

# PLANA ALICANTINA

A classic roof tile profile

**The most versatile roof tile**

This was the first mechanical roof tile available on the domestic market.

At Tejas Borja, we have been producing this type of roof tile for more than three generations.

It is designed with two curved channels to allow water drainage.



## FROM TRADITION TO AVANT-GARDE IN CERAMIC ROOF TILES

A format that remains elegant and stylish over the years. These roof tiles are used at all latitudes and in the most diverse of climate conditions.





# PLANA ALICANTINA

## Technical Information

Size	430 mm x 252 mm
Minimum pitch	40% - 22° (*)
Weight	3,15 kg/unit
Units / sq. m.	12,3 tiles
Useful width	215 mm
Useful length (batten distance)	370 mm



**Approximate values:** If the roof tiles are installed on battens, the useful length must be calculated on site.  
 A tolerance of ± 2% is allowed on the dimensions of the roof tiles according to UNE - EN 1024.  
 Installation must comply with Code of practice for the design and fixing of roofs with clay roofing tiles for the region and Tejas Borja specifications.  
 (\*) Check pitch panel according to the roof length and the location.



## ADVANTAGES

1

**First pressed roof tile**  
in the market.



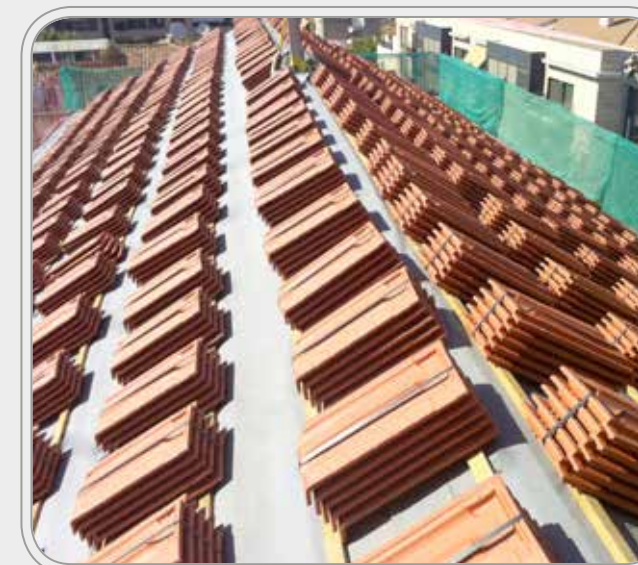
2

**Roof tile profile and colours** range that assists renovation and roofing restoration.



3

**Strapped packages.**  
Easy handling on deck.





# PLANA ALICANTINA

Colours

NATURE



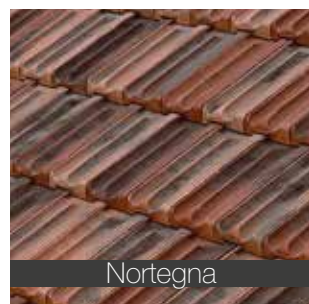
Red



Fosca



Litoral



Nortegna



Black



Plana Alicantina Litoral

RESTORATION OF CHURCH MARE  
DE DEU DEL ROSER (BARCELONA)



# PLANA ALICANTINA

## Accessories

2,50 u./lm  
3,15 Kg



Angular Ridge  
42 l 31 w 9,7 h

2,83 Kg



Angular Hip Starter  
42,2 l 29,3 w 10 h

4,37 Kg



Angular 3 Ways  
45,1 l 47,5 w 13,8 h

6,50 Kg



Angular 4 Ways  
46 l 41,5 w 16,5 h

2,65 Kg



Universal Straight  
End Cap  
8,5 l 28,5 w 12,5 h

2,50 u./lm (On monopitch)  
3,00 Kg



Universal Angular Edge  
43 l 14,5 w 14,5 h

1,25 u./lm  
1,80 Kg



Half Plana Alicantina  
Roof Tile (Left/Right)  
43 l 15 w 4,5 h

3,70 Kg



Plana Alicantina Ventilation  
43 l 25,5 w 9 h

4,00 Kg



Plana Alicantina  
Chimney Carrier  
43 l 25,5 w 12 h 15,5 D 13,5 d

2,15 Kg



130 Universal Chimney  
20,4 D 18 d 23,5 h

1,70 Kg



Universal Ventilation Cap  
24,5 D 22 d 6 h

Dimensions in cm.  
Check colours availability for accessories.

Plana Alicantina Black  
COUNTRY HOUSE (ARAGON)



## PLANA ALICANTINA

Size	430 mm x 252 mm
Weight	3,15 kg/unit
Useful length (batten distance)	370 mm
Useful width	215 mm
Lateral overlap	60 mm
Head overlap	37 mm
Units per sq. m.	12,3 tiles
Weight per sq. m.	39 Kg
Units per ml eave line	5,0 tiles
Roof Tiles per pallet	140 / 210 / 280 units
Waterproofing	Waterproof membrane
Battens per sq. m.	2,7

**Approximate values:** If the roof tiles are installed on battens, the useful length must be calculated on site. A tolerance of ± 2% is allowed on the dimensions of the roof tiles according to UNE - EN 1024.

### WHY DRY INSTALLATION?

Dry installation has significant advantages over conventional installation, as well as improving the performance of the roof during both summer and winter.

To ensure that the roof is installed correctly, air must circulate continuously in the space under the roof tiles. This micro-ventilation will allow air to enter via the eave lines and leave through the ridge lines, increasing through the use of ventilation roof tiles distributed along the roof.

During the summer this air chamber will reduce the amount of heat received by the support for the roof tile and, therefore, the heat transferred into the building, reducing air conditioning costs. In winter, indoor ventilation will prevent condensation from forming on the materials used to build up the roof (roof tiles, insulation, support, etc.), as they harm their durability. Furthermore, this condensation can affect the comfort of the building, producing moisture that is conducive to the formation of moss and bacteria that reduce the quality of the air inside.

With regards fittings, the use of mortar is not recommended due to its poor reaction with ceramics and the rigidity of joints. Roof tiles should be fixed mechanically or with adhesives made specifically for roof tiles, since these give the materials the necessary room to allow for the movements caused by expansion and changes in temperature.

### ROOF SLOPES

Each roof must be planned taking into account where it should be built and the length of the deck, in accordance with the technical standards applicable in each territory. It is for this reason that for each area and location, must take into account of the minimum slopes for installation and the roof length.

**Pitch panel according to the roof length and the location.  
(according to UNE - 136020)**

Location	Roof length up to 6.5 m	Roof length from 6.5 to 9 m	Roof length from 9 to 12 m
Protected	35% - 19,5°	40% - 22°	50% - 26,5
Normal	40% - 22°	50% - 26,5°	60% - 31°
Exposed	60% - 31°	70% - 35°	80% - 39°

Use the breathable/waterproof membrane on the support.  
A special study should be carried out for roof length more than 12m in length (ask us).

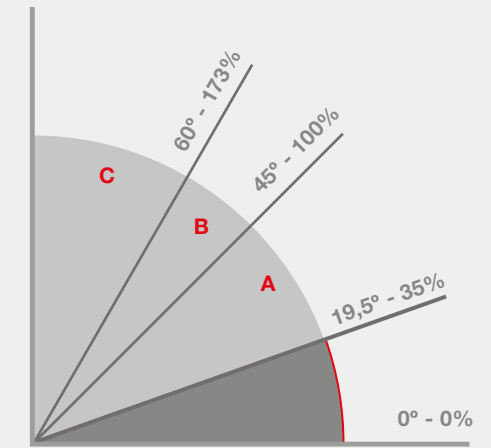
### FITTING

Roof tiles on the roof surface must be fixed to the support to a greater or lesser extent, depending on the pitch. In the case of singular points such as eave lines, edges, hip lines, valleys, joints and the ridge line, all roof tiles and accessories of these joints must be fixed to the battens.

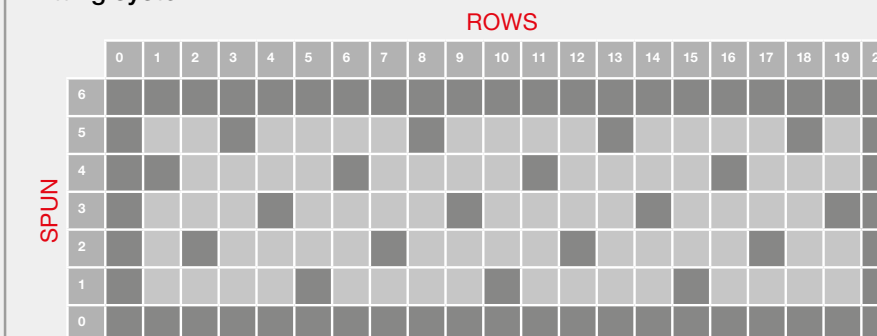
**We recommend that all roof tiles that form the perimeter of each skirt be fixed mechanically.**

Batten type:	Metallic Treated wood
Dry installation:	Self-drilling stainless screws or nails (depending on the support)

- A 35% - 100%** The roof tiles will rest on battens, since they are provided with nib support.
- B 100%-173%** All the roof tiles around the perimeter of each roof surface must be fixed and at least one in every five should be fixed in a regular manner.
- C > 173%** In areas with strong winds, exposed areas or areas with basic seismic acceleration of > 0.12g, all roof tiles should be fixed mechanically to the battens.



### Fitting system LEVEL B

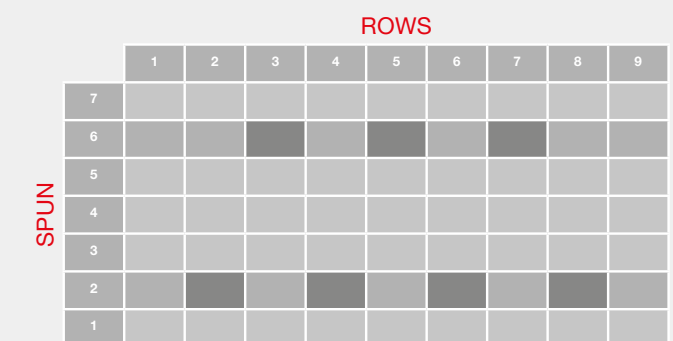


### VENTILATION

Under-tile ventilation is necessary at all times. This will guarantee the durability of the material used to build the roof with their optimal characteristics, improving the hygrothermal performance of the roof tiles against the moisture resulting from condensation.

There must be a continuous air flow between eave lines and ridge line. To this end, a space must be left between the roof tiles and the support. As a result, eave lines, ridge lines and singular points must never be filled in with mortar, as this will impede micro-ventilation.

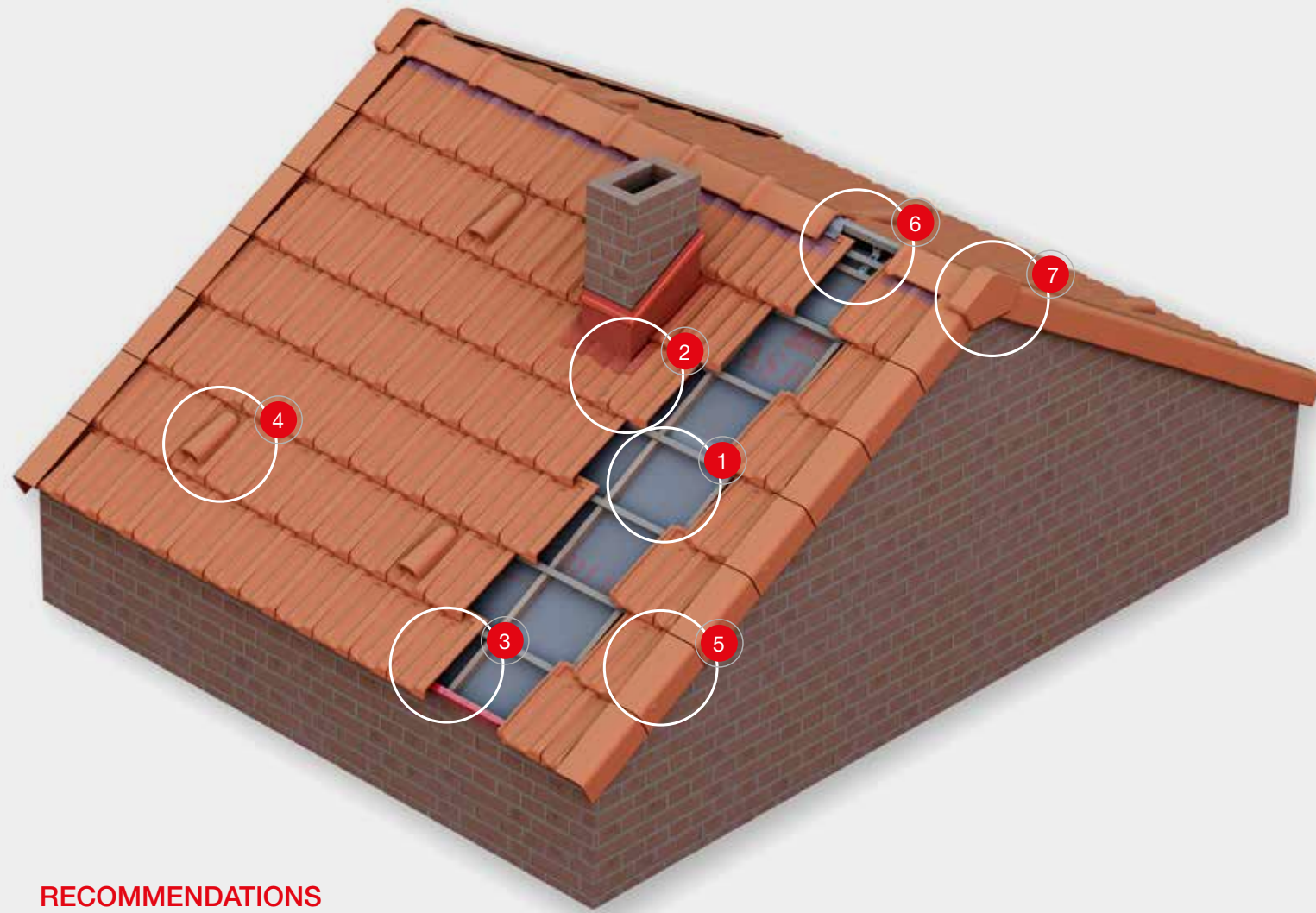
Ventilation roof tiles will also be installed in a uniform manner across the surface of the roof. In case of dry installation, it is recommended that at least 1 ventilation roof tile be used every 10 sq.m. and 4 ventilation roof tiles per the roof surface.



**Example case of distribution of ventilation roof tiles on a 7m x 9m rectangular roof surface (63 sq. m.)**

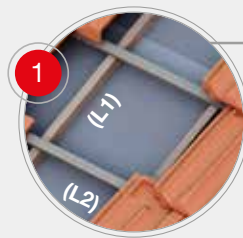
# FITTING INSTRUCTIONS PLANA ALICANTINA ROOF TILES

Always follow the Code of practice for installation of roofs with clay roofing tiles in accordance with latest regulations and those applicable in each zone of application.



## RECOMMENDATIONS

To ensure their optimal installation, Plana Alicantina Roof Tiles should be fixed to a support previously prepared with a double batten layout.



A breathable waterproof membrane should be laid on the support of the roof and the main battens (L1) should be installed every 50/70 cm, parallel to the steepest slope. The horizontal support battens (L2) for the roof tiles should be fixed to the main battens depending on the useful length of each roof tile (the useful length must be calculated on site).



Waterproof and breathing membrane



Multi-use PREMIUM

To adequately solve roof joints and chimneys, multi-use (Premium or Aluminium) waterproofing bands should be used. Once attached to the clean dry surface, they must then be finished with the Counter flashing profile, sealing the upper line with a continuous line of putty.



2



3



To prevent birds from entering the roof and allow ventilation, Eave ventilation comb should be installed.

The first batten to be installed on the eaves must be 2 cm taller than the others. To achieve this effect, a taller batten or a Eave Ventilation Comb Profile, which combines both products, can be installed in this area.

Plana Alicantina roof tiles are installed from right to left, always in staggered formation and from the eave to the ridge line. The first row of roof tiles have variable overhanging.



Bird stop grate



Eave Ventilation Comb

Ventilation roof tiles are installed in the same manner as other roof tiles, interlocking into each other laterally and from the top. These roof tiles should be distributed along the roof surface in accordance with the function and type of installation.



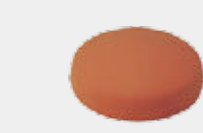
Plana Alicantina Ventilation



Plana Alicantina Chimney Carrier



130 Universal Chimney



Universal Ventilation Cap



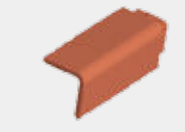
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5



Universal Angular Edges - clay accessory should be installed overlapping the roof tiles and half-tiles on the right and left sides.



Universal Angular Edge

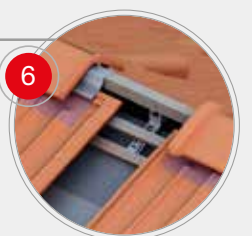


Half Plana Alicantina Roof Tile (Left - Right)



Cantilever support

The batten installed on the ridge line should be attached to the Cantilever supports. To install the battens, they must be installed to the Cantilever support at the required pitch and height so that the ridges are directly supported on the roof tiles in the last row.



6



7



The Under ridge roll tape (mixed, aluminium or Roof ridge pvc vent brush) should be placed on the ridge batten and fixed with clips or nails. The rolls have adhesive strips of butyl to attach to the profile of the roof tiles and waterproof joints. Finally, the Ridges and End Caps clay accessory should be installed with screws/nails and ridge clips.



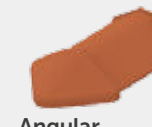
Under ridge mixed roll



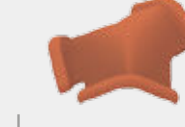
Angular ridge



Universal Angular



Angular Hip Starter



Angular 3 Ways



Angular 4 Ways