

**La Escandella**  
ROOFING THE WORLD

CONSTRUCTION SYSTEM

Solutions for  
ventilated roofs





**ESCANDELL  $\lambda$  SAT**

**Advanced systems** to meet the ventilation, thermal insulation, watertightness and durability requirements of tile roofs.

**ESCANDELL  $\lambda$  SAT** panels are made entirely of **Neopor® Expanded Polystyrene (EPS)**, considered one of the best insulating materials in construction and used in many building applications. Neopor® expanded polystyrene has high thermal insulation because it contains tiny particles of graphite that absorb or reflect infrared radiation, making it **20% more insulating than other EPS products.**



**High insulation,** without thermal bridges and with lower thicknesses.



**Ventilated roof,** preventing damp and improving heat insulation.



**Lightweight and easy to install.** No need for prior staking out.



Lateral and longitudinal fittings for **maximum watertightness.**



Multi-purpose panel. Suitable for installing **any tile with a 37 or 39.5 cm batten pitch.**



Installation in horizontal position for 370 mm batten pitch



$\lambda = 0,031 \text{ W/mk}$   
**100% Neopor®**



Installation in vertical position for 395 mm batten spacing



**CTE** System adapted to the new requirements of the Technical Building Code.

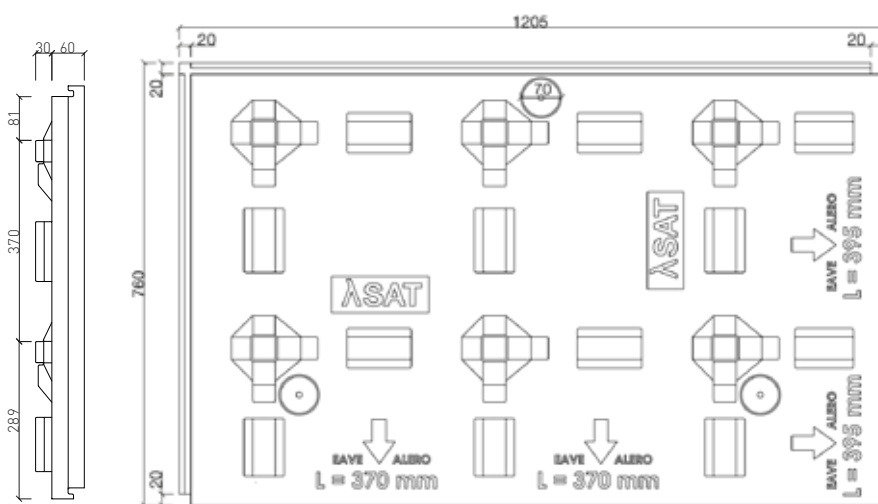
## SYSTEM FEATURES

The ESCANDELL **λ** SAT insulating panel is manufactured in three thicknesses: 60, 100 and 140 mm and has a thermal conductivity coefficient of  $\lambda = 0.031 \text{ W/m-K}$  to meet the thermal insulation requirements of each project. When placed on the outside of the roof structure, they form a **continuous layer of insulation without thermal bridges**.

ESCANDELL SAT THICKNESS	Thermal transmittance U	Thermal resistance R	Minimum square metres (m <sup>2</sup> )
60mm	0,51 W/m <sup>2</sup> k	1,94 W/m <sup>2</sup> k	11,44
100mm	0,31 W/m <sup>2</sup> k	3,23 W/m <sup>2</sup> k	7,92
140mm	0,22 W/m <sup>2</sup> k	4,52 W/m <sup>2</sup> k	6,16



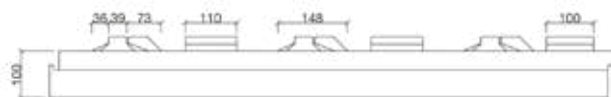
The panels **must always be installed on a continuous support and waterproof sheet**, to ensure that the roof is completely watertight in the event of condensation or accidental breakage of parts.



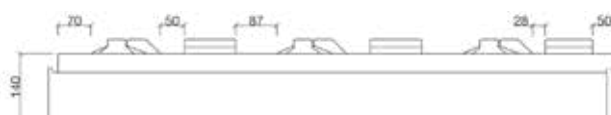
ESCANDELL **λ** SAT  
thickness 60 mm



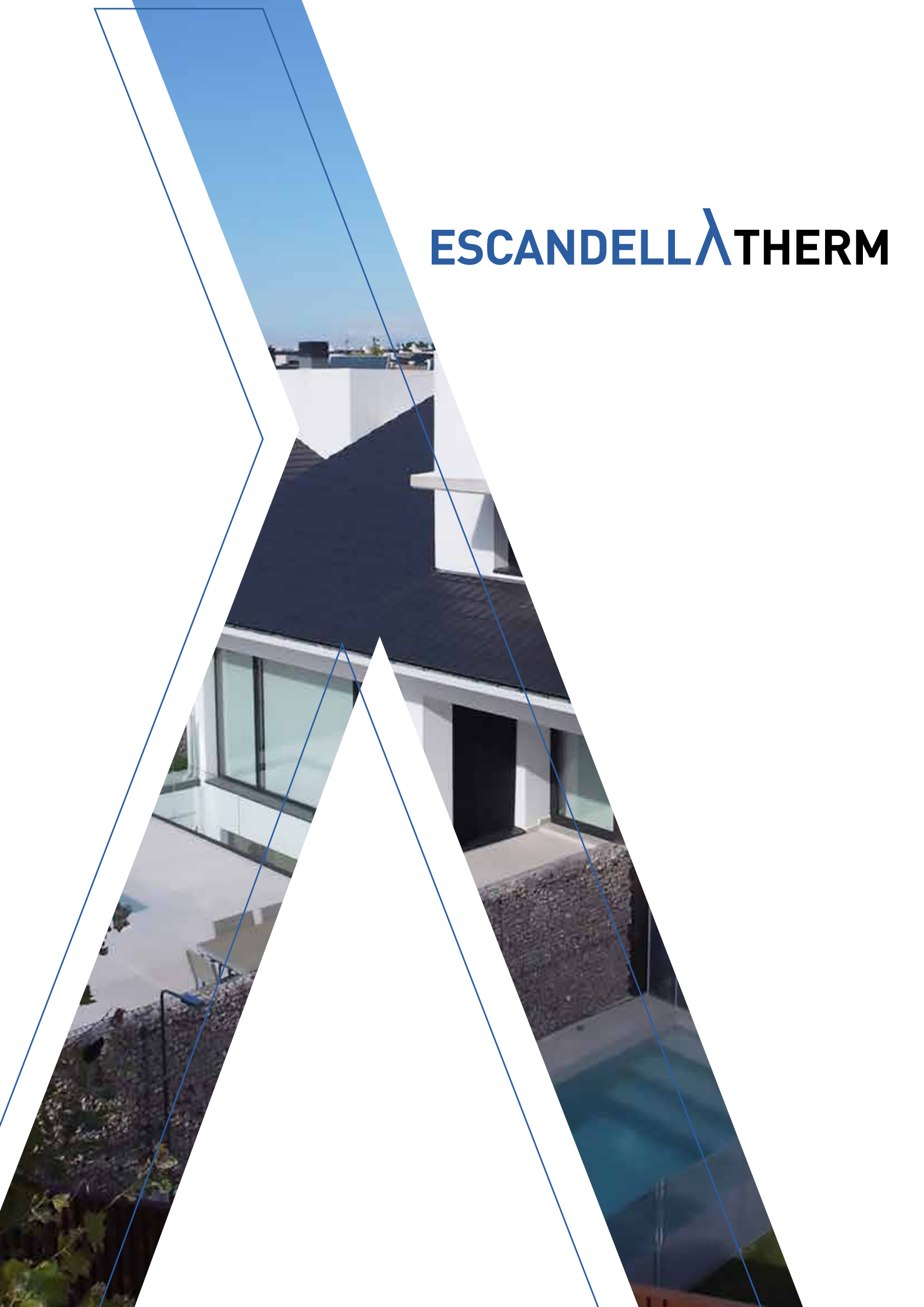
ESCANDELL **λ** SAT  
espesor 100 mm



ESCANDELL **λ** SAT  
thickness 140 mm

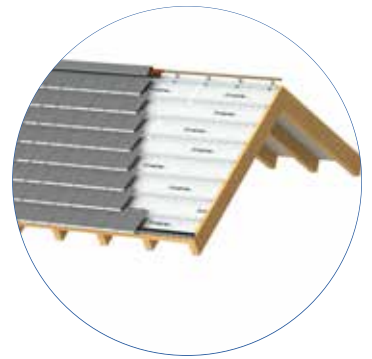


**ESCANDELL**  **THERM**



**ESCANDELLATHERM** prefabricated panels consist of a closed-cell polyurethane foam core with **excellent dimensional stability and high breaking strength**, protected by aluminium cladding on all four sides. Thanks to this combination of materials, the panels have one of the best thermal insulation coefficients on the market, making them **ideal for both cold areas and hot climates**.

Each panel **incorporates its own Aluzinc ventilated strip and is self-supporting**, always respecting the minimum distances between supports depending on the thickness. These characteristics make it ideal for both renovations and new projects. **ESCANDELLATHERM** is supplied ready to install each model of tile, thus avoiding the need to set out and take measurements on site, **which means significant savings in time and labour**.



**Intuitive**, simple, fast and safe **assembly**.



Complete **lightweight** technical roof system.



**Great savings** in structure and labour.



**Excellent micro-ventilation** under roof tiles.

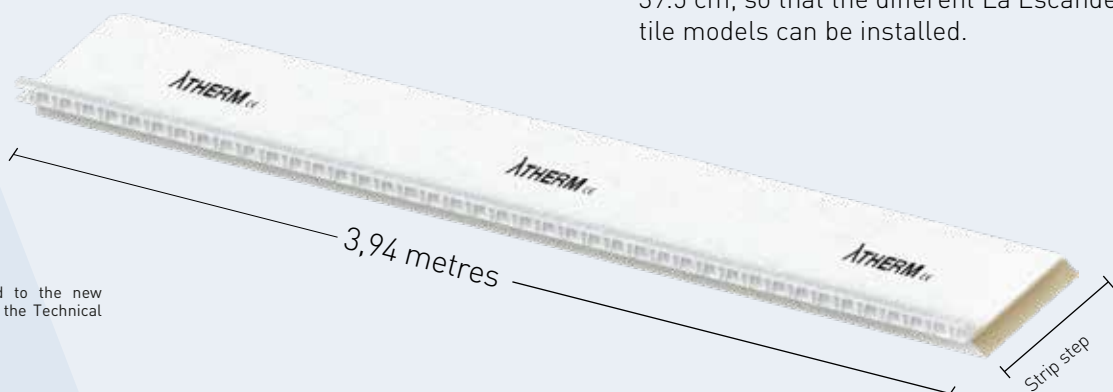


It **insulates the roof** without losing interior space.



**Sustainable**, low energy consumption

The panels are available in two sizes, 37 or 39.5 cm, so that the different La Escandella tile models can be installed.



**CTE** System adapted to the new requirements of the Technical Building Code.



## TECHNIQUE FEATURES

The ESCANDELL  $\lambda$  THERM insulating panel complies with **UNE-EN 13165:2015 - Thermal insulation products for building applications. Products manufactured from rigid polyurethane foam (PU).**

ESCANDELL $\lambda$ THERM TECHNIQUE FEATURES	Value
Density	39 Kg/m <sup>3</sup>
Coefficient stated thermal conductivity $\lambda_D$ Conductivity	0,022. W/mk
after ageing for 25 years of operation Thermal stability	-50°C/+100°C
Dimensional stability DS(TH)	Class 8
Compressive strength at 10% strain CS(10)	130 Kpa
Resistance to water vapour diffusion MU	2.000.000 $\mu$
Long-term water absorption WL(T)	0,7%
Emission of hazardous substances	Meet
Reaction to fire	Class F
Sound insulating power	22dB
Weight (panel pitch 370 mm) - from 2.36 to 6.29"	4,20 Kg/m <sup>2</sup> - 8,10 Kg/m <sup>2</sup>

ESCANDELL  $\lambda$  THERM has a **thermal conductivity coefficient  $\lambda = 0.022 \text{ W/m-K}$** , the lowest compared to other insulating materials for roofs. This translates into lower thicknesses to achieve the levels of thermal insulation required in each case, **since the lower the coefficient  $\lambda$ , the greater the insulation.**

ESCANDELL $\lambda$ THERM panel thickness	Thermal transmission U
60 mm / 2.36 "	0,37 w/M <sup>2</sup> k
80 mm / 3.14 "	0,27 w/M <sup>2</sup> k
100 mm / 3.93 "	0,22 w/M <sup>2</sup> k
120 mm / 4.72 "	0,18 w/M <sup>2</sup> k
1400 mm / 55.11 "	0,16 w/M <sup>2</sup> k
160 mm / 6.29 "	0,14w/M <sup>2</sup> k

The ESCANDELL  $\lambda$  THERM system adapts perfectly to both renovations and new construction. The prefabricated panels that make it up are ready to be installed on site, thus facilitating the installation of the roof.

> **External embossed aluminium coating** that wraps around the insulation on all 4 sides, acting as a protection and sealing barrier.

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WE DESIGN OUR SYSTEMS

**Thinking about the ease of energy  
installation of the cover**



AITANA MIXED TILE WITH **ESCANDELL**SAT



The use of high performance insulation systems is a direct and immediate way to achieve significant savings in energy consumption when renovating or building new buildings.

Lower energy consumption translates into **lower CO2 emissions**, responsible for global warming, which contributes positively to the environment. Houses are responsible for a large part of the

The roof is the most energy-efficient and therefore special care must be taken in its design to reduce energy losses as much as possible. **Of the energy losses in the dwelling, approximately 30% corresponds to the roof.**

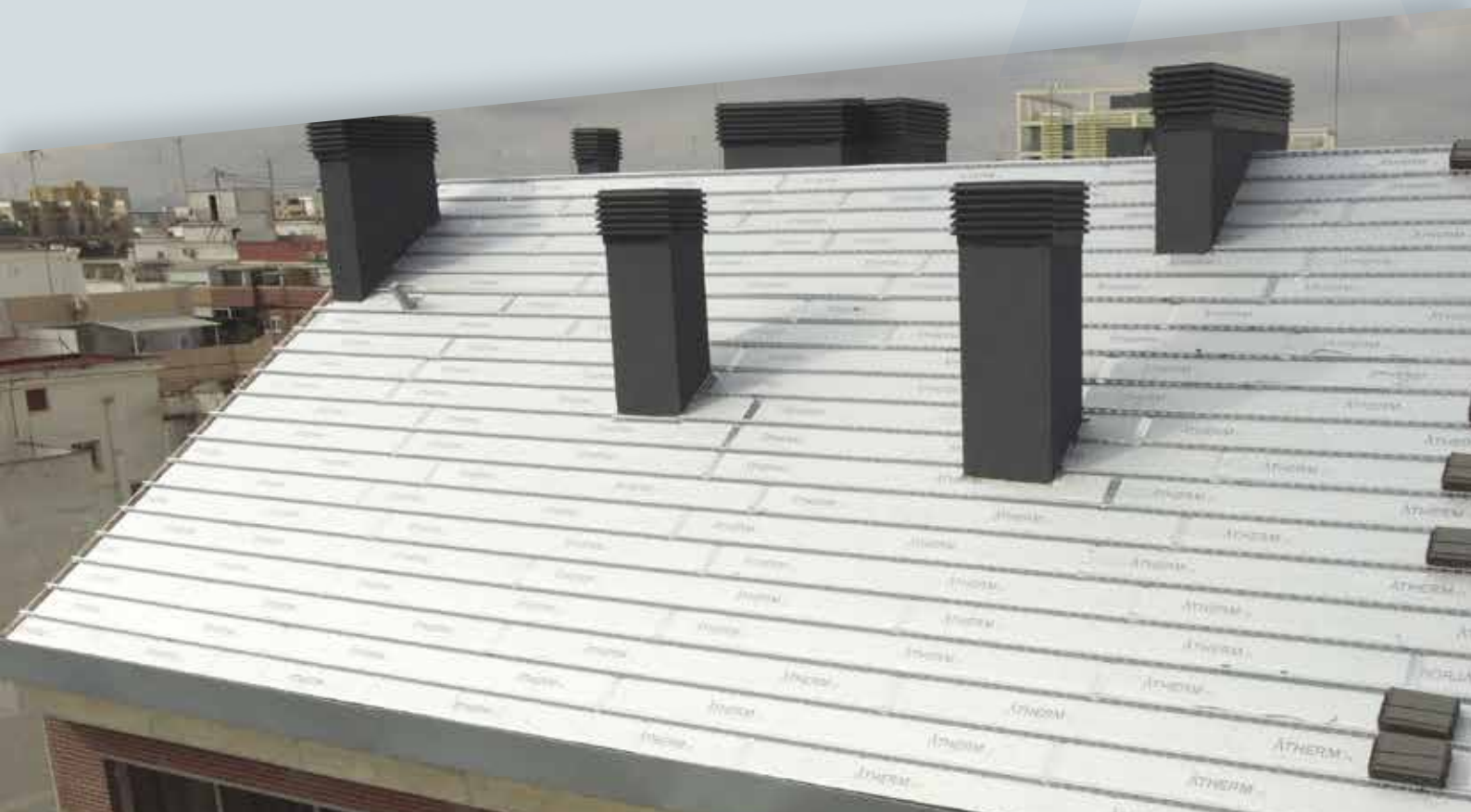


### ΛSAT

- ✓ LIGHT SYSTEM
- ✓ VENTILATED ROOF
- ✓ QUICK INSTALLATION
- ✓ MINIMUM WASTE
- \* COMPATIBILITY WITH LA ESCANDELLA TILES  
\* Valid for all La Escandella tiles, except for the Visum3 and Plana models.

### ΛTHERM

- ✓ SELF-PORTING
- ✓ MAXIMUM INSULATION
- ✓ LIGHT SYSTEM
- ✓ VENTILATED ROOF
- ✓ QUICK INSTALLATION
- ✓ MINIMUM WASTE
- ✓ COMPATIBILITY WITH LA ESCANDELLA TILES



# La Escandella

ROOFING THE WORLD

La Escandella provides a **comprehensive service** of the calculations necessary for your project free of charge.  
Contact us and we will manage the **full budget for your roof.**



More info on the web

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