



# PLANUM



La Escandella



# PLANUM

The essence of a traditional material for today's architectural language

Its design and size make the installation easier and faster, lowering laying time and cost. Planum tile, available in several colors and finishes, it's a solution where aesthetical and functionality are combined to provide a versatile and stylish roof

GUARANTEE  
**35**  
YEARS

	Application Standard	Requirements	PLANUM
<b>Flexural Strength</b>	EN 538	Resistance > 900N	Above
<b>Water Impermeability</b>	EN 539-1	Complies with level 1 (Method 1)	Above
<b>Frost Resistance</b>	EN 539-2	Level 3 Resistance (Method E)	Above
<b>Geometric Characteristics</b>	EN 1024	Flatness ≤ 1,5% Straightness ≤ 1,5%	Complies Complies



EN 539-2  
Test of frost resistance



EN 539-1  
Impermeability test



EN 538  
Flexural strength test



EN 1024  
Geometric characteristics

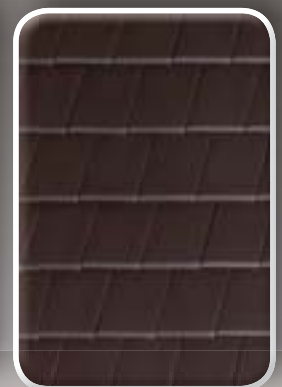
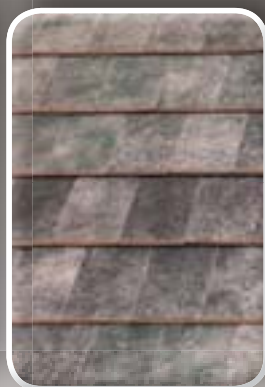
RED

JASPEE RED

LUCENTUM

BROWN

COCOA





# Discover the New amazing Planum!!

## Double interlocking

The interlocking and overlapping system ensures an excellent watertightness

## Lighter

Its light weight and the 11 pieces sq.m. make the installation easier and faster

## Less water absorption

A selection of quality clays and high temperature firing give the tile a reduced water absorption



## Flatness

Perfect finishes make roofs stylish and avantgarde

## Higher Resistance

Clay composition and a perfect pressing allow a flexion rate above the standard

## Costing

Its big format (11pcs/sqm), 5 tiles packaging in pallets of 240 or 320 units imply a relevant cost reduction

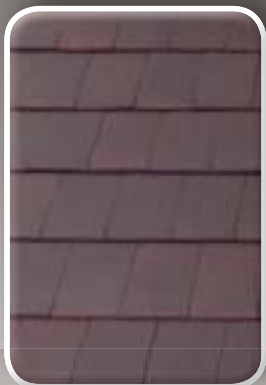
BURGUNDY

PEPPER

GREY

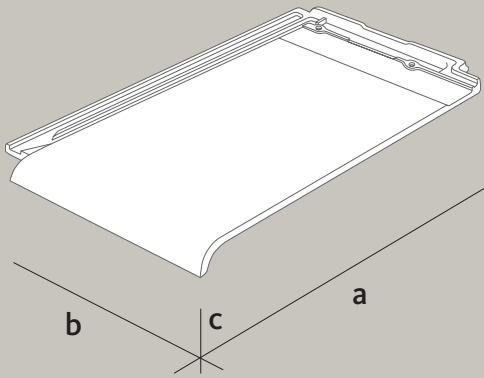
GALAXY

SLATE





# PLANUM



Dimensions*	a: 440 mm / 17.732"; b: 280 mm / 11"; c: 32 mm / 1.26"
Pieces/m <sup>2</sup> - Pieces/sq	11 - 97
Weight piece	3.5 kg / 7.7 lbs
Longitudinal fit**	≈369 mm (± 7 mm) / 14.53" (±3")
Transversal fit**	≈237 mm (+2 mm/-1 mm) / 9.33" (+0.08"; -0.04")
Units per pallet	240 / 320
Weight por pallet	840 kg / 1,120 kg - 1,852 lbs / 2,470 lbs
Laying method	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.

## ACCESSORIES

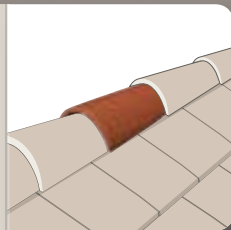
La Escandella offers a complete line of Planum accessories, available in any color to customize your roof.

\* 290mm / 11.42"

### Round ridge / Hip

Q02

3400 gr  
7.5 lbs  
2.5 uds/ml

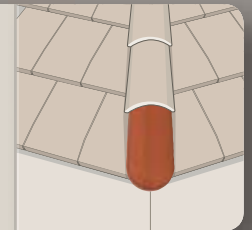
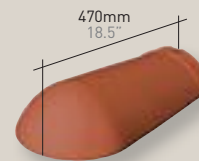


### Round ridge end / Hip starter

Q04

3600 gr  
7.94 lbs

With Q02

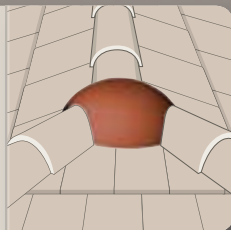


### Round 3 way ridge

Q44

4600 gr  
10.14 lbs

Ø 440mm  
17.32"

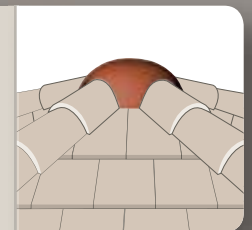


### Round 4 way ridge

Q45

4100 gr  
9.04 lbs

Ø 445mm  
17.52"



### Round 3 way ridge female

Q55

4100 gr  
9.04 lbs

With Q02



\*400mm / 15.75"

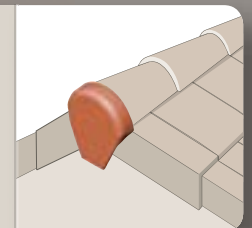
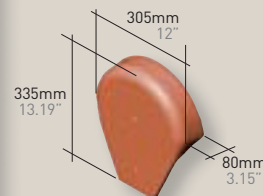


### End cap round ridge

Q83

2600 gr  
5.73 lbs

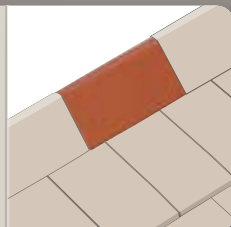
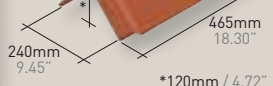
With Q02



### Pyramid ridge-side course / Rake

Q91

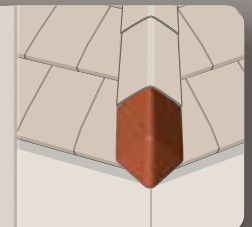
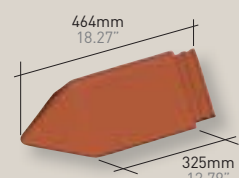
4550 gr  
9.92 lbs  
2.5 uds/ml



### Pyramid end ridge

Q93

3750 gr  
8.27 lbs



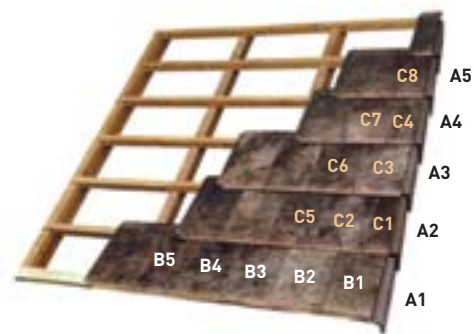
On their products, La Escandella has right to make changes in dimensions, fittings, weight & units per pallet, without previous notice. For more information, please contact your Sales Representative or our Customer Care Service.



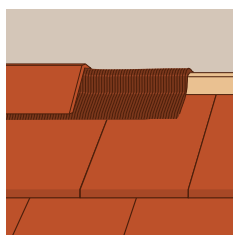
## LAIID METHOD

Planum roof tile can be laid on a continuous frame, which has to be completely flat in order to ensure the right laying of tiles and their fixing components (to avoid water-leaking); or on a discontinuous frame or battens, which will be fixed by building a batten counter batten deck or by fixing them directly to the frame. The laying of Planum roof tile is carried out by broken bond (also referred as cross bond) as follows:

1. The starter course will begin with the Planum right side course (Rake trim - Q88) (A1) from the eave to the ridge (A1-A5...).
2. The starter course will begin with a full tile (B1). The tiles structuring the eave will have to overlap the side course and fit together one to another. The second course will be started with half tile -Q85- (C1) and will be laid to provide the proper vertical exposure. This exposure is continued through each successive course.
3. All joints of the second course and succeeding courses should be at the center line of the previous course, alternating half tiles Q85 (C1) and full tile at the start and at the end of each course.

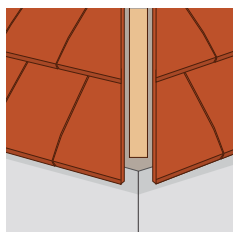
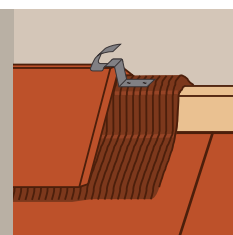


## INSTALLATION DETAILS



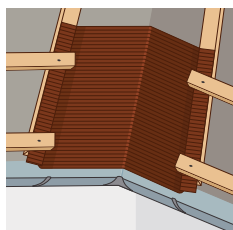
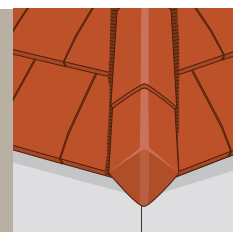
### RIDGE

- Apply "La Escandella Alu-Roll for ridges and hips" (or similar) along the centre line of the ridge batten and fasten to the ridge nailer.
- Fix special ridge tiles with a minimum overlapping of 5 cm (1.97") on top of the tiles, placing them in opposite direction of the blowing winds.



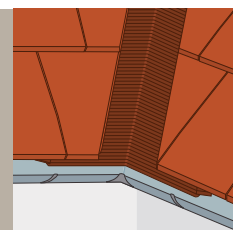
### HIP

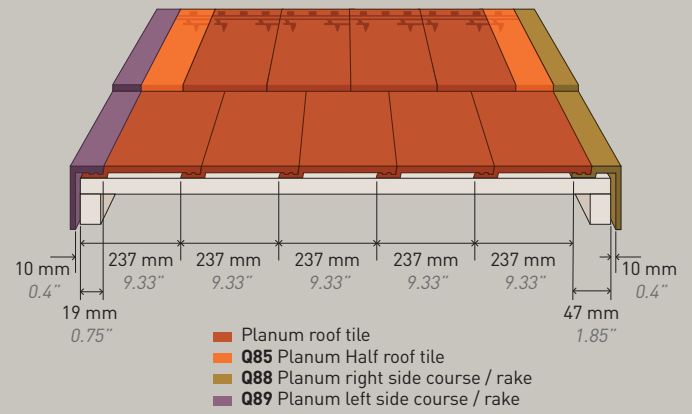
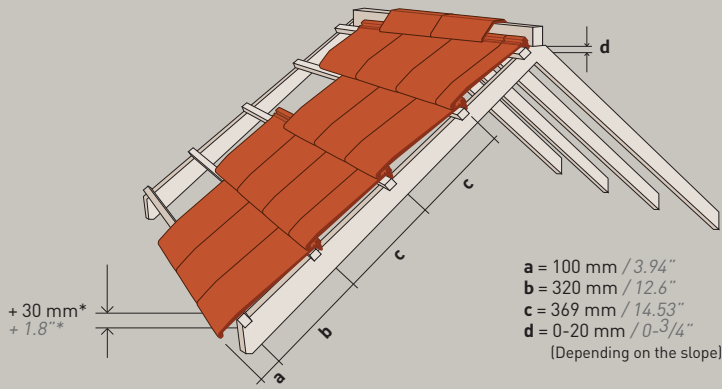
- Cut the general tiles closely to the hip timber and at the same relative angle.
- Fix "La Escandella Alu-Roll for ridges and hips" and special pieces for hip as above mentioned for ridges.



### VALLEY

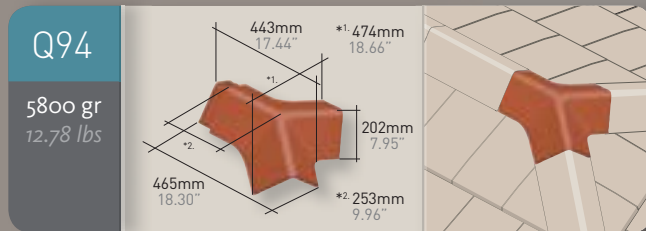
- Install valley battens on each side of the valley crease. Apply "La Escandella" Alu-roll Valley (or similar) over the valley battens. Alu-roll must overlap the ridgeline and should be extended along the eaves to finish at least, as per minimum building codes requirements, above the outside wall.
- At valleys, straight cut field tiles to allow a minimum 15 cm (6") open channel. Secure cut field tiles to the horizontal battens.



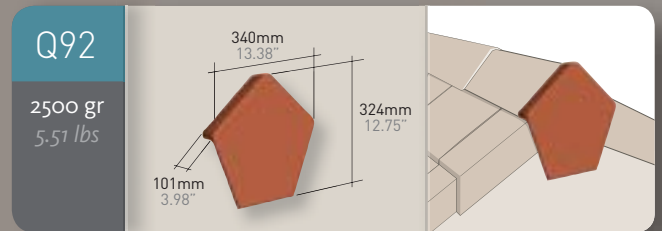


\*First course batten should be 30mm (1.18") higher than all succeeding course battens to provide a vertical alignment and to assure a symmetrical installation.

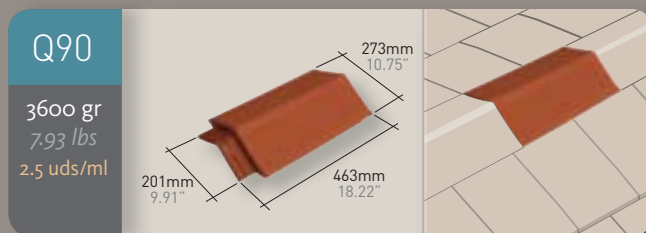
### Pyramid triple ridge



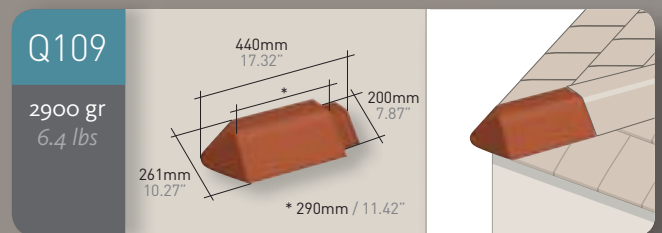
### Pyramid end cap



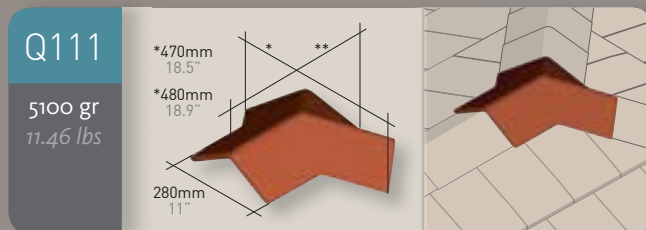
### Ática Ridge



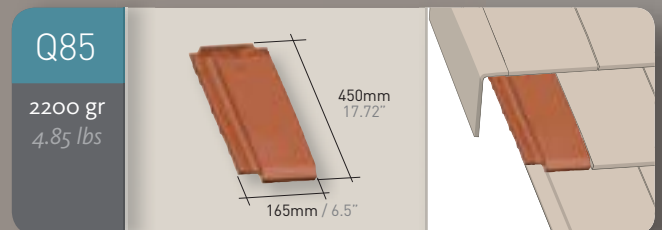
### Ática end ridge



### Ática 3 ways Ridge



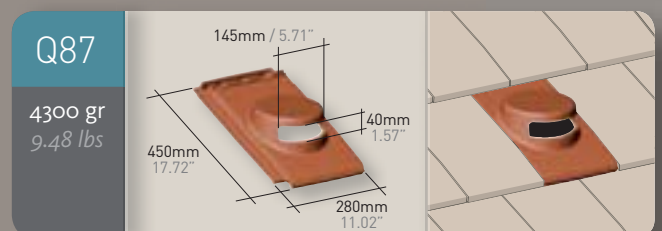
### Planum half roof tile



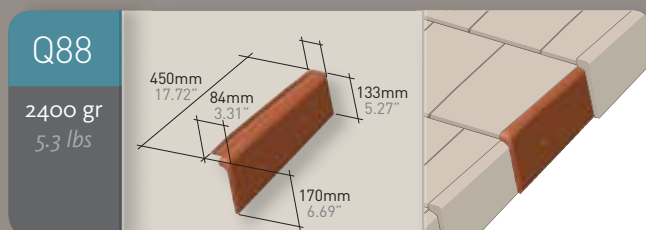
### Planum ventilation roof tile



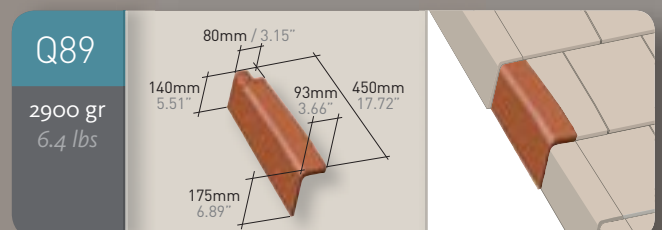
### Planum chimney / Pipe tile



### Planum right side course / Rake



### Planum left side course / Rake



# SLOPES / PITCHES

The minimum pitch standard recommendations should always be followed (see values in the referral table). On all pitches below the standard recommended minimums, or in regions where ice dams may occur, a waterproof underlayment on the entire deck **MUST** be applied. Most problems with water-shedding roof installations occur from water that migrates through the joints of the tiles through capillary action, wind-driven rain, and runoff or ice damming. Because of this possibility, the underlayment is critical to the success of the roof.

**PROTECTED LOCATIONS:** hollow area which is surrounded by hills that protect the hollow from the winds in all directions.

**NORMAL LOCATIONS:** Flat area, plateau with minimal elevation changes.

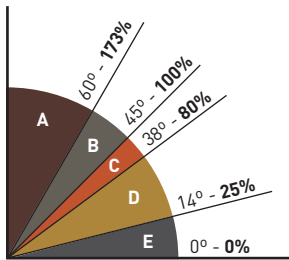
**EXPOSED LOCATIONS:** Places open to strong winds, coastal areas (up to 5 km / 3 miles from the shoreline), islands or narrow peninsulas, estuaries or closed bays, narrow valleys, isolated mountains, mountain passes and earthquake zones.

Hip < 6,5m < 21.32'	Hip 6,5m - 9,5m 21.32' - 31.16'	Hip 9,5m - 12m 31.16' - 39.37'
45% / 24,5°	50% / 26,5°	55% / 29°
50% / 26,5°	55% / 29°	65% / 33°
65% / 33°	75% / 37°	85% / 40,5°

Note: For hips greater than 12m (39.4') long, a waterproof underlayment on the entire roof deck **MUST** be applied.

## FASTENING METHODS

The manner in which roof tiles are installed makes them a highly effective water shedding assembly that affords years of service and protection. The effectiveness of a tile roof system as a weather resistant assembly however depends on the proper installation of all the tile roof components, and installing them properly is critical to the performance of the installed system.



- A:** Every tile should be securely fastened (Nailed, screwed, clipped...) (60° / 203/4:12).
- B:** As a minimum, each tile in every five proportion, should be secured with (10 gauge) non-corrosive ring shank nails or screws (45° / 12:12).
- C:** Each tile hangs on the batten (held by the nib) (38° / 10:12).
- D:** Each tile hangs on the batten, held by the nib. When mortar is used, back bed and face point with color matched mortar. Clean off all excess mortar from the face of the tiles. For Foam Adhesive, refer to local building codes.
- E:** La Escandella recommended minimum slope requirements is 25% (3:12).

## VENTILATION

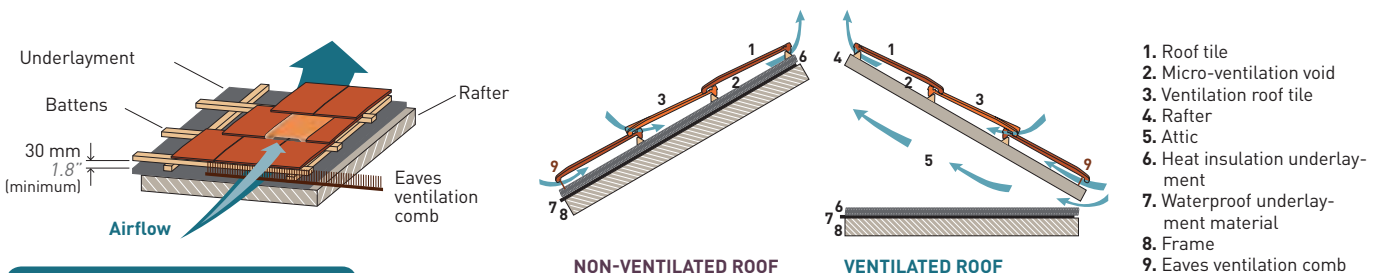
Ventilation is one of key elements to assure a good hygrothermal behavior of the roof and preservation of the roof structure. The key to a good and well preserved roof is a good ventilated roof. Proper installation of Ventilation tiles combined with ventilated roof can result in energy savings, in a more energy efficient home.

Air should be able to flow through the eave and ridge; be sure not to close these off with cement, mortar or similar. Eave and ridge areas should be protected to help minimize the access of birds and vermin infiltration.

A free flowing ventilation area must be provided through the roof deck. This ventilation should be evenly distributed throughout the roof space to eliminate any dead air space.

La Escandella recommends a minimum of 1 **Planum ventilation tile (Q86)** for every 7 m<sup>2</sup> (1.32 vent tiles per 100 sq ft.) and with a minimum of 2 ventilation tiles per roof surface, installed on the upper part of the roof.

Using a proper ventilation system is the best way to avoid moisture in a roof, that could cause peeling, cracking and other defects on the tile.



Openings at the eaves and the ridge must allow for even distribution of ventilating air below the entire roof deck.

- Note 1:** Recommended underlayment installed over the sheathing are dependant on the roof pitch and local weather conditions.
- Note 2:** Underlayment materials must be covered with tile as soon as possible to prevent degradation from exposure.

La Escandella warranty will be honored when installation is in strict accordance with local building codes, particularly to those referring to the ventilation of the deck and minimum slope requirements. Clay roof tiles should always be installed in full compliance with the local building codes and good tiling practice. For each country, please refer to local building codes.





# La Escandella

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Colour Shall be Harmonized but clay tiles are a natural product and some shade variations between individual pieces enhance their beauty and should be expected. All Tiles should be blended regardless of the number of colours supplied. Colours of the tiles shown in this catalogue can not faithfully reflect the colours of the ceramic tiles.

On their products, La Escandella has right to make changes in dimensions, fittings, weight & units per pallet, without previous notice. For more information, please contact your Sales Representative or our Customer Care Service.

This catalogue, printed in December 2013, replace the existing ones.