 1200 \text{ J/kgK}$
- **Vapour Resistance**: $\mu = 2$
- **Equivalent Air Layer Thickness**: $S_d = 0.08 - 0.12 - 0.16 \text{ m (respectively for 40 - 60 - 80 mm versions)}$
- **Airborne Sound Insulation**: $R_w > 50 \text{ dB Cavity wall made of standard bricks without evident acoustic bridges}$
- **Reaction to Fire**: Class 1
- **Size**: Panels of 0.6 m x 1.50 m = 0.9 m²
- **Packaging**: Packs of 30 - 20 - 15 panels (equal to 27 - 18 - 13.5 m² each pack) for the 40 - 60 - 80 mm version respectively
- **Transport Data**: Packs of 1.20 m x 1.50 m x 0.60 m weight 22 kg - volume 1.08 m³

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Insulating panel made of IsoFIBTEC PFT fibre (recycled fibre of polyester for technical application with increasing density along the thickness). These panels provide a high sound and thermal insulation. Non-toxic, ecological, with unlimited duration. Isolmant Perfetto CG provides credits for green building certifications according to LEED or ITACA rating systems.

### Conditions of use
Isolmant Perfetto CG is a versatile product. It is recommended for acoustic and thermal insulation of light partition, drywall, false ceiling and wall. It should be installed into stud spacing and it is suitable to fill partition cavity. It could be also screwed on the partition and then coated. Isolmant Perfetto CG provides the partition with a high airborne insulation and a low thermal transmittance.

### Specifications
- **Thickness**: Approx. 25 - 45 mm
- **Upon request (at least 500 m² and within 20 working days in advance), it is also possible to have products with no standard thickness and height
- **Airborne Sound Insulation**: $R_w = 55 \text{ dB Value certified}$$
- **False wall with 8 cm hollow brick and metal structure, double plaster board and 45 cm Perfetto CG in the cavity
- **Thermal Conductivity**: $\lambda = 0.038 \text{ W/mK}$
- **Thermal Resistance**: $R_t = 0.658 \text{ m}^2\text{K/W (25 mm ver)}$
- $R_t = 1.184 \text{ m}^2\text{K/W (45 mm ver)}$
- **Specific Heat Capacity**: $c = 1200 \text{ J/kgK}$
- **Equivalent Air Layer Thickness**: $S_d = 0.05 - 0.09 \text{ m (25 and 45 mm versions respectively) - } (\mu = 2)$
- **Reaction to Fire**: Euroclass B-s2,d0
- **Size**: Panels of 0.6 m x 1.00 m = 0.6 m²
- **Packaging**: Packs of 30 - 20 panels (equal to 18 - 12 m² each pack) for 25 - 45 mm versions respectively
- **Transport Data**: Packs of 0.6 m x 1.00 m x 0.75 m weight 9 kg - volume 0.45 m³

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## Products

### ISOLMANT FIBRA LC

- Insulating panel made of IsoFIBTEC FLC fibre (recycled and thermo-bonded fibre of polyester for technical application). These panels provide high sound and thermal performances/insulation. Non-toxic, ecological, with unlimited duration. Isolmant Fibra LC provides credits for green building certification according to LEED and ITACA rating system.

### ISOLMANT PERFETTO CG

- Insulating panel made of IsoFIBTEC PFT fibre (recycled fibre of polyester for technical application with increasing density along the thickness). These panels provide a high sound and thermal insulation. Non-toxic, ecological, with unlimited duration. Isolmant Perfetto CG provides credits for green building certifications according to LEED or ITACA rating systems.

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### Table of Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thickness</strong></td>
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</tr>
<tr>
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</tr>
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</tr>
<tr>
<td><strong>Equivalent Air Layer Thickness</strong></td>
<td>$S_d = 0.08 - 0.12 - 0.16 \text{ m (respectively for 40 - 60 - 80 mm versions)}$</td>
</tr>
<tr>
<td><strong>Airborne Sound Insulation</strong></td>
<td>$R_w &gt; 50 \text{ dB Cavity wall made of standard bricks without evident acoustic bridges}$</td>
</tr>
<tr>
<td><strong>Reaction to Fire</strong></td>
<td>Class 1</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>Panels of 0.6 m x 1.50 m = 0.9 m²</td>
</tr>
<tr>
<td><strong>Packaging</strong></td>
<td>Packs of 30 - 20 - 15 panels (equal to 27 - 18 - 13.5 m² each pack) for the 40 - 60 - 80 mm version respectively</td>
</tr>
<tr>
<td><strong>Transport Data</strong></td>
<td>Packs of 1.20 m x 1.50 m x 0.60 m weight 22 kg - volume 1.08 m³</td>
</tr>
</tbody>
</table>

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### Table of Specifications (ISOLMANT PERFETTO CG)

<table>
<thead>
<tr>
<th>Specification</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Thickness</strong></td>
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</tr>
<tr>
<td><strong>Thermal Conductivity</strong></td>
<td>$\lambda = 0.038 \text{ W/mK}$</td>
</tr>
</tbody>
</table>
| **Thermal Resistance**        | $R_t = 0.658 \text{ m}^2\text{K/W (25 mm ver)}$
| $R_t = 1.184 \text{ m}^2\text{K/W (45 mm ver)}$ |
| **Specific Heat Capacity**    | $c = 1200 \text{ J/kgK}$     |
| **Equivalent Air Layer Thickness** | $S_d = 0.05 - 0.09 \text{ m (25 and 45 mm versions respectively) - } (\mu = 2)$ |
| **Reaction to Fire**          | Euroclass B-s2,d0             |
| **Size**                      | Panels of 0.6 m x 1.00 m = 0.6 m² |
| **Packaging**                 | Packs of 30 - 20 panels (equal to 18 - 12 m² each pack) for 25 - 45 mm versions respectively |
| **Transport Data**            | Packs of 0.6 m x 1.00 m x 0.75 m weight 9 kg - volume 0.45 m³
|                             | Packs of 0.6 m x 1.00 m x 0.9 m weight 10.8 kg - volume 0.54 m³ |
**ISOLMANT PERFETTO SPECIAL (EX BV)**

Insulating panel made of IsolFIBTEC PFT (recycled fibre of polyester for technical application with increasing density along the thickness. This fibre has high thermal and acoustic performance) bonded to 5 mm Isolmant Special. Non-toxic, ecological, with unlimited duration. This product comes with overlaps.

Isolmant Perfetto Special (ex BV) provides credits for green buildings certifications according to LEED or ITACA rating systems.

<table>
<thead>
<tr>
<th>THICKNESS</th>
<th>Approx. 30 - 50 mm (stored) Upon request (at least 500 m² and within 20 working days in advance), it is also possible to have products with no standard thickness and height</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRBORNE SOUND INSULATION</td>
<td>Rₛ = 54 dB Value certified Double wall with 8 and 12 cm hollow brick (3 plasters) and 30 mm Isolmant Perfetto BV in the cavity</td>
</tr>
<tr>
<td>THERMAL CONDUCTIVITY</td>
<td>λ = 0.035 W/mK (this value refers to the fibre layer) λ = 0.035 W/mK (this value refers to the polyethylene)</td>
</tr>
<tr>
<td>THERMAL RESISTANCE AND SPECIFIC HEAT</td>
<td>Rₜ = 0.857 m²K/W c = 1300 J/kgK (30 mm version) Rₜ = 1.429 m²K/W c = 1293 J/kgK (50 mm version)</td>
</tr>
<tr>
<td>VAPOUR RESISTANCE</td>
<td>μ = 3600 (this value refers to the polyethylene layer)</td>
</tr>
<tr>
<td>EQUIVALENT AIR LAYER THICKNESS</td>
<td>Sₑ = 18 m</td>
</tr>
<tr>
<td>SIZE</td>
<td>Panels of 1.00 m x 2.85 m = 2.85 m² Upon request (at least 500 m² within 20 working days), it is also possible to have products with no standard height</td>
</tr>
<tr>
<td>PACKAGING</td>
<td>Packs of 10 - 7 panels (equal to 28.5 - 19.95 m² each pack) for 30 - 50 mm versions respectively</td>
</tr>
</tbody>
</table>

| TRANSPORT DATA | Version 30 mm Packs of 2.85 m x 1.00 m x 0.30 m weight 37 kg - volume 0.855 m³ Version 50 mm Packs of 2.85 m x 1.00 m x 0.35 m weight 39 kg - volume 0.997 m³ |

| Version 30 mm | n. 56 = 1596 m² ... n. 28 = 798 m² |
| Version 50 mm | n. 48 = 957.6 m² ... n. 24 = 478.8 m² |

**Conditions of use**

Isolmant Perfetto Special is a versatile product. It is recommended for acoustic and thermal insulation of cavity wall cavity wall both perimeter walls and partitions between different dwelling units. Isolmant Perfetto Special can be dry laid between the two leaf wall (if necessary it can be glued or screwed). This product ensures a high airborne sound insulation even in case of dry or false wall.
1. When the wall leaves rest on a continuous slab connecting different dwellings, an elastic layers [Isolmant Fascia Tagliamuro] should be placed on top and bottom of each leave/wall, as well as in the junctions with the abutting walls, to reduce flanking transmission. Dry lay the acoustic strip [Isolmant Fascia Tagliamuro] under the wall and before the first bed of mortar upon which a brick is laid.

2. Mortar beds and perpends should be always filled with mortar to avoid acoustic bridges.

3. A layer of heavy plaster on the inner side of the cavity can reduce acoustic leakage due to workmanship error, such as lack of mortar in vertical joints. Disparity of surface mass for the two leaves [recommended 20 Kg/m²] allows their resonance and coincidence frequency to diverge, ensuring a better airborne insulation.

4. While constructing the wall leaves, mortar may drop and debris may fall down to the base of the cavity. The collection of mortar at the base of the cavity wall (at ground floor) creates a strong acoustic bridge: the cavity should be kept clean.

5. It is important that a porous material such as Isolmant Fiber LC or Isolmant Polimuro is installed in the cavity both for thermal insulation and for airborne sound insulation, as it absorbs the cavity resonance of the inner air gap. Sound absorbing material should be installed continuously in the cavity.

6. Avoid the symmetrical installation of electrical boxes [not staggered] on both sides of the wall.
1. Dry lay the acoustic strip Isolmant Fascia Tagliamuro under the wall and before the first bed of mortar upon which a brick is laid. Mortar beds and perpends should be always filled with mortar to avoid acoustic bridges. A layer of heavy plaster on the inner side of the cavity can reduce acoustic leakage due to workmanship error, such as lack of mortar in vertical joints.

2. The stud construction is connected all around to the flanking building components. Steel frames must not be directly connected with walls and floor: a resilient material should be used. Insulating material such as Isolmant Orditura Cartongesso can be fitted to the webs of runners. Failure to use a resilient material may result in a loss of decibels through the acoustic bridge that is created between the steel frame and the structural/building elements.

3. Joint design greatly influences the sound insulation of lightweight walls. The same polyethylene foam tape should be used to disconnect the steel frame from plasterboard walls.

4. Isolmant Fibra LC should be placed into the cavity between the steel frame structures and then coated with plasterboard panels. In the cavity, a porous material such as Isolmant Fiber LC guarantees both thermal insulation and airborne sound insulation, as it absorbs the cavity resonance of the inner air gap. Sound absorbing material should be installed continuously in the cavity.

5. A layer of Isolmant Telogomma can be installed between two plasterboards in order to reduce the resonance frequency and to improve low frequency insulation performances. Joints should be staggered in multiple layer applications.

6. Multiple plasterboard leaves should be installed with staggered recessed edges between layers and on the opposite sides of the wall. When jointing, paper tape should be bedded into the compound giving a stronger joint.
SPECIAL PRODUCTS

ISOLMANT ISOLTILE

IsolTile is high density polypropylene soundproofing against footfall, designed to be glued under ceramic flooring. Used in the renovation of existing floors, it guarantees acoustic improvement of the level of footfall both when replacing ceramic or wooden flooring and when laying over existing flooring. It is ideal in the creation of new floors and, in combination with a floating floor, it allows excellent results in terms of soundproofing against footfall, even in the most complicated situations.

Advantages:
- Renovation of an existing floor as regards acoustics
- Contribution to soundproofing against footfall
- Reducing the risks of breakage of ceramic tiles when these are laid on screeds with limited thickness or which are damp or not particularly firm
- Wooden floorings of all kinds and sizes can be floating or semi-floating on Isolmant IsolTile

Particular Application

Isolmant Kit Scale comes with standard shape sheets of IsolTile that can be cut according to the actual size of treads and risers and stair landings. This kit includes all necessary accessories such as adhesive tape to seal the sheets and flanking strips for disconnecting walls and stairs, both fundamental to perform the acoustic insulation of stairs.
IsolTile is a low thickness undertile acoustic layer, designed to the acoustic refurbishment of new or existing floor. This product can be directly laid under ceramic or wooden flooring. IsolTile is made of HD expanded polypropylene (77 kg/m³), calendered-coated by FIBTEC XP1 on both sides. FIBTEC XP1 is non-woven, embossed, black polypropylene.

**Conditions of use**

IsolTile can be installed directly on the existing flooring where acoustic bridges and flanking paths are critical in terms of compliance with the standards in force. It ensures a significant improvement of impact sound insulation with ceramic tiles and wooden flooring as well. It could be also installed on floating screed to enhance acoustic performances. These sheets installation does not modify the standard procedure to lay the flooring. Isoltile does not need any special adhesive that could be selected referring to the installation surface and finishing type. For instance, IsolTile could be laid by means of C2 class compounds for tiles or bi-component epoxypolyurethane glues for wooden flooring.

**THICKNESS**

Approx. 2 mm

**IMPACT SOUND INSULATION**

$\Delta L_w = 16 \text{ dB}$ Certified value

**THERMAL CONDUCTIVITY**

$\lambda = 0.037 \text{ W/mK}$

**THERMAL RESISTANCE**

$R_t = 0.054 \text{ m²K/W}$

**EQUIVALENT AIR LAYER THICKNESS**

$S_d = 30 \text{ m}$

**COMRESSIVE STRENGTH**

10% compressive deformation at 151 kPa
25% compressive deformation at 180 kPa
40% compressive deformation at 222 kPa
50% compressive deformation at 274 kPa

**SIZE**

Rolls of: 1 m x 20 m = 20 m²

**PACKAGING**

Single rolls with accessories (sealing tape and flanking strip)

**ACCESSORIES**

Sealing strip: h 7.5 cm x L 20 m
Flanking strip: h 3 cm x L 20 m

**TRANSPORT DATA**

Roll size 1.03 m x 20 m (h x L) = 20 m²
Ø 0.31 m - weight 5.8 kg - volume 0.099 m³

n. 650 = 13000 m²  n. 310 = 6200 m²

- Container size 40’
- Container size 20’
Isolmant Telogomma is a 2 mm EPDM sheet with high density (4 kg/mq) and high damping characteristics, which is suitable for many applications. The main acoustic property of Telogomma is the high insulation it provides against sound and vibration spread both in air and in structures. Isolmant Telogomma is designed to be laid free or glued on other materials, in order to improve mass and vibration mitigation. EPDM provides superior properties for outdoor and high temperature applications. The use of Telogomma increases acoustic insulation of light structures, like gypsum boards and wooden floors, mainly at low frequencies. Isolmant Telogomma has low compressibility and it does not deform under constant stress or pressure, so it is appropriate to support typical building loads.

Advantages:
- High density
- High damping
- VOC free (certified)
- Low thickness
- Good drapability
SPECIAL PRODUCTS

→ ISOLMANT TELOGOMMA

Visco-elastic mass made of a special blend of EPDM rubber with mineral fillers (surface density 4 kg/m² or 5 kg/m²). This acoustic membrane is coated on both sides with non-sticky non-woven fabric. Isolmant TeloGomma is recommended for the airborne sound insulation and vibration isolation of drywalls, masonry walls, plates, fibreglass, plastics and plywood. Upon request, it is possible to have this product with one adhesive side.

<table>
<thead>
<tr>
<th></th>
<th>isolmant TeloGomma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>Approx. 2 mm</td>
</tr>
<tr>
<td></td>
<td>Approx. 2.5 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 4 kg/m²</td>
</tr>
<tr>
<td></td>
<td>Approx. 5 kg/m²</td>
</tr>
<tr>
<td>Airborne Sound Insulation</td>
<td>$R_w = 29$ dB Certified value</td>
</tr>
<tr>
<td></td>
<td>Normal incidence sound transmission loss test with rubber of 4 kg/m²</td>
</tr>
<tr>
<td>Vapour Resistance</td>
<td>$\mu = $ approx. 7000</td>
</tr>
<tr>
<td>Size</td>
<td>Rolls of 1 m x 3 m (h x L) = 3 m²</td>
</tr>
<tr>
<td>Packaging</td>
<td>30 rolls pallet (equal to 90 m²)</td>
</tr>
<tr>
<td>Transport Data</td>
<td>Pallet size 1.16 m x 0.80 m x 0.60 m weight 370 kg - volume 0.5568 m³</td>
</tr>
<tr>
<td></td>
<td>$n. , 72 = 6480 , m²$</td>
</tr>
<tr>
<td></td>
<td>$n. , 50 = 4500 , m²$</td>
</tr>
</tbody>
</table>

→ Conditions of use

The material can also be used on uneven surfaces. May be cut or punched. The viscoelastic mass is suitable for increasing air-born sound insulation of lightweight wall, for vibration isolation of metal sheets and for damping the vibrations of mechanical parts in general.
REFERENCES

Antonini Tower – Milan

Lombardia Region Headquarters – Milan
“Bosco Verticale” – Milan
REFERENCES

Theatre Arcimboldi – Milan

San Siro Stadium – Milan
Housing Estate – Assago – Milan