

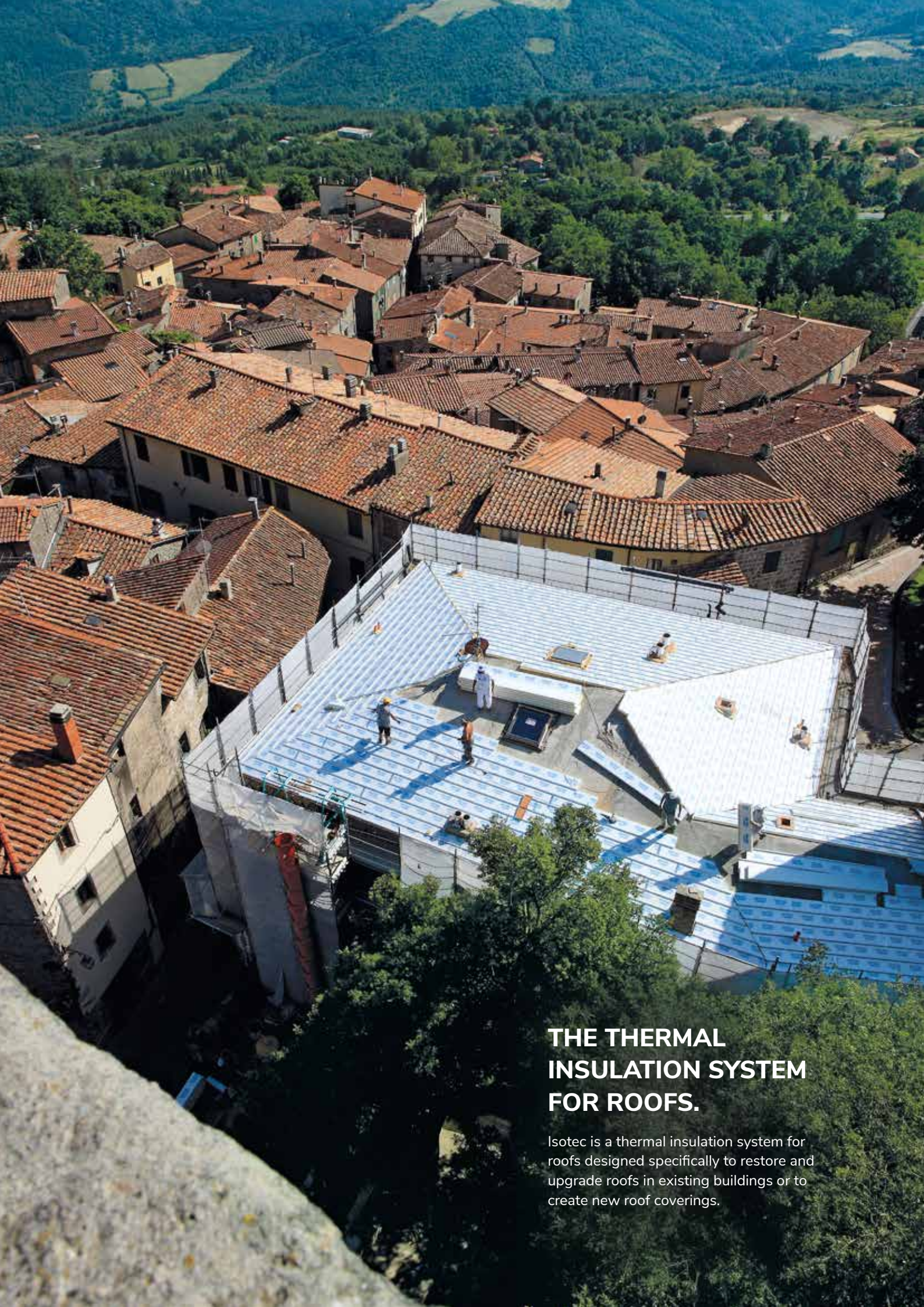


ISOTEC®
Thermal insulating system

1984
2024
40



ISOTEC[®]
Thermal insulating system



THE THERMAL INSULATION SYSTEM FOR ROOFS.

Isotec is a thermal insulation system for roofs designed specifically to restore and upgrade roofs in existing buildings or to create new roof coverings.



THE ISOTEC SYSTEM

The Isotec insulated and ventilated roof system plays a decisive role in enhancing a building's energy by reducing heat loss during winter and mitigating the effects of solar radiation in warmer seasons. This results in a significant reduction in heating and cooling costs. The system also contributes to reducing CO₂ emissions into the atmosphere.

By consolidating multiple installation phases into a single, efficient product, the Isotec System reduces construction times. In fact, Isotec enables the creation of a load-bearing, thermally insulated, ventilated and waterproof roof covering in just one step.

THERMAL INSULATION AND SUSTAINABILITY

Thermal insulation plays a crucial role in sustainability, addressing environmental, economic and social factors. Environmentally, it reduces energy consumption; economically, it lowers operating costs; and socially, it improves comfort and the overall healthiness of indoor spaces.

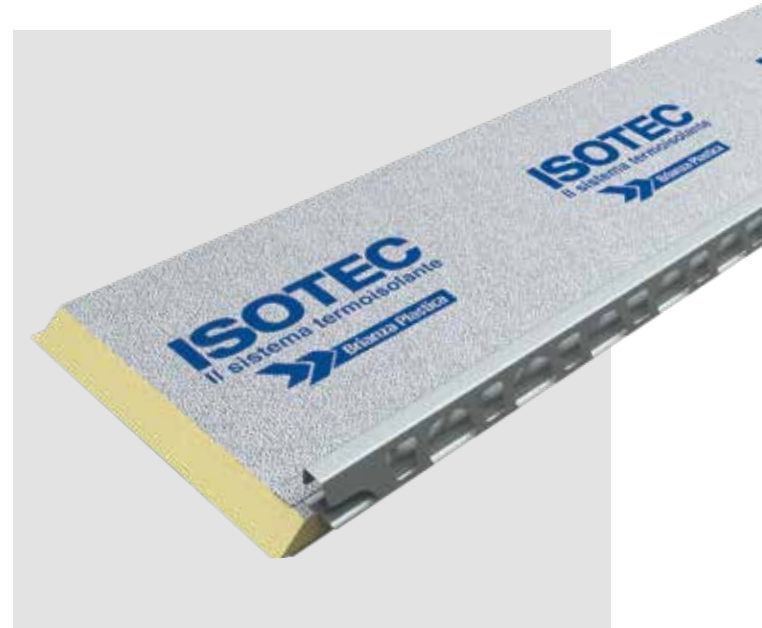
To implement policies that improve the environmental sustainability of buildings, it is essential to assess the contribution of thermal insulation, both during the construction and operational phases. The operational phase, in particular, has a significant impact on a building's environmental footprint. Sustainable design must, therefore, focus on the careful selection of high-quality materials that can effectively reduce energy consumption during a building's use.



POLYURETHANE

Polyurethane is one of the most effective thermal insulators available, delivering exceptional insulating performance even with minimal material thickness.

Thanks to its low mass and high efficiency, polyurethane foam insulation enables substantial energy savings for heating and cooling with minimal consumption of resources. For example, in roof insulation, the resources used to produce polyurethane are offset within the first year of operation of the heating system alone. The extremely low volume and weight of polyurethane insulation, combined with its efficiency and durability, also results in a minimal contribution to the overall waste at the end of a building's lifespan.



- Consistent performance and durability over the entire lifespan of the building.
- Polyurethane's closed-cell structure prevents transformations caused by water absorption, compression, sagging, etc. under normal usage conditions. It is also impervious to the most common chemical agents.
- Rigid polyurethane foam is a thermosetting material that remains stable across a wide temperature range (-50°C to +100°C).



ECO DESIGN

Reducing CO₂ emissions, promoting the sustainable use of natural resources, and recycling waste have now become standard practices across all production sectors. With decades of experience and an innovative mindset, Brianza Plastica has always paid particular attention not only to minimising the environmental impact of its production processes but, above all, to the extreme importance of analysing the entire life cycle of its products - from design to end-of-life management. For this reason, the company adopted the UNI EN ISO 14006 guidelines on eco-design in 2020.

NEW ISOTEC PACKAGING, 100% RECYCLABLE

As part of its commitment to continuous innovation aimed at improving performance and reducing environmental impact, Brianza Plastica has revolutionised the traditional packaging system for Isotec panels. At its main production site in Carate Brianza, the company has begun replacing heat-shrinkable film with a new, lighter and 100% recyclable stretch film. This choice has led to a reduction in energy consumption from non-renewable sources, equivalent to 21 toe/year. Most importantly, it has also led to a **25% reduction in the amount of plastic used per packaging unit (pack)**. The new packaging is also much simpler and easier to dispose of on-site.



LEED® v4 CERTIFICATION

LEED® (Leadership in Energy and Environmental Design) is a voluntary certification system for buildings developed by U.S. Green Building Council (USGBC) and applied in over 140 countries worldwide. It evaluates the environmental sustainability and energy efficiency of buildings - residential, commercial, educational, hospital, etc. - and takes into account the entire life cycle of the building, from design to construction.

The LEED® rating system certifies the building, does not certify the individual products or building components, that can help meet the requirements of the protocol and consequently achieve the score for the building.

The protocol is organized in areas / chapters that contain the prerequisites and credits. The prerequisites are mandatory and do not give points, while the credits are the ones that give the score, which must be achieved to obtain the certification level defined as a certification objective.

ISOTEC RANGE: CREDITS AND PREREQUISITES

Isotec thermal insulation systems have been mapped by QualityNet certification in accordance with version v4 of the LEED® protocol.

The properties of the individual materials used can contribute positively to meeting requirements and earning credits to the building.



Isotec, Isotec XL and Isotec XL Plus products contribute to the LEED® v4 protocol score through the following credits and prerequisites:

- EAp2 - Minimum Energy Performance
- EAc2 - Optimize Energy Performance
- MRc3 - Building product Disclosure and Optimization - Sourcing of Raw Material
- MRc4 - Building product Disclosure and Optimization - Material Ingredient
- MRc5 - Construction and Demolition Waste Management
- EQc1 - Enhanced Indoor Air Quality Strategies
- EQc5 - Thermal Comfort
- EQc9 - Acoustic Performance

The mapping of the Brianza Plastica products has been monitored and verified by QualityNet and can be found at <https://greenitop.com>.

WHY CHOOSE THE ISOTEC SYSTEM?

Multi-phase layering

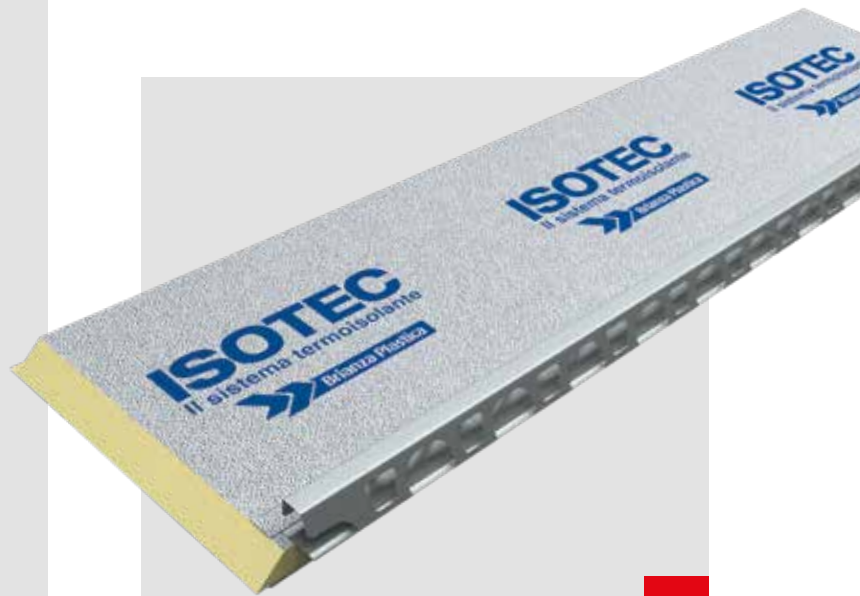
In traditional roofing systems, the layering of a ventilated package requires a separate installation process for each material that makes up the layer. This method requires as many **separate steps as layers in the package**, which significantly increases installation time and the likelihood of roofing issues, with the added risk of failing to meet the project's expected, performance standards.



- 1 - Tile-bearing batten
- 2 - Waterproof membrane
- 3 - Thermal insulation panel
- 4 - Containment battens for thermal insulation panels
- 5 - Vapour barrier

Single-phase layering

The installation of Isotec pre-coupled insulation panels progressively creates a load-bearing deck that integrates multiple functions, such as a vapour barrier, thermal insulation, secondary waterproofing, micro-ventilation/ventilation and a metal support frame for roof coverings. In other words, **a single composite material and a one-step installation process** combine to create a complete roofing “system.”



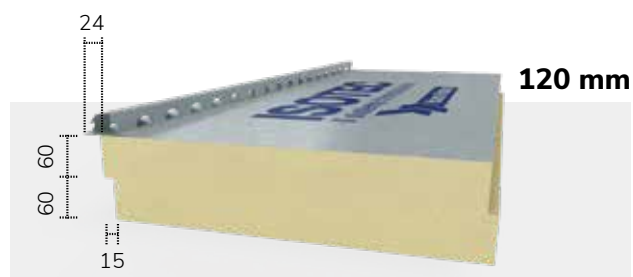


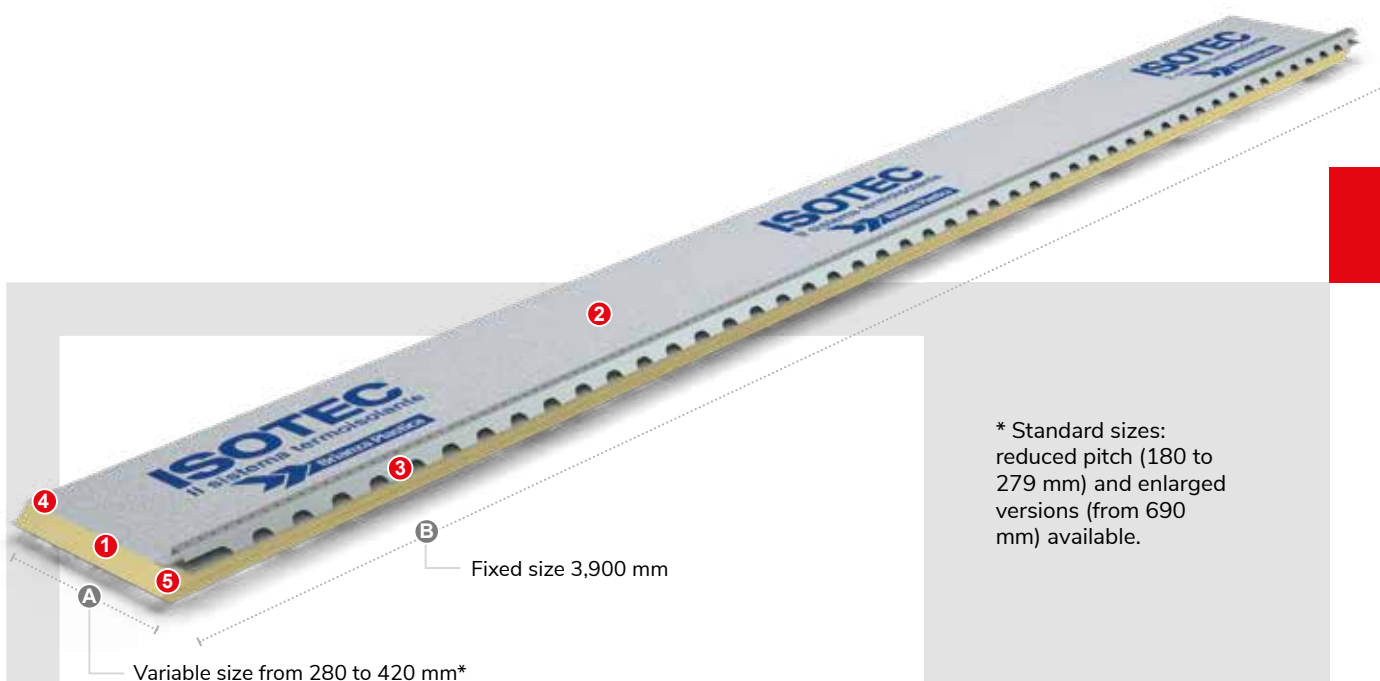
Isotec is the roof insulation system designed to enhance thermal resistance, increase living comfort and achieve greater energy savings.

The Isotec polyurethane panel is coated with an embossed aluminium sheet and is made load-bearing by an integrated steel stiffener. This stiffener, hot-coated with an aluminium-zinc-silicon alloy, is ribbed and slotted to provide the panel with static resistance. It also acts as a support for the roofing covering, optimising under-roof ventilation and channelling any accidental water infiltrations toward the eaves.



ISOTEC THICKNESSES



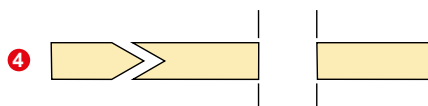
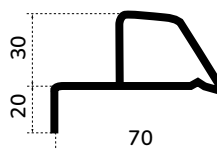


* Standard sizes: reduced pitch (180 to 279 mm) and enlarged versions (from 690 mm) available.

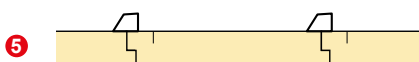
- 1 The Isotec panel is made of self-extinguishing rigid polyurethane foam.
- 2 The Isotec panel is coated on both surfaces with embossed aluminium sheet.

STIFFENER HEIGHT ISOTEC: 30 mm

- 3 The Isotec panel is made load-bearing by a 30 mm-high slotted steel stiffener coated with an aluminium zinc-silicon alloy.



The transverse side ends of the panels are cut in a dovetail shape to maintain seamless continuity of the insulation.



The Isotec panel is shaped with opposing battens on the longitudinal sides, that enable them to interlock, eliminating the risk of thermal bridges.

ISOTEC®



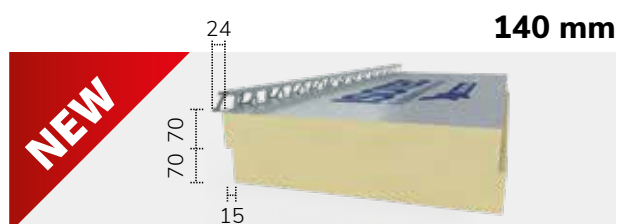
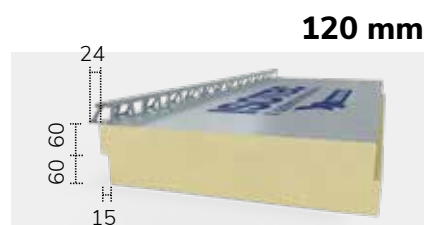
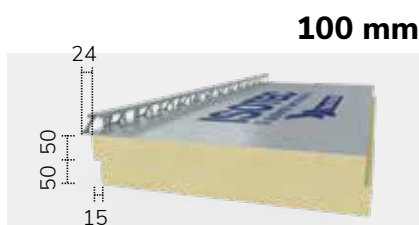
INCREASED VENTILATION UNDER THE ROOF

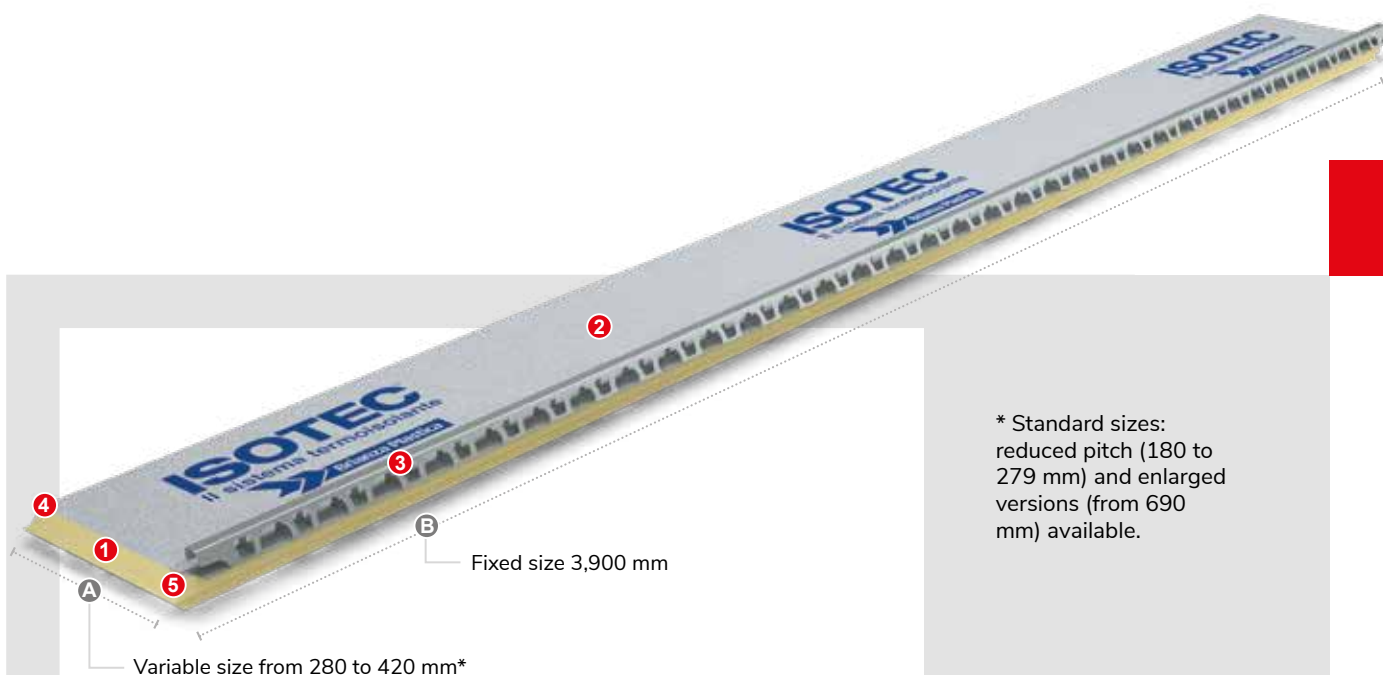
The Isotec XL version stands out from the standard one due to its 4 cm high stiffener, which ensures ventilation of the roof equivalent to more than 200 cm²/m of gutter.

During the summer, the uniform flow of air from the gutter to the ridge enhances thermo-hygrometric comfort by dissipating heat transmitted through the roof covering, thus extending the lifespan of its components. In winter, the convective motion helps eliminate humidity and prevents the formation of mould and condensation. Isotec XL securely holds the tiles in place and can be walked on, even on roofs with very steep pitches.



ISOTEC XL THICKNESSES



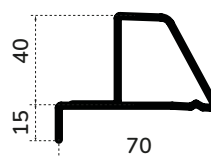


* Standard sizes:
reduced pitch (180 to
279 mm) and enlarged
versions (from 690
mm) available.

- 1 The Isotec XL panel is made of self-extinguishing rigid polyurethane foam.
- 2 The Isotec XL panel is coated on both surfaces with embossed aluminium sheet.

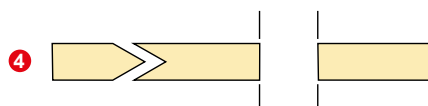
STIFFENER HEIGHT ISOTEC: 40 mm

- 3 The Isotec XL panel is made load-bearing by a 40 mm-high slotted steel stiffener coated with an aluminium zinc-silicon alloy.

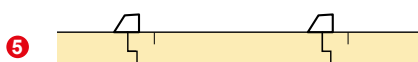


ISOTEC[®] XL+

Isotec XL Plus with pre-applied gasket under the batten.



The transverse side ends of the panel are cut in a dovetail shape to maintain continuity of the insulation.



The Isotec XL panel is shaped with opposing battens on the longitudinal sides, that enable them to interlock, eliminating the risk of thermal bridges.

ISOTEC[®] XL








TECHNICAL CHARACTERISTICS

| CHARACTERISTIC | U.M. | VALUE | TEST METHOD |
|------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| DENSITY | kg/m ³ | 38,0 | UNI EN ISO 845 |
| Declared thermal conductivity λ_D (weighted ageing value for 25 years of use) | W/m K | 0,022 | UNI EN 13165 Annexes A e C |
| Thermal conductivity U | W/m ² K | 0.37 per 60 mm 0.28 per 80 mm 0.22 per 100 mm 0.18 per 120 mm 0.16 per 140 mm 0.14 per 160 mm | $U = \lambda_D / d$ (d= panel thickness in m) |
| Thermal resistance R | m ² K/W | 2.73 per 60 mm 3.64 per 80 mm 4.55 per 100 mm 5.45 per 120 mm 6.36 per 140 mm 7.27 per 160 mm | $R = d / \lambda_D$ (d= panel thickness in m) |
| Thermal consistency | °C | - 50 ÷ +100 | UNI 9051 |
| Dimensional stability DS(70,-) | level | 3 | UNI EN 1604 |
| Compressive strength at 10% deformation CS(10Y) | kPa | ≥ 120 | UNI EN 826 |
| | kg/cm ² | ≥ 1,22 | UNI EN 826 |
| Resistance to water vapour diffusion MU | μ | > 50.000 | UNI EN 12086 |
| Long-term water absorption WL(T) | % | < 0,6 | UNI EN 12087 |
| Specific heat | J/kgK | 1400 | UNI EN ISO 10456 |
| Emission of dangerous substances | // | Compliant | UNI EN 13165 Annex ZA |
| Reaction to fire | Euroclass | F | EN 13501-1 |

CE marking in compliance with Regulation 305/2011/CE, UNI EN 13165:2013 and UNI EN 13172:2012 standards - System 3; notified body: CSI S.p.A. (0497).

| REQUIREMENTS ON TOLERANCES EXPRESSED IN ACCORDANCE WITH UNI EN 13165 (PAR. 4.2.2, 4.2.3) | | |
|------------------------------------------------------------------------------------------|---------|-------------------------------|
| PANEL THICKNESS | 60 mm | 80 - 100 - 120 - 140 - 160 mm |
| Thickness Class T2 | ± 3 mm | + 5 ÷ -3 mm |
| Length | ± 10 mm | |
| Width | ± 5 mm | |


MATERIAL THICKNESSES REQUIRED TO ACHIEVE $U = 0.18 \text{ W/m}^2\text{K}$ or $R = 5.45 \text{ m}^2\text{K/W}$

| | |
|-----------------------------------------------|---------------------------------------------------------------------------------------------|
| POLYURETHANE FOAM WITH WATERPROOFING COATINGS | 12 cm  |
| POLYURETHANE FOAM WITH WATERPROOFING COATINGS | 15 cm  |
| EXPANDED POLYSTYRENE WITH GRAPHITE | 17 cm  |
| EXPANDED OR EXTRUDED POLYSTYRENE | 20 cm  |
| MINERAL WOOLS | 21 cm  |
| BLOND CORK | 24 cm  |
| WOOD WOOL | 26 cm  |

SPECIFICATIONS

ISOTEC / ISOTEC XL

ISOTEC XL PLUS

The thermal insulation of the pitched roof should be achieved using an insulation system consisting of a **structural monolithic panel** that is modular, load-bearing, insulating and self-extinguishing, made of rigid closed-cell polyurethane foam with a density of 38 kg/m³, Euroclass F (EN 13501-1), a **declared thermal conductivity λ_p of 0.022 W/mK** (in accordance with UNI EN 13165) and a thermal resistance R of no less than:

- 2.73 m²K/W for 60 mm thick panels
- 3.64 m²K/W for 80 mm thick panels
- 4.55 m²K/W for 100 mm thick panels
- 5.45 m²K/W for 120 mm thick panels
- 6.36 m²K/W for 140 mm thick panels
- 7.27 m²K/W for 160 mm thick panels

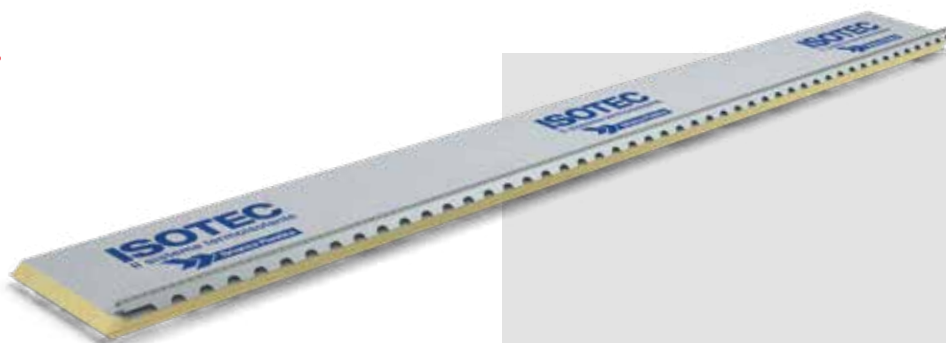
The panel features longitudinal battens along its long side and dovetail joints on its short side.

The panel is coated with embossed aluminium sheet on both the intrados and extrados.

The panel must bear the CE marking, supported by certificates issued by accredited bodies.



ISOTEC®



Isotec: the 3 cm-high steel profile, coated with an aluminium-zinc-silicon alloy, is integrated into the panel and has slots that enable water discharge and micro-ventilation of air from the gutter to the ridge. It includes a longitudinal rib on the flat section resting against the polyurethane panel, which prevents capillary water rise. The stiffener has holes in the flat area adhering to the insulating panel, allowing the use of accessories such as aerated gutter battens or metal tabs for the mechanical fastening of the tiles.

Width: conforms to the depth of the roofing element

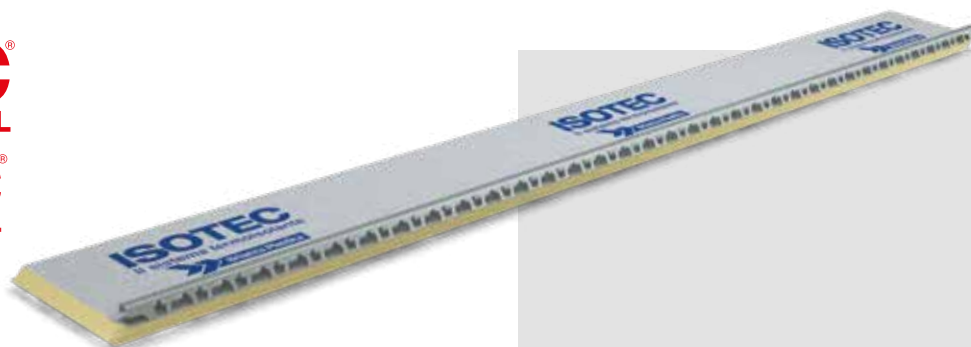
Length: 3,900 mm

Thicknesses: 60 mm, 80 mm, 100 mm and 120 mm



ISOTEC^{XL}

ISOTEC^{XL+}



Isotec XL and Isotec XL Plus: the 4 cm-high steel profile, coated with an aluminium-zinc-silicon alloy, is integrated into the panel and has slots that enable water discharge and ensure ventilation of the roof equal to more than 200 cm²/m of gutter. It includes a longitudinal rib on the flat section resting against the polyurethane panel, which prevents capillary water rise.

Width: conforms to the depth of the roofing element

Length: 3,900 mm

Thicknesses: 80 mm, 100 mm, 120 mm, 140 mm and 160 mm



ISOTEC[®]
Thermal insulating system



THE EFFICIENT ROOF

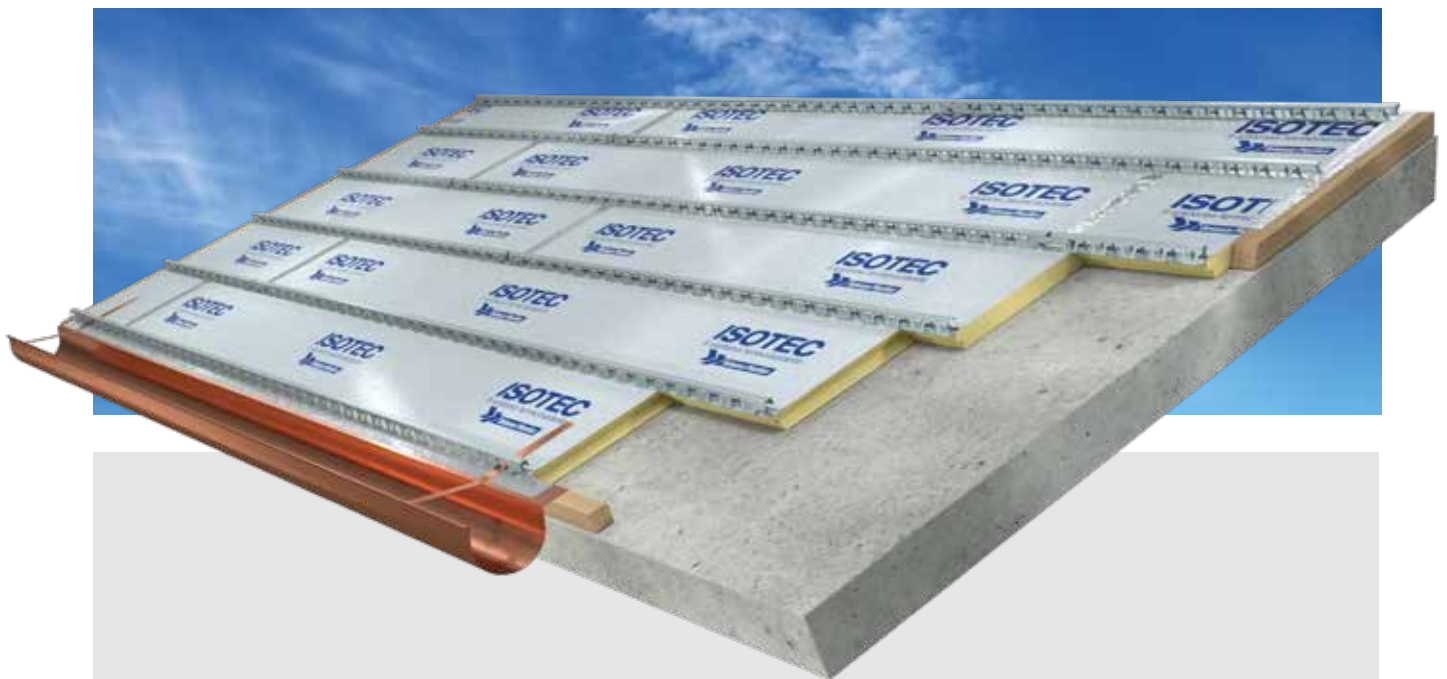
Isotec is quick and easy to install and transforms the roof into a valuable resource for enhanced living comfort and energy savings for the entire building.



A SYSTEM
WITH **MAXIMUM**
FLEXIBILITY

EXAMPLES OF CONTINUOUS STRUCTURES:

CONCRETE SLAB



SCREW
ANCHOR



The Isotec System is a universal solution for roof insulation and efficiency.

In fact, it is designed to be applied to all pitched roofs using special mechanical fasteners, regardless of the supporting structure.

For continuous wooden boarding, it is recommended to place a breathable waterproof membrane (such as Elytex-N) before laying the insulating panels; this allows for the natural circulation of air and keeps the structure dry.

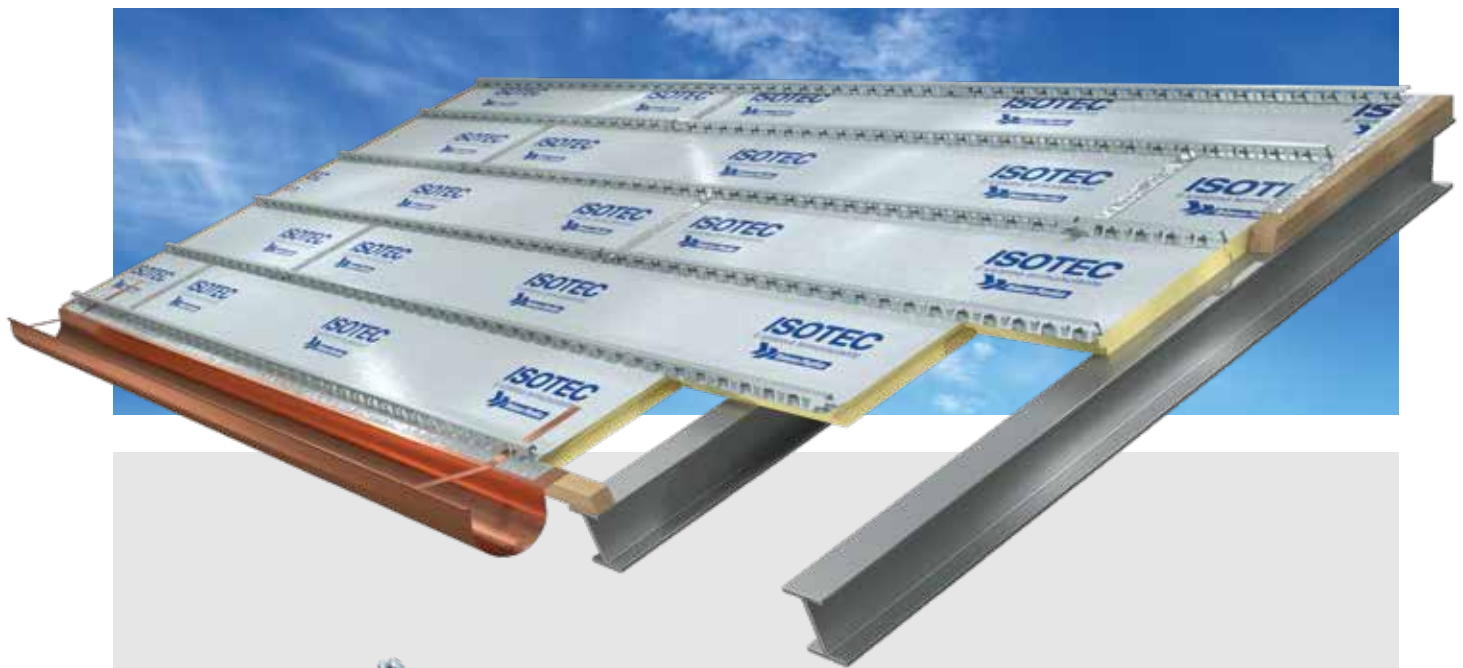
WOODEN BOARDING





EXAMPLES OF DISCONTINUOUS STRUCTURES:

IN WOOD OR IRON



SELF TAPPING SCREW
FOR WOOD



SELF TAPPING
SCREW
FOR STEEL

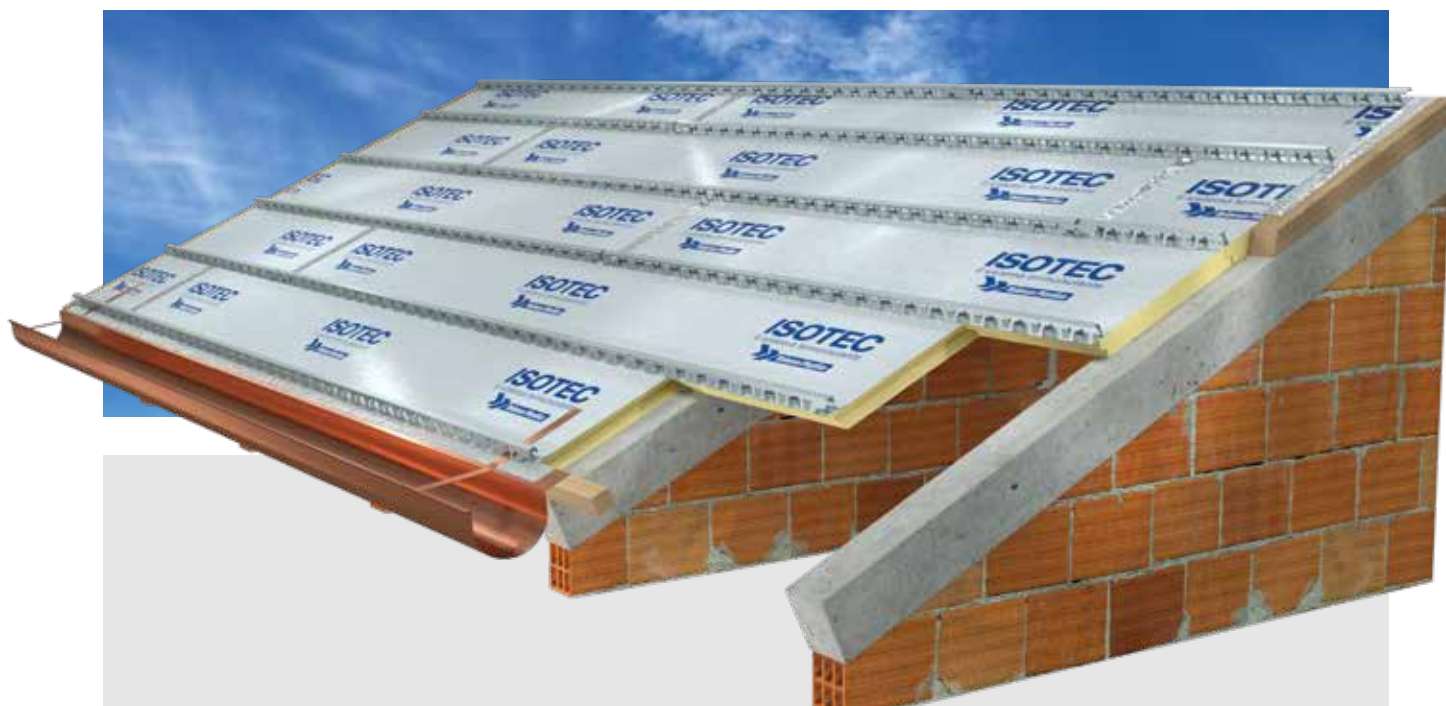


When installing the Isotec System on discontinuous structures, refer to the table of load capacities:

| TABLE OF LOAD CAPACITIES [daN/m ²]* | | | | | | | |
|-----------------------------------------------------|--------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|
| Distance between supports - l - (cm) | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| Maximum distance permitted between supports: 120 cm | | | | | | | |
| THICKNESS | OPERATING OVERLOADS | | | | | | |
| 60 mm | 606 | 527 | 460 | 395 | 338 | 296 | 260 |
| 80 mm | 689 | 595 | 515 | 447 | 396 | 358 | 335 |
| 100 mm | 798 | 708 | 628 | 557 | 495 | 442 | 393 |
| 120 - 140 - 160 mm | 911 | 808 | 715 | 633 | 562 | 502 | 452 |
| Safety coefficient | 3 (1/3 - load at breakage) | | | | | | |
| Load deflection | The permissible loads shown comply with the limit condition $f \leq 1/200 - l$ | | | | | | |

*Load testing was conducted on Isotec panels with a pitch of 34.2 cm, laid on support joists with a 5 x 5 cm cross-section. The panels were subjected to a permanent downward load from a roof covering in Portuguese tiles (approx. 45 daN/m²), followed by incremental loads. Testing was performed at the Institute for Technology (test report 3675/RP/03 dated 05/11/2003). The design stress, resulting from the combination of loads as specified in DM 17/01/2018 (NTC and subsequent applications), must not exceed the values shown in the table.

WALLS



SCREW
ANCHOR

During installation, operators must walk on the stiffeners. For discontinuous structures, it is recommended to walk on the underlying joists while using a load spreader, such as a wooden plank to distribute the weight evenly.

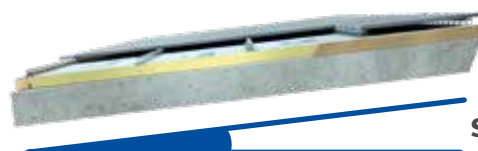
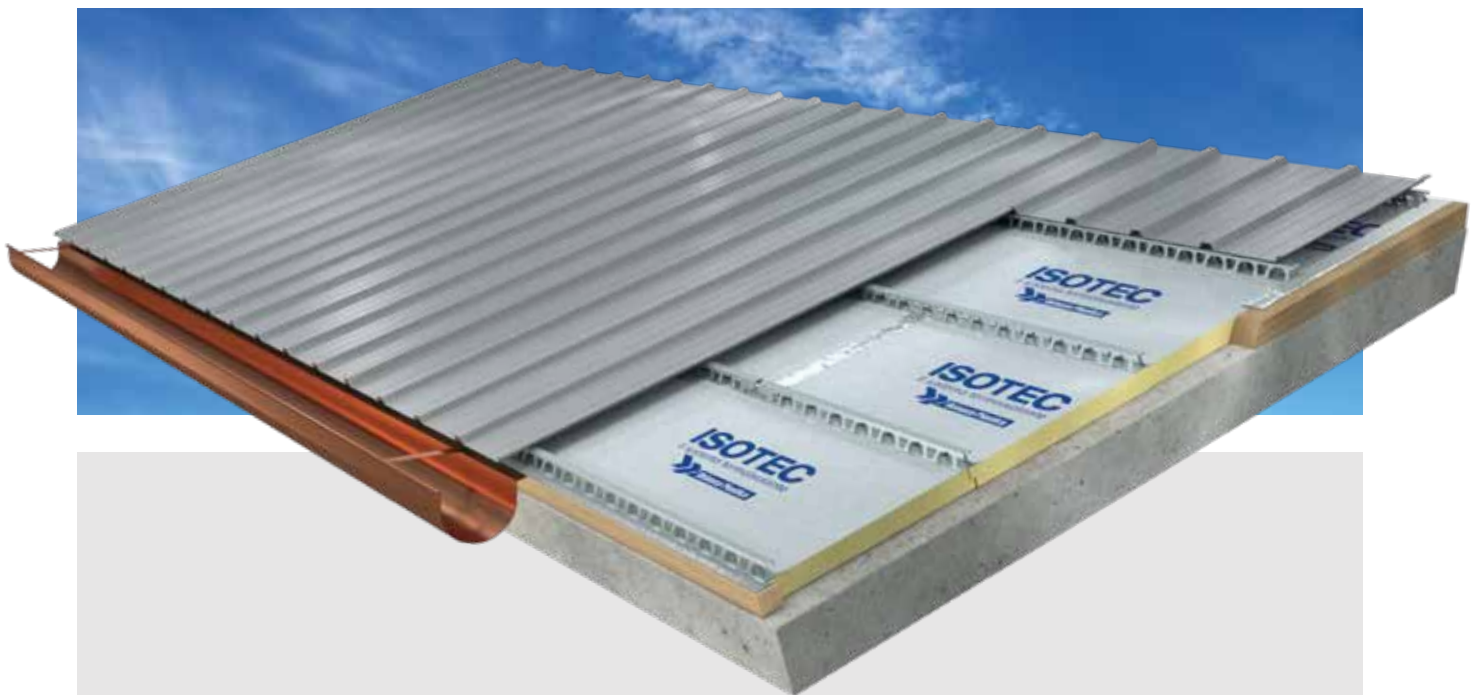




A SYSTEM
WITH **MAXIMUM**
COMPATIBILITY

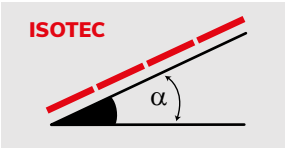
EXAMPLES OF CONTINUOUS COVERINGS:

METAL SHEETS

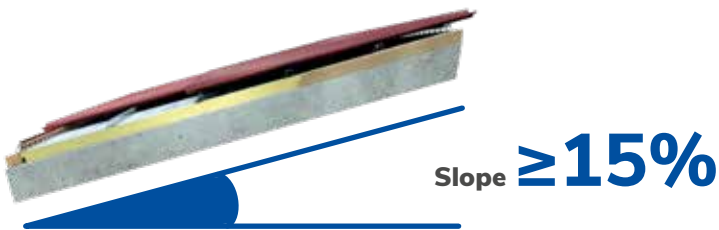
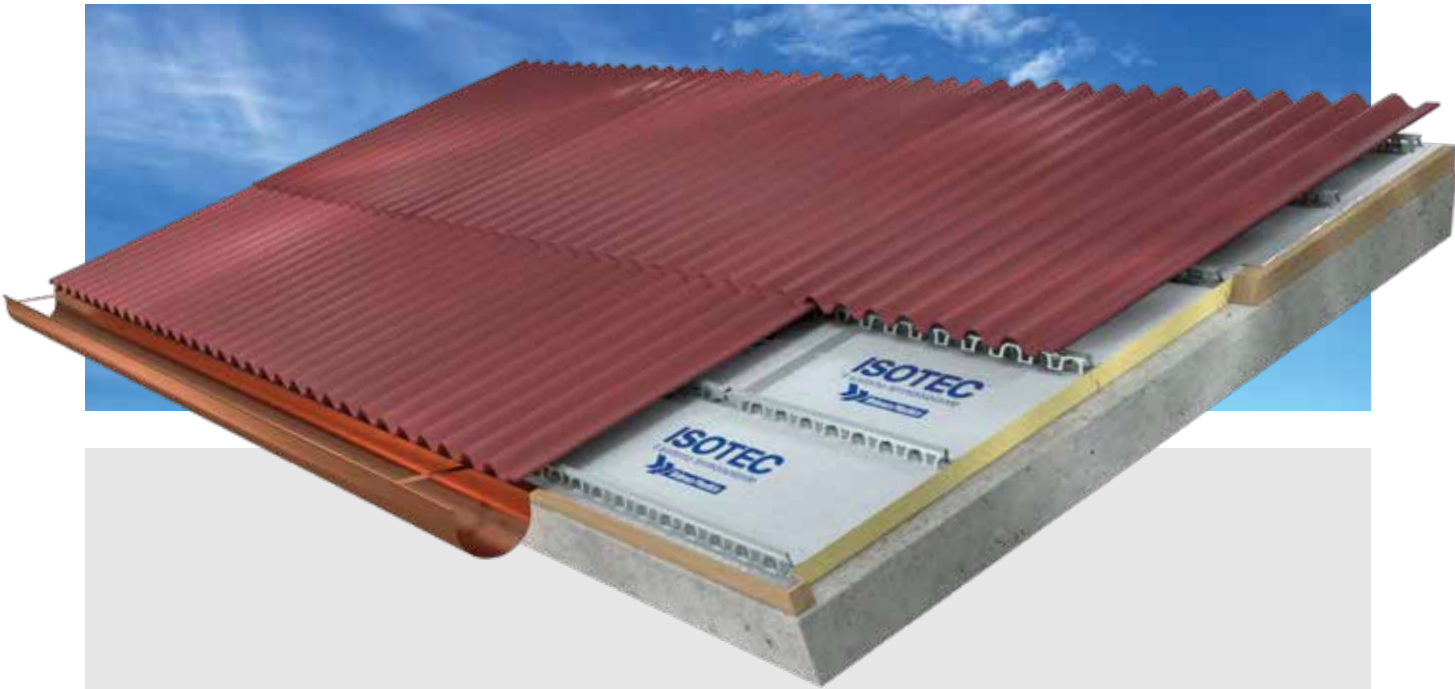


Slope **$\geq 7\%$**

The Isotec System is compatible with all types of roof coverings, whether continuous (e.g. sheets) or discontinuous (e.g. tiles). The pitch of the panel is determined by the selected covering. To serve as secondary waterproofing, Isotec must be installed on pitched roofs, ensuring adherence to the recommended slopes. Additionally, always follow the technical instructions provided by the manufacturers of the specific covering materials used.

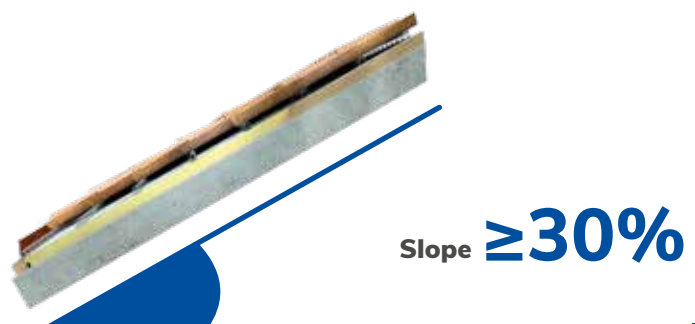
|  | α | % | TYPE OF COVERING |
|-----------------------------------------------------------------------------------|-----------------|-------------|-----------------------------------------------------------------------------------------|
| | $\geq 17^\circ$ | $\geq 30\%$ | any roof covering |
| | $< 17^\circ$ | $< 30\%$ | continuous roof covering (sheets), low-slope tiles and additional waterproofing systems |

FIBRE CEMENT SHEETS



EXAMPLES OF DISCONTINUOUS COVERINGS:

TILES OR PANTILES



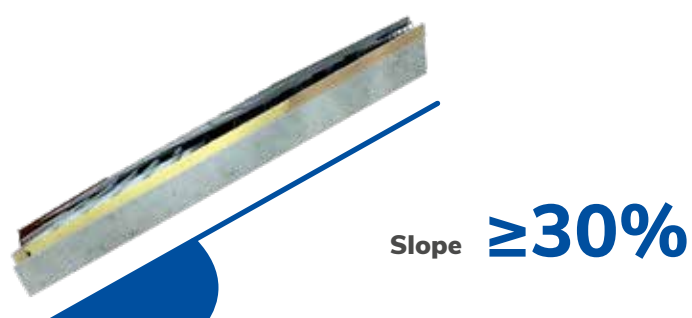
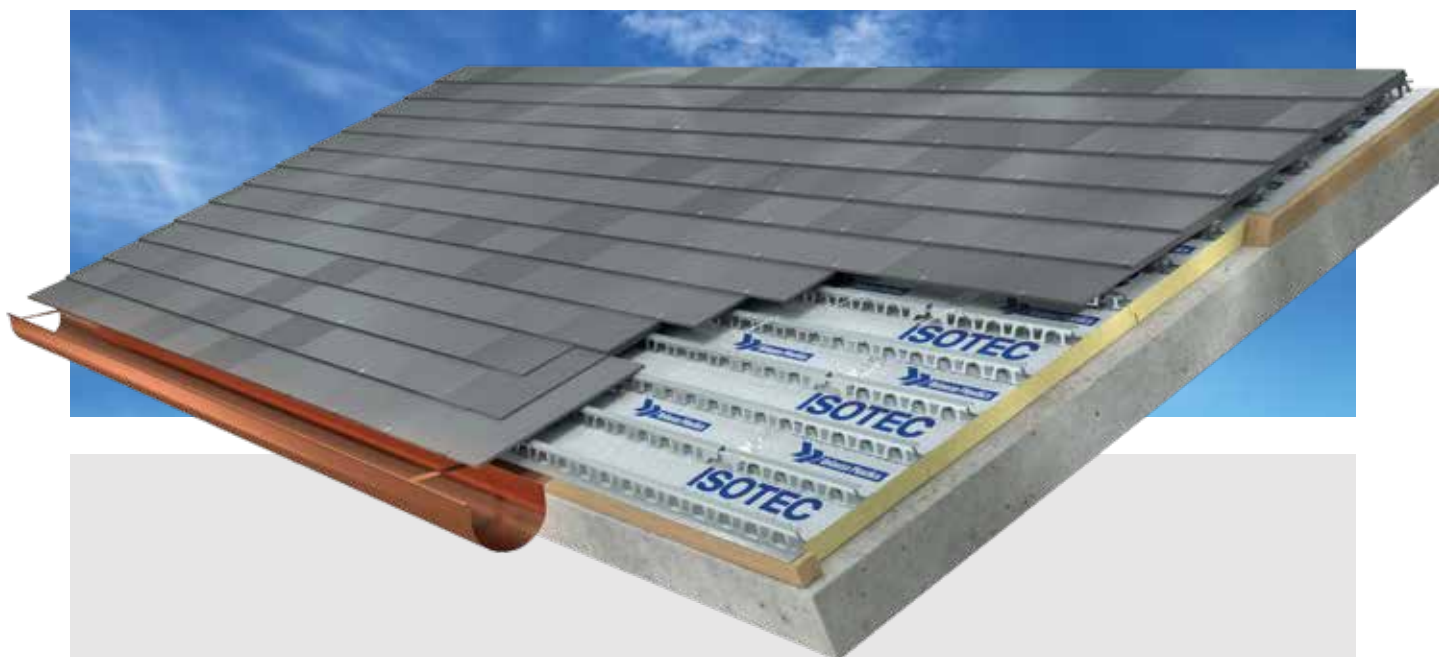
PATENTED FOR WINDY AREAS

The Isotec panel features a patented system specifically designed for areas exposed to high winds that enables tiles to be securely fastened to the metal roof stiffener. Tiles are fixed to the stiffener using a steel bracket that passes through the hole in the tile and folds over it, permanently locking the roof covering.

In addition to the above fixing method, other anchoring devices can be used, following the guidelines provided by roofing manufacturers, applicable technical standards (e.g. UNI 9460) or local installation practices.



“SPECIAL” TILES - SLATE



LAYING STEPS



1- Starting wooden strip



2- Sealing the dovetail with silicone



4- Applying butyl aluminium tape



5- Cutting the panel



6- Ventiladed ridge brackets

The installation of the Isotec System requires following a few simple rules and using the accessories supplied with the system.

When installed correctly, the Isotec System actively contributes to improving living comfort and energy efficiency throughout the entire building.



3- Positioning and fixing the panel



7- Ventilated ridge

WATCH THE VIDEO
FOR A DETAILED
WALKTHROUGH OF
ALL THE **STEPS FOR**
INSTALLING THE
ISOTEC SYSTEM



**LAYING
INSTRUCTIONS
VIDEO**

For more information on the installation of the product, please contact the Brianza Plastica technical sales department: sales-insulation@brianzaplastica.it



PROTRUDING PARTS

All elements emerging from the roof - such as chimneys, exhaust - ducts, dormers, roof windows - must be connected to the Isotec panel using polyurethane foam. The joint should then be sealed with Isoband aluminium butyl tape. To divert any potential water flow, an inverted "V" shape should be installed upstream of the protruding part.



PROTRUDING
PARTS

COMPLUVIUM AND DISPLUVIUM

Along the compluvium and displuvium, it is recommended to fill any voids caused by irregular panel cuts with extruded polyurethane foam. This ensures the continuity of the aluminium covering and prevents the formation of thermal bridges. For these areas, a portion of the upper section of the metal profile must be cut to allow for the continuous application of waterproofing tape, particularly along the converses and sloping ridges. Before applying the butyl aluminium tape, use a cutter knife to remove any excess foam.



COMPLUVIUM



DISPLUVIUM

ACCESSORIES FOR SEALING AND FINISHING



Polyurethane foam



Isoband butyl coated aluminium tape



Silicone sealer



Tile locking brackets



Ridge brackets



Loose steel stiffener



Loose XL steel stiffener



Zinc and lead ridge



Aluminium ridge



Ridge hook



Isotec ventilated gutter batten in metal with low teeth 7.00 cm, high teeth 11.50 cm, length 100 cm



Isotec XL ventilated gutter batten in metal with high teeth 11 cm + 3.5 cm, length 100 cm



Isotec XL ventilated gutter batten in polypropylene, length 38.5 cm



Isotec ventilated gutter batten in polypropylene with teeth 9.5 cm and 12.5 cm, length 38.5 cm

THE BREATHABLE WATERPROOF MEMBRANE

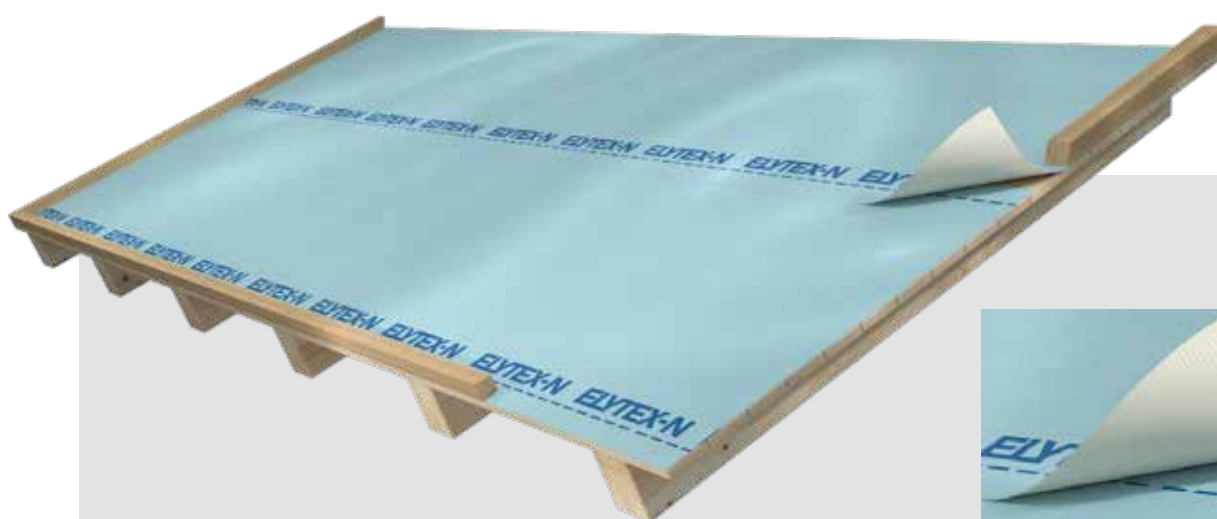
ELYTEX-N

CHARACTERISTICS

Elytex-N consists of three layers of 100% recyclable polypropylene non-woven fabric. Thanks to its permeability, it facilitates natural air circulation while ensuring the structure remains dry.

FUNCTION

Elytex-N is designed for use when installing the Isotec system on continuous wooden structures. The membrane should be laid parallel to the gutter, ensuring that the membrane align with the dotted line and overlap it. During winter, Elytex-N's excellent micro-ventilation prevents the formation of condensation by allowing humid air to permeate through the membrane and evaporate. If condensation does occur, it is directed toward the gutter. This process ensures the functionality and durability of each element that makes up the stratigraphy of the slope.



ADVANTAGES OF THE ISOTEC SYSTEM



THERMAL INSULATION IN SUMMER AND WINTER

Isotec has a core made of closed-cell rigid polyurethane foam with a density of 38 kg/m³, currently one of the best thermal insulators in existence. The available thicknesses of Isotec panels are designed to meet the minimum requirements of thermal performance for any climate zone, depending on the specific insulation needs of the roof. The Isotec insulated and ventilated roof system plays a decisive role in enhancing a building's energy efficiency by reducing heat loss during winter and mitigating the effects of solar radiation in warmer seasons. This results in a significant reduction in heating and cooling costs.



THERMAL RESISTANCE

Thermal resistance (R) takes into account the actual thickness of the panels and provides a clear measure of the insulation's ability to resist heat exchange. With its wide range of thickness options and the low thermal conductivity of polyurethane, Isotec delivers the highest thermal resistance values on the market while offering the lowest cost per unit of thermal resistance.



ELIMINATION OF THERMAL BRIDGES

The Isotec system provides continuous and homogeneous roof insulation, eliminating thermal bridges and minimising temperature fluctuations.



MICRO-VENTILATION / VENTILATION

The ventilation created within the air chamber between the roof covering and the insulating panel significantly enhances the building's natural heat-regulating properties. The "chimney effect" generates a continuous upward flow of air inside the ventilation chamber, which improves the roof's thermal performance in summer by dissipating excess heat. In winter, it helps eliminate any condensation that may form inside the air chamber.



PROTECTION AGAINST HUMIDITY AND ACCIDENTAL INFILTRATION

Ventilation plays a key role in eliminating humidity and preventing the formation of mould and condensation inside the roof structure. When installed following our "Laying Instructions" and on structures with a slope of $\geq 30\%$ (or in line with the minimum slope requirements of the roof covering), Isotec acts as an excellent second-stage waterproofing layer. It provides reliable protection against accidental infiltration caused by cracks or imperfections in the roof covering.



NEW BUILDINGS AND RENOVATIONS

Isotec can be used in both new buildings and to update and renew existing ones, enhancing the energy efficiency of the building.



MAXIMUM COMPATIBILITY

Isotec can be applied to any type of structure, whether continuous or discontinuous, and is compatible with most roof covering materials.



FAST AND COST-EFFECTIVE INSTALLATION

Isotec forms a load-bearing deck that can be walked on safely when installed in accordance with the instructions and the load-bearing capacity table provided in the catalogue. These factors, together with the opposing batten design, ensure safe, faster and more cost-effective installation.



LIVING COMFORT

Isotec is the ideal solution to improve indoor living comfort throughout the year. In fact, the Isotec system allows a constant temperature to be maintained indoors regardless of external weather conditions.



DURABILITY

With a polyurethane core and aluminium coating on both surfaces, Isotec offers exceptional durability.



ENERGY SAVING

The characteristics of the pre-coupled panel (thermo-insulation plus ventilation) provide the roof with effective thermal insulation, resulting in considerable savings on heating costs in winter and cooling costs in summer.



CERTIFICATIONS AND TEST REPORTS



- Type-examination certificate of EC marking – certification system 3 – issued by CSI SPA (UNI EN 13165, UNI EN 13172).
- Test report of initial/aged thermal conductivity issued by CSI SPA (UNI EN 13165, UNI EN 12667).
- Test report of water vapour transmission issued by CSI SPA (UNI EN 13165, UNI EN 12086).
- Test report of water absorption by long-term immersion issued by CSI SPA (UNI EN 13165, UNI EN 12087).
- Test report of compression strength issued by CSI SPA (UNI EN 13165, UNI EN 826).
- Report on the sound insulation power of “Isotec” issued by CSI SPA (UNI EN ISO 140-3, UNI EN ISO 717-1).
- Technical Report for assessing the resistance to overload evenly distributed “Isotec + tile” issued by the Institute for CNR Construction Technologies (internal method).
- Determination of the classification as non-hazardous waste.
- LEED® v4 mapping report issued by QualityNet®.

SERVICE INFORMATION

■ IDENTIFICATION, TRACEABILITY AND PACKAGING

Isotec panels are marked with the production batch number and are packaged and packed by Brianza Plastica using UV-resistant and waterproofing polyethylene film. Each pack features an identification label with a barcode, ensuring full product traceability. The CE marking is affixed to each label.

■ TRANSPORT

Packages are equipped with support beams in expanded polystyrene placed at appropriate intervals to distribute the weight evenly and to facilitate easy handling.

■ STORAGE

Do not remove the packing film until installation; any loose panels should remain in their original packaging and be stored off the ground.

If necessary, a maximum of two packs can be stacked on top of each other to minimise the area occupied.

■ LIFTING AND HANDLING

Packages must be secured at two points, with the distance between them no less than half the package length. Use special spacers to prevent direct contact between belts with the package. Packages must be lifted only with a rocker arm. Packages must be deposited on roof surfaces capable of supporting their weight, ensuring proper resting and safety conditions. Isotec panels are light enough to allow for quick and easy manual handling by a single operator.

■ WARRANTY

With over 40 years of experience in thermal insulation systems and the use of high-quality materials, Isotec has reached a standard of excellence that ensures long-lasting durability and reliability.

Isotec can benefit from an extended warranty of up to 10 years by completing the appropriate form available on the website www.sistemaisotec.it within 30 days of purchase.

■ DISPOSAL

The Isotec panel is classified as NON-HAZARDOUS SPECIAL WASTE based on its characteristics. Therefore, it can be disposed of as solid municipal waste at any authorised landfill or ecological dumpsite. Recommended disposal code: CER 170604 – “Insulating materials other than those mentioned in items 170601 and 170603”.

ISOTEC[®]
Thermal insulating system



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