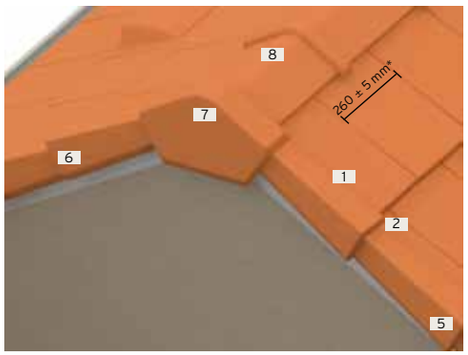
TB-Flat

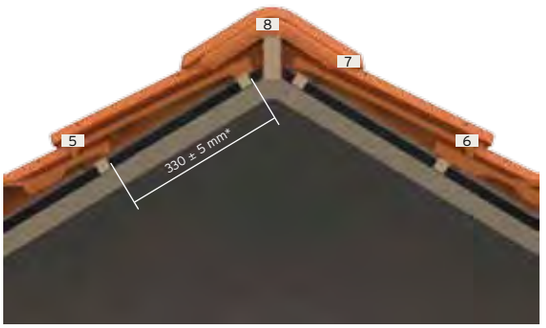
Installation details

See formats and finishing accessories in page 108

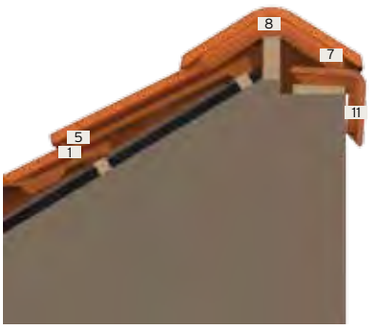
End Cap

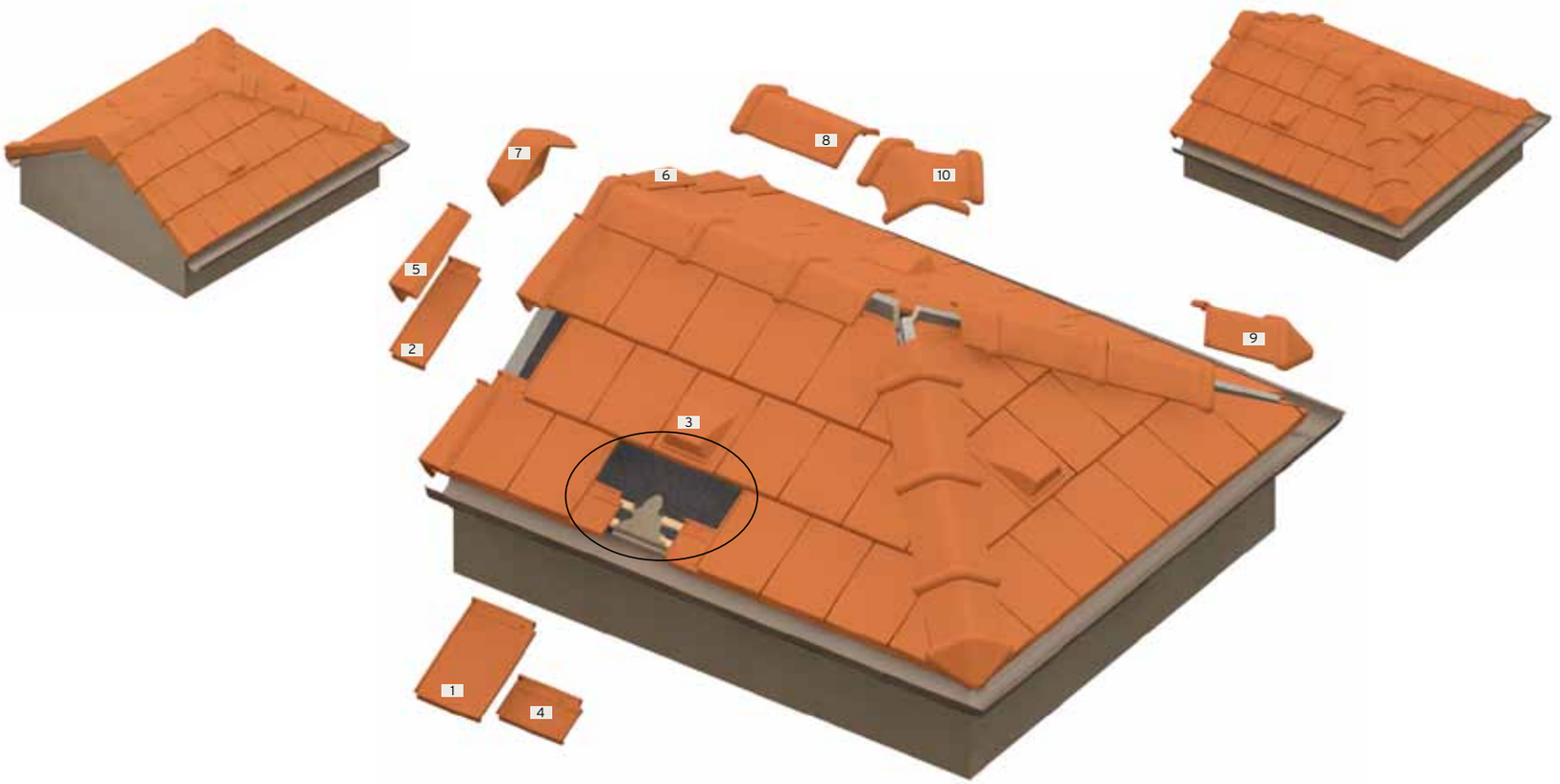


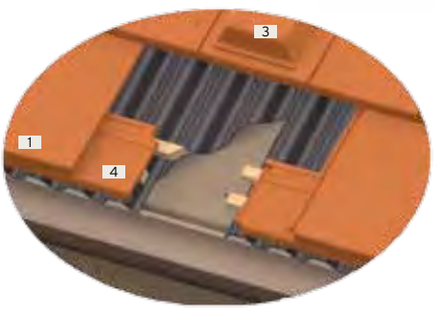
Ridge line



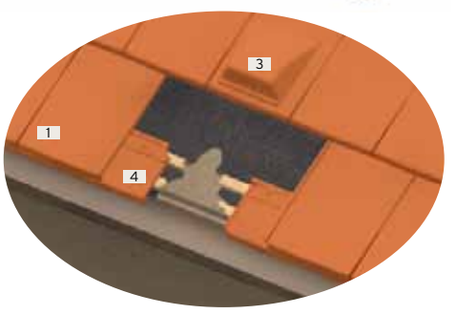
Monopitch





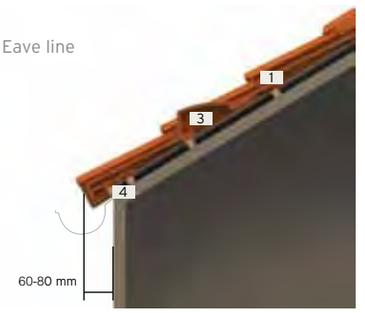


Waterproofing detail
(Asphalt board)



Waterproofing detail
(asphalt membrane)

Eave line



* It is necessary to check the useful length on site

Installation

See AutoCAD files on www.tejasborja.com

SUPPORT
This format can be placed on any type of structure, on mortar base or with wooden or metallic battens (RECOMMENDED) or continuous waterproof decking.

In any case, the deck surface has to be perfectly levelled. Special attention should be paid to inclined decks by smoothing down and levelling them with finishing mortar.

ROOF TILE INSTALLATION
The installation is similar to the Alicantina Flat roof tile. In order to achieve a proper installation, start along the eave line, from right to left, in conformity with the direction of the side fittings, so that the next roof tile fits over the one previously placed. Start this operation using the STARTER TB-FLAT ROOF TILE (4), placing the first course of roof tiles on top of it, even with the eave line. After this first line (the eaves), place the remaining tiles one on top of the other in ascending and parallel course.

Keep in mind that this format of roof tile is recommended to be installed in discontinuous joints or joined in "herringbone" fashion (in stepped course way), so that the HALF TB-FLAT ROOF TILE (2) shall be used on the left and right sides of the deck.

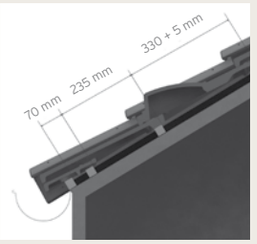
If the installation is done in continuous joints, the half roof tile will not be necessary. Once the roof tiles are placed, finish the sides of the roof surface with TB-FLAT UNIVERSAL EDGE- LEFT HOLES (5) and the TB-FLAT UNIVERSAL EGDE- RIGHT HOLES (6).

Finally, finish the ridge line with ANGULAR RIDGE (8). At the starting position of the hip line, use the ANGULAR HIP STARTER (9) and at the end of the ridge line, the TB-FLAT STRAIGHT END CAP (7). When necessary, the ANGULAR 3 WAYS (10) shall be used. In case of mono-pitch the UNIVERSAL ANGULAR EDGE (11) shall be used placing it under the ridge.

FIXING
- WITH MORTAR:
Use the minimum quantity of mortar necessary to fix the ceramic pieces, and always do so in a way that allows the correct ventilation of all of the roofing pieces*. We recommend the use of mortars (preferably waterproof) with a 1:2:10 ratio dosage; that is, for every m^3 of dry sand, use 200 kg of hydraulic lime and 100 kg of cement.

- WITH BATTENS (This is the recommended type of installation):
Battens made of wood, metal or PVC can be used. Place them perpendicular to the maximum pitch line, spacing each of them at every 2 meters to allow the ventilation through the underside part of the tiles.

First place the counter battens for the STARTER TB-FLAT ROOF TILE (4) between 8 and 10 cm. from the eave of the support; the roof tile shall hang out from 6 to 8 cm. Place the counter batten from the first course of TB-FLAT ROOF TILE in such a way that it overlaps and is even with the STARTER TB-FLAT ROOF TILE (4) and is at a distance of 23.5 cm from the first batten; in this way, you create the first course of tiles (eave line). Finally, install the rest of the tiles with a batten interval of 33 cm. + 0.5 cm – 0.5 cm. (Always verify these values during installation).



Keep in mind that in order to fix the sides, the counter battens are prepared parallel to the maximum pitch line and perpendicular to the eave line.

To fix the ceramic pieces use nails or self drilling screws made of tempered and galvanized steel and washers for fixing them with a hammer or gun, or polyurethane foam or paste specially designed to fix tiles. Finally, seal all holes*.

VENTILATION
The underside of the tiles should be appropriately ventilated to ensure the correct preservation of the roof and to avoid the formation of condensation.

Air should be allowed to enter through the eaves, which should not be sealed or closed off with mortar. The same goes for roof valleys if there are any.

A minimum of 1 TB-FLAT VENTILATION ROOF TILE (3) for every 5 m^2 should be placed when using continuous structure (attaching with mortar), and 1 tile for every 10 m^2 when using discontinuous structure (attaching with battens) and with a minimum of 4 ventilation tiles per roof surface, two on the low side and one on the high side.

Air should be able to pass through the ridge line and hip line; be sure not to close these off with mortar, use VENTILATED ENCLOSURES FOR RIDGE.

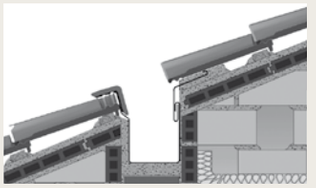
To prevent the obstruction of air flow throughout the entire roof, use the minimum amount of mortar to fix the ceramic pieces (attaching with mortar), or interrupt the placement of the laths at two meter intervals (dry fixing) ensuring so the minimum air flow under tile of 30 mm

See more information in page 176.

PITCH
Because of its flat and decorative design, the TB-Flat roof tile is recommended on pitches greater than 60% so that the differentiating aesthetic value of the roof is not lost.

VERY IMPORTANT:
TB-Flat roof tile is a product especially designed to decorate roofs. It will be necessary to waterproof the entire surface for all pitches. Its design implies that TB-Flat surface is no uniformly flat. Each tile can vary up to 8 mm along the horizontal plane (according to UNE standard 1304), so we recommend combining the contents of each pallet to obtain a uniform roof appearance.

LONG ROOF SURFACES
For roof lengths greater than 12 m, an intermediary gutter shall be used. Always waterproof the entire roof*.



MAINTENANCE
For a full conservation of the roof we recommend a regular inspection of it, removing moss, lichen, plants or any strange body that impedes the proper functioning of the roof.

TEJAS BORJAS´ products are in agreement with the EU regulations, conforming to our certificates and documentation published in our catalogue and our website.
The method of roof tile placement is the responsibility of the installer. It should follow TEJAS BORJA´s technical specifications.

* According to TEJAS BORJA´s specifications