



ISOTEC LINEA.
THE THERMAL INSULATION SYSTEM
FOR NON VENTILATED ROOFS AND WALLS.



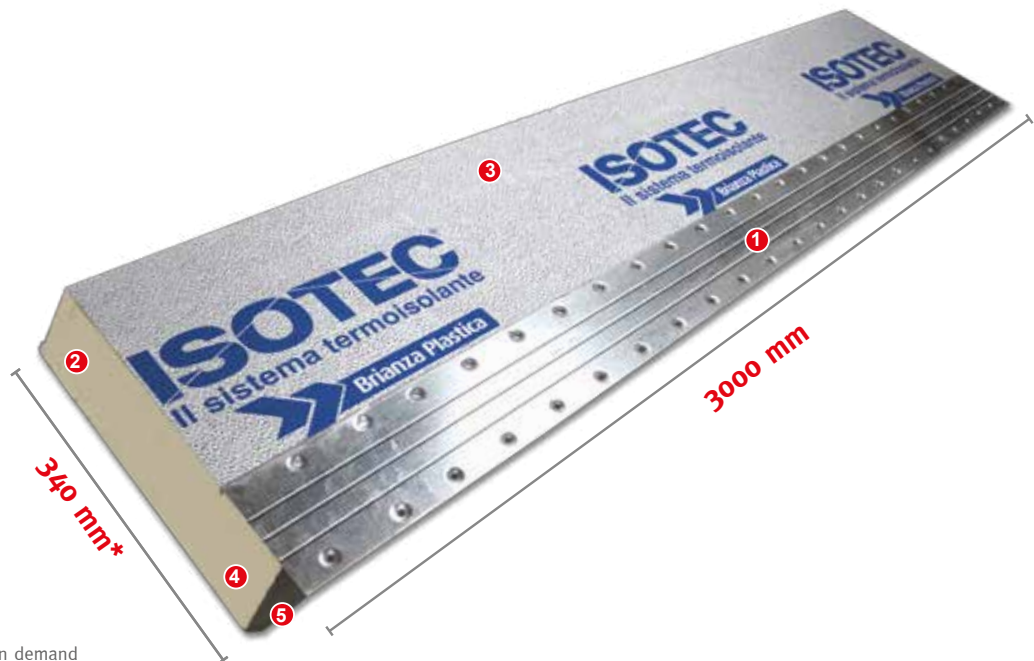
ISOTEC
— LINEA

The thermal insulation system
for non ventilated roofs and walls.

ISOTEC LINEA is a structural insulation panel for non-ventilated walls and roofs. The panels create the ideal support structure for the easy application of metal, fibrocement and other non-ventilated finishes. The panel consists of an insulation core in self-extinguishing rigid polyurethane foam covered by embossed aluminium sheet, made load bearing by a steel profile clad in aluminium, zinc and silicon alloy.

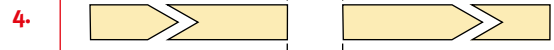


Isotec Linea panels comes from over 30 years experience of Brianza Plastica production of Isotec polyurethane roofing and wall-solutions.

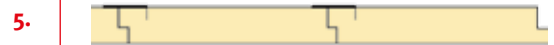


* other widths available on demand

1. Steel stiffener covered in aluminium, zinc and silicon alloy.
2. Rigid, self-extinguishing polyurethane foam (PIR or PUR).
3. Coated on both surfaces with embossed aluminium foil.

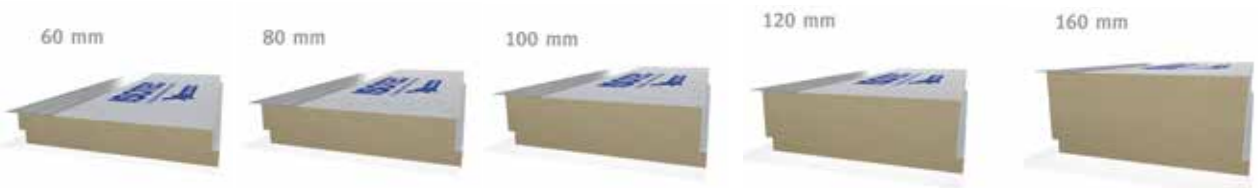


Dovetail (crosswise): insulation continuity.



Longitudinal batten: elimination of the risk of thermal bridges.

Thicknesses

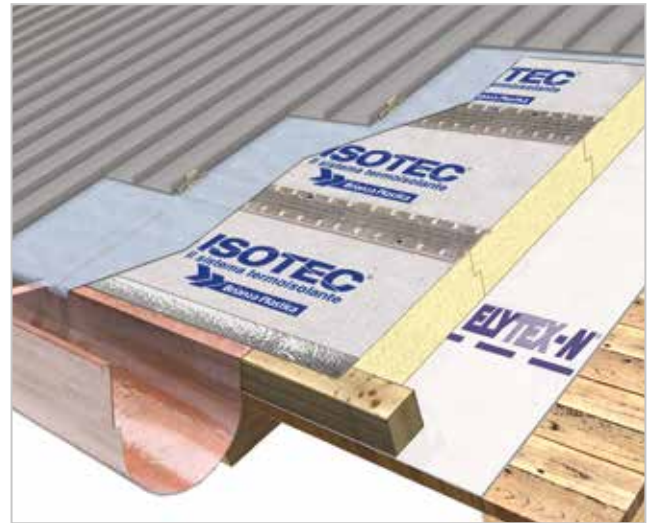




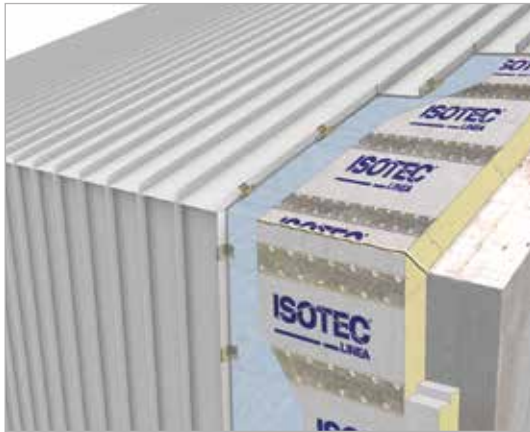
Examples of installations

Roof

- Fix the panel to the below substrate by screws, employing the holes on the metal stiffener.
- Lay the waterproof tissue on the panels.
- Apply the cover sheet and fix it with the clips to the metal stiffener.

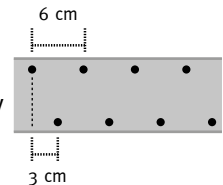


Isotec Linea on a continuous wooden structure and metal roof.



Isotec Linea advantages:

- **integrated metal stiffener**, whose holes every 6 cm allow for a quick and easy fixing of the panel without drilling
- the integrated profile provides a **perfect substructure** for the clips and finishing
- **easy handling, quick installation** thanks to its size and lightweight
- the complete coating with embossed aluminum foil and the metal stiffener instead of wood makes it a **long-lasting product**
- once installed, the panels realize a **self-loaded and insulated surface**



Wall

- Fix the panel to the supporting structure by screw anchors, employing the holes on the metal stiffener.
- Apply the covering and secure it to the metal stiffener using mechanical fasteners.

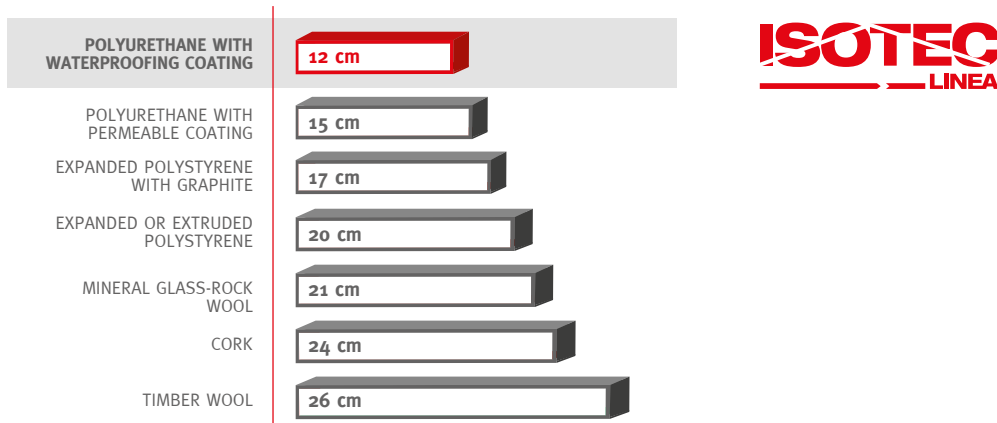


Isotec Linea on brick wall and cladding in fibrocement sheets.

CHARACTERISTIC	U.M.	VALUE	TEST METHOD
Density	kg/m ³	38,0	UNI EN ISO 845
Initial Thermal Conductivity $\lambda_{mean,i}$	W/mK	0,021	UNI EN 12667
Declared Thermal Conductivity λ_D (after pondered ageing of 25 years)	W/mK	0,022	UNI EN 13165 Appendix A and C
Thermal Conductance U	W/m ² K	0,37 - 60 mm 0,28 - 80 mm 0,22 - 100 mm 0,18 - 120 mm 0,14 - 160 mm	$U = \lambda_D / d$ (d = thickness panel in m)
Declared Thermal Resistance R_D (after pondered ageing of 25 years)	m ² K/W	2,70 - 60 mm 3,60 - 80 mm 4,50 - 100 mm 5,45 - 120 mm 7,25 - 160 mm	UNI EN 13165
Constant temperature	°C	- 50 ÷ + 100	UNI 9051
Dimensional stability DS(70)	level	3	UNI EN 1604
Stress Resistance to 10% Deformation CS(10\Y)	KPa	≥ 120	UNI EN 826
	kg/cm ²	≥ 1,22	UNI EN 826
Water vapor Resistance MU	μ	> 50000	UNI EN 12086
Long term Water Absorption WL(T)	%	< 0,6	UNI EN 12087
Specific heat	J/kgK	1400	UNI EN ISO 10456
Fire reaction	euroclass	F (PUR)	EN 13501-1
	euroclass	D (PIR)	EN 13501-1, EN 13823, EN 11925-2

Isotec Linea bears the CE mark in compliance with the European Regulation 305/2011/CE, norms UNI EN 13165:2013 and UNI EN 13172:2008. System 3 (Organism certified by CSI S.p.A. n° 0497).

Comparative histogram of the thicknesses of various insulating materials required to achieve a value **U=0,18 W/m²K ***



*Source ANPE 2016

Brianza Plastica SpA
Via Rivera, 50 - 20841 Carate Brianza, ITALY
Tel. +39 0362 91601 - Fax +39 0362 990457
export@brianzaplastica.it - www.brianzaplastica.it

