

La Escandella
ROOFING THE WORLD

PLANUM PHOTOVOLTAIC SOLAR SYSTEM



BENEFITS OF PLANUM PV SOLAR SYSTEM



Integrate design with technology

The Solar tile combines perfectly with our Planum ceramic tile, so the system will be fully integrated with the roof.

The Solar tile integrated in the roof with more energy in less space (150 W/m²).



Increase the market value of your home

Installing the Planum PV Solar System, the value of your property automatically increases because it is an innovative system.



Easy installation

Mechanical interlocking allows a simple and quick, laying with battens like any other clay roof tile. La Escandella laying system results in significant savings compared to others solutions.

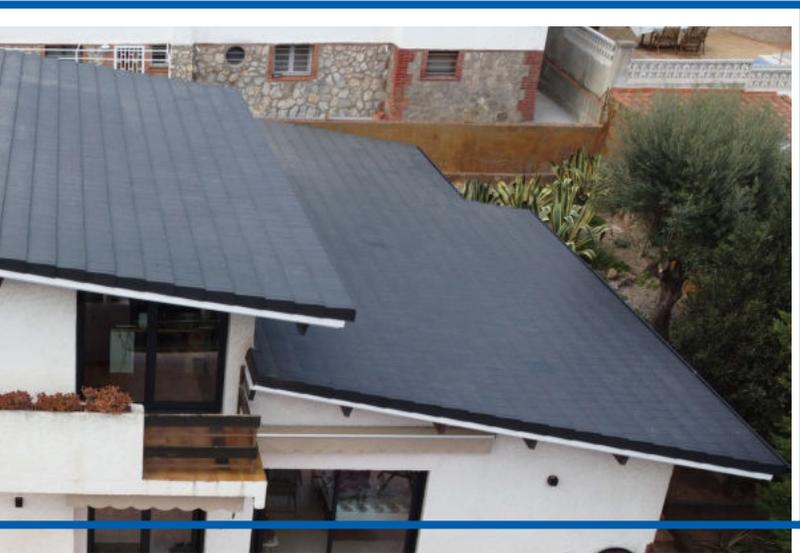


Find more



Energy efficient

A pitched roof improves the thermal efficiency and Planum PV Solar System makes your home self-sufficient by generating your own sustainable energy and reducing your energy bills.



Weather resistant

Planum Solar tiles are made from premium mono crystalline cells and the glass technology that surrounds them is very sturdy and durable in extreme weather conditions.



Low maintenance

The combined solar roof tiles and a battery solution offers an easy-to-use monitoring system so you can track your solar roof system's performance, monitor the amount of energy it stores and how much you're saving on your energy bill.

ROOFING COMPONENTS

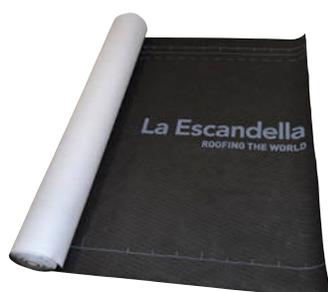
ROOF VAPOUR BARRIER



Condensation barrier membrane with three overlapped and termosealed layers. The weight is of 145 g/m².

Ref.	Description	Selling unit	Package pcs./box
CAM56	Condensation barrier membrane 145 gr/m ²	roll 75 m ²	1 roll

WATERPROOF & CONDENSATION BARRIER MEMBRANES



Waterproof membrane with a high transpiration capacity and 3 overlapped and ther-mosealed layers. Different weights allow the choice of greater or less permeability to steam, while it is waterproof and protects against wind.

Ref.	Description	Selling unit	Package pcs./box
CAM52	Waterproof membrane 150 gr/m ²	roll 75 m ²	1 roll
CAM53	Waterproof membrane 180 gr/m ²	roll 75 m ²	1 roll

ADHESIVE TAPES - WATERPROOF MEMBRANE



Polyethylene adhesive tape with reinforcing mesh covered with high resistance acrylic adhesive. Designed for bonding waterproof membranes in its overlapped area preventing the air and wind flow through the different layers.

Ref.	Description	Selling unit	Package pcs./box
CAM44	Adhesive tape for Water proof membrane 1 side (50mm width x 20ml length / 1.97" x 0.79")	1 roll	1 roll
CAM42	Adhesive tape for Water proof membrane 2 sides (50mm width x 50ml length / 1.97" x 1.79")	1 roll	1 roll

ADHESIVE TAPES - BATTENS



Adhesive tape used between batten supports and waterproof membrane to prevent leakage where battens are nailed.

Ref.	Description	Selling unit	Package pcs./box
CAM43	Nagel Adhesive tape - under tile drilling (40mm width x 30ml length / 1.97" x 1.18")	1 roll	1 roll

BATTENS

Wood or galvanized metal batten to create the air chamber and the perfect support of the tiles.



Ref.	Description	Selling unit	Package pcs./box
CAM92	L.M of Treated wood batten (5 x 5 x 240 cm / 1.96" x 1.96" x 94.48")	1 lm	1 batten
CAM050	Galvanized metal batten (5 x 3 x 250 cms / 0,6 mm / 1.96" x 1.18"x 98.42" / 0.02")	1 unit	1 batten

FIXING COMPONENTS



The function of fixing components is to provide the join between the tiles and any accessories, and the support, in order to prevent them from moving.

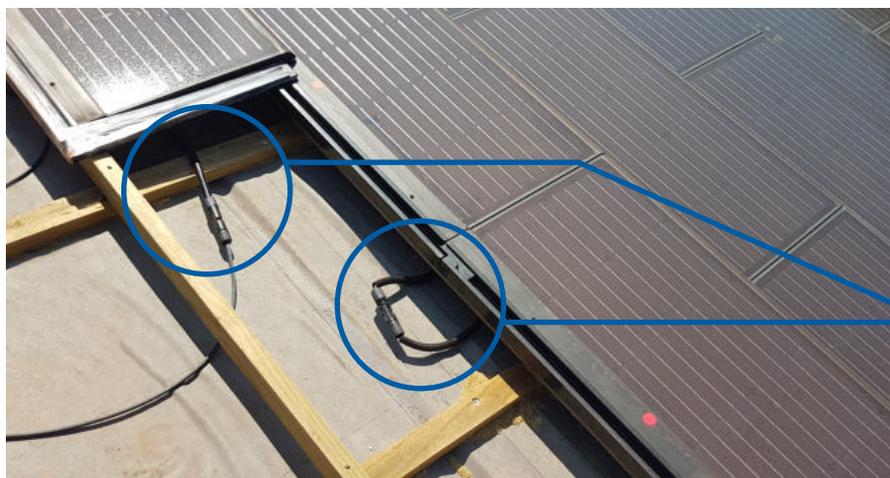
Ref.	Description	Selling unit	Package pcs./box
CAM95	Flat head screws (5 x 70 mm / 1.96" x 2.8" / WOOD-WOOD)	1 box	100 units
CAM97	Flat head screws (3,5 x 50 mm/ 0.14" x 1.97" / TILE-WOOD)	1 box	100 units
CAM93	Hexagonal head drill screws (5,5 x 22 mm / 0.22" x 0.873" > with washer / METAL-METAL)	1 box	100 units
CAM94	Self-supporting flat head drill screws (4,2 x 45 mm / 0.17" x 1.77" / TILE-METAL)	1 box	100 units

EAVE GRATING



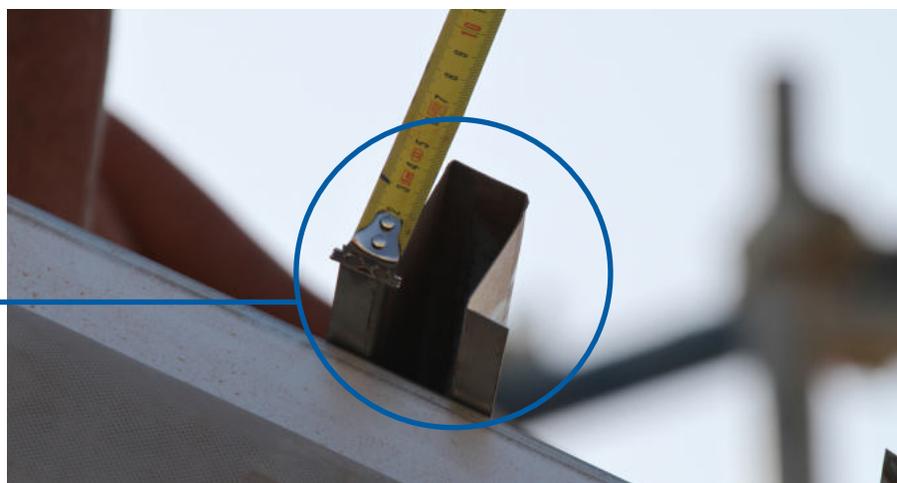
It protects the open ventilation area in the eaves against the entry of birds and rodents. The holes allow the air flow to ensure a proper ventilation.

Ref.	Description	Selling unit	Package pcs./box
CAM33R	Eave grating - Red (10cm x 60m / 3.94" x 65,61 yd)	5/60 lm	24 rolls
CAM33N	Eave grating - Black (10cm x 60m / 3.94" x 65,61 yd)	5 lm	24 rolls
CAM118RN	Metalic Eave (10 cm / 3.94")	5 lm	24 rolls
CAM121R	Metalic eave membrane - Red (10 cm x 2,5 m / 3.94" x 98.4")	1 unit	24 rolls
CAM121N	Metalic eave membrane - Black (10 cm x 2,5 m / 3.94" x 98.4")	1 unit	24 rolls



All electrical connections are covered under the solar tiles, so they are completely isolated and protected from the outside.

The Planum PV Solar System must be installed on a Ventilated Roof with 5 cm high secondary battens.



PLANUM ROOF TILE

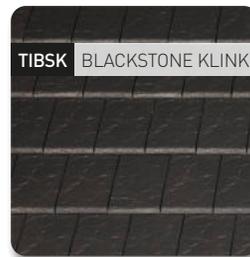
CHARACTERISTICS



Dimensions*	A 441 mm / 17.36"
	B 278 mm / 10.98"
	C 32 mm / 1.26"
Pieces per m ² / sq.	11 / 101
Weight per piece	3.5 kg / 7.71 lbs
Longitudinal fit**	370 mm (+6 mm; - 44 mm) / 14.57" (+0.24"; -1.73")
Transversal fit**	237 mm / 9.33"
Units per pallet	240 / 320
Weight per pallet	840 kg / 1.852 lbs (240 pieces) / 1.120 kg / 2.469,2 lbs (320 pieces)
Laying	Broken bond

* The tile dimensions indicated in this chart, allow a tolerance of approximately ±2%.

** Theoretic value: this should be re-calculated on site with the tiles that are to be used.



*Consult glazed and special colours upon request.

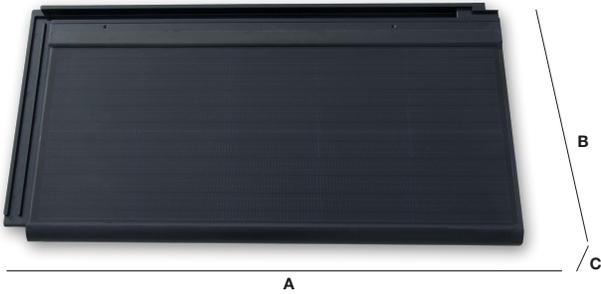
HOOKS AND CLIPS



Fixation system for H-Selection tiles. It ensures fixation and prevents lifting tiles wind. It is presented in the manner of installation or by subsection, either nailed to battens.

Ref.	Description	Selling unit	Package pcs./box
CAM26	Universal clip for roof tiles with lace	1 unit	250 units
CAM59	Metal hook/clip for wooden batten (38x27 / 30x40mm // 1.5"x1.06" / 1.18"x1.57" battens)	1 unit	250 units
CAM62	Eave hook/clip for roof tiles with lace (8 cm largo / 3.15")	1 unit	100 units
CAM64	Clip de golpe (25x38 / 25x50mm // 0.98"x1.5" / 0.98"x1.97" battens)	1 unit	500 units

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TECHNICAL CHARACTERISTICS

Dimensions	A 823 mm / 32.40" B 340 mm / 13.38" C 61 mm / 2.40"	Rated Maximum Power	47 Pmax/W
N° of tiles/m ²	3,2	Power/m ²	148 W
Equal to Planum tiles	3,5	Maximum efficiency	17 %
Unit weight	11,2 kg / 24.69 lb	Maximum Power Voltage	5,18 Vmp/V
N° of monocrystalline cells	10 (2 x 5)	Open-circuit Voltage	6,67 Voc/V
Cell Size	156 x 156 mm / 6.14 x 6.14"	Maximum Power Current	9,19 Imp/A
Laying	Broken bond	Short-circuit Current	9,68 Isc/A
Treated wood batten	5 x 5 x 240 cm / 1.96 x 1.96 x 94.48"	N° of solar tiles/kw	21

STC: Irradiance 1000W/m² Module temperature: 25°C AM=1.5



For the 25 year performance warranty period we guarantee the solar cells continue to produce power at 80% of its full power generation capabilities. Check La Escandella roof tile installation manual and the Planum PVhotovoltaic Solar System installation manual for all the information regarding the installation of ceramic tiles.



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



www.laescandella.com
info@laescandella.com



C/ Bélgica 1, P.I. La Escandella
03698 Agost (Alicante) - SPAIN



T/ +34 965 691 788
F/ +34 965 691 692

