Trade model

TB-4 Quattro®

Characteristics*

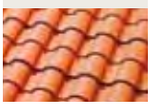
Length: 44,2 cm. / 17,40 “
Width: 25,8 cm. / 10,16 “
Weight: 3,4 kg. / 7,56 lb.
Units/m²: 12,4 uds. / uts./sq.ft.: 1,152
Useful length: 37 cm. / 14,57 “

Visual effect of 50 roof tiles /m²
Type: double lateral overlapping and double longitudinal overlapping.
Free lateral overlapping: placing at different angles and round areas.

*Average values: if the installation is with battens, it is necessary to check the useful length

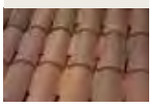
nature

RED



VILATERRA®

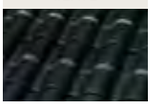
FOSCA



BORJA decor

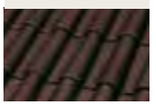
TAMIZADOS

SLATE



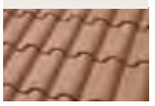
GREY

BROWN



TERRACOTTA

CREAM



GREEN

BLUE

GLAZED

COGNAC

GREEN

COBALT BLUE

ELECTRIC BLUE

ALICANTE BLUE

SKY BLUE

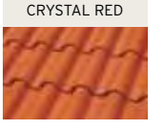
CARMIN

IVORY

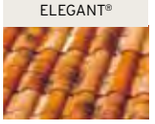
WHITE

CRYSTAL

CRYSTAL RED



ELEGANT®



METALLIC

COPPER

LEAD

INSPIRATION

OCRE

INDIGO

LIENZO DE MAR

MEDITERRANEO

IRISADOS

IRISADO COGNAC

IRISADO GREEN

IRISADO BLUE

See page 146 for installation details

Formats and finishing accessories

One half TB-4® roof tile

Dimensions as average values:

25 (L) / 26 (w) / 6 (H)
5 (Lm units)

One half TB-4® cover Decocurva® roof tile

25 (L) / 16 (w) / 5,5 (H)
5 (Lm units)

TB-4® eave closure

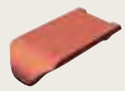
19 (L) / 10 (w) / 7,7 (H)
5 (Lm units)

Half TB-4® roof tile / TB-4® cover Decocurva® roof tile

44 (L) / 15,5 (w) / 6 (H)
5 (Lm units)

TB-4® pan Decocurva® roof tile

46 (L) / 16 (w) / 6 (H)
5 (Lm units)



Universal Under Ridge

24 (L) / 12,2 (w) / 5,6 (H)
5 (Lm units) on monopitch

TB-4® Curved Edges left - right

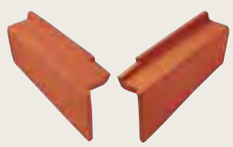
43 (L) / 13,5 (w) / 14 (H)
2,5 (Lm units)

Universal Cover + Curved End Cap

15 (L) / 26 (w) / 26 (H)

Universal Circular Curved End Cap

17,5 (L) / 26,7 (w) / 26,5 (H)



Universal Straight Edges left - right

47 (L) / 9 (w) / 17 (H)
2,5 (Lm units)

Universal Circular Straight End Cap

7,5 (L) / 24,7 (w) / 27,9 (H)

Universal Cover + Straight End Cap

6,5 (L) / 27 (w) / 31 (H)

Universal Angular Edge

43 (L) / 14,5 (w) / 14,5 (H)
2,5 (Lm units)

TB-4® Ventilation roof tile

43,5 (L) / 26 (w) / 10 (H)

TB-4® Chimney Carrier

43,5 (L) / 26 (w) / 18 (H)
18 (∅ ext.) / 16 (∅ int.)

130 Universal Chimney

20,4 (∅ ext.) / 18 (∅ int.) / 23,5 (H)

Universal Ventilation Cap

24,5 (∅ ext.) / 22 (∅ int.) / 6 (H)

Conversion table:

1 cm. = 0,3937"
1 Kg. = 2,22 lb.

(L) Length in cm.
(w) Width in cm.
(H) Height in cm.
(∅ ext.) Exterior diameter
(∅ int.) Interior diameter
(Lm units) Units by linear meter

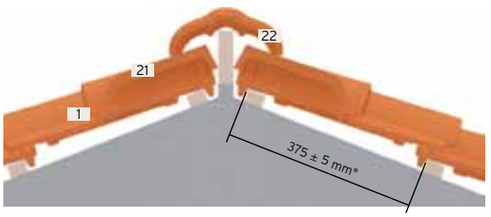
Check finishing colours availability for accessories at www.tejasborja.com or by telephone at (+34) 902 200 909

TB-4 Quattro®

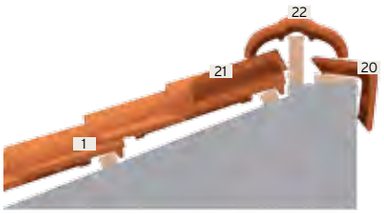
Installation details

See formats and finishing accessories in page 110

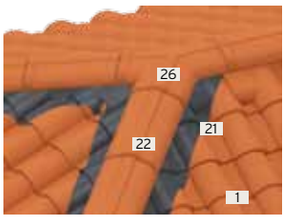
Ridge line



Monopitch



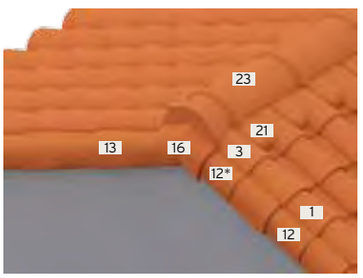
3-Ways

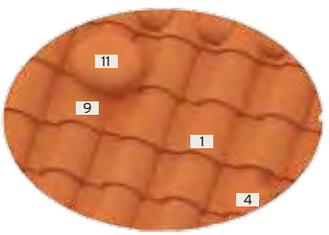


Hip line ventilation

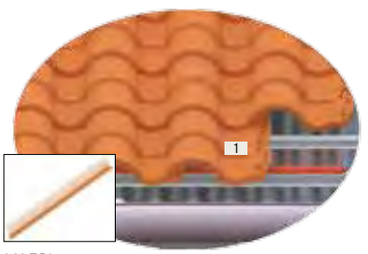
LH 517 section

TB-4® curved edges and Universal cover + curved end cap





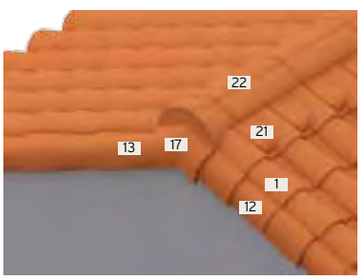
Ventilation cap option (Diagram B)

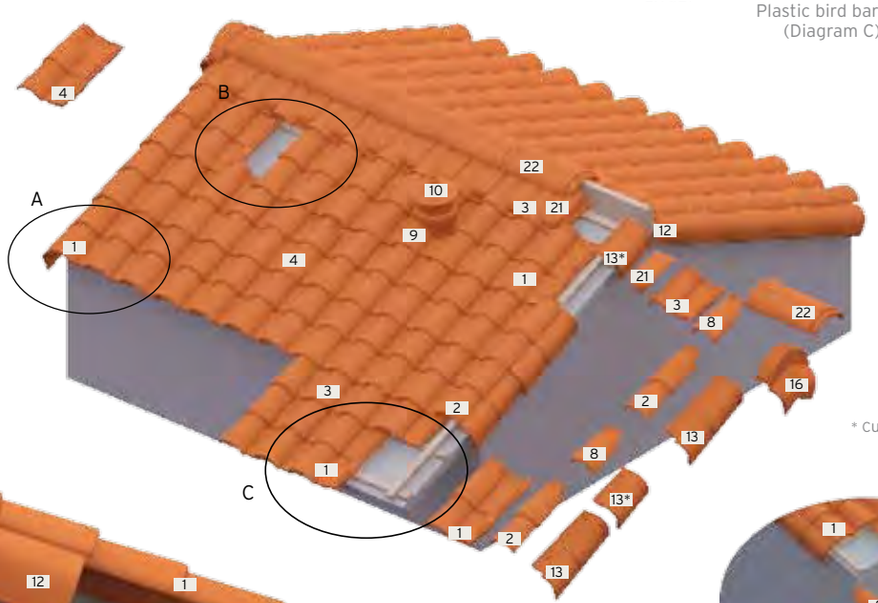


LH 521

Plastic bird barrier (Diagram C)

TB-4® curved edges and Universal circular curved end cap

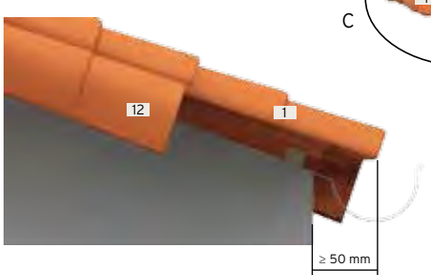


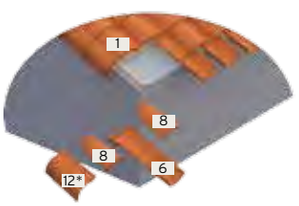


* cut on site

Universal straight edges and Universal cover + straight end cap

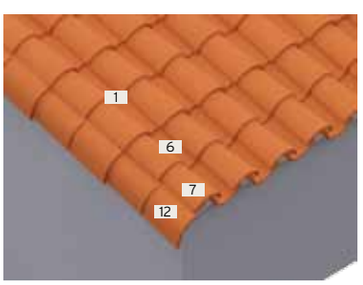
Eave line



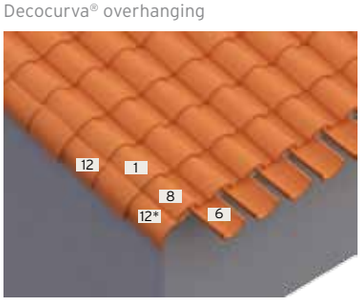


Decocurva® option (Diagram A)

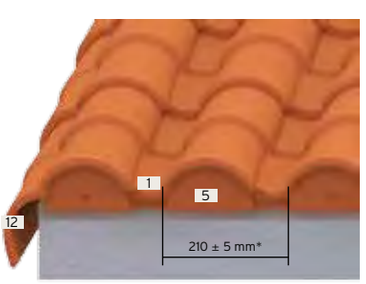
Eave line

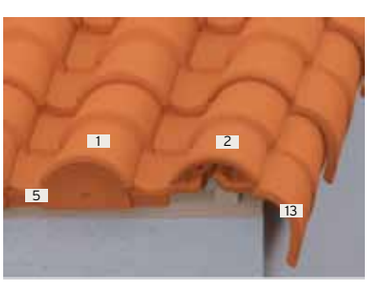


Eave line with TB-4® Pan Decocurva® overhanging



Eave line with TB-4® eave closure





It is necessary to check the useful length on site, as per valid standards

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, metallic or PVC 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
Start mounting the roof tiles at the left bottom corner of the deck. First the LEFT EDGE (12 or 14) is placed and then all the tiles of the eave line; to guide the placing use a set square, and draw perpendiculars from the ridge line. Then the tiles are placed from bottom to top and from left to right, checking that the roof tiles are correctly aligned. End in the right side with the RIGHT EDGE (13 or 14) and the HALF TB-4® ROOF TILE (2). The use of the HALF TB-4® ROOF TILE (2) enables us to avoid the need of the longitudinal cut of the roof tile. When the dimensions of the deck require it, the ONE HALF TB-4® ROOF TILE (3) shall be used.

The EDGES protect the side wall plaster from dampness, providing the vertexes of the deck with an efficient protection, as well as giving a more aesthetic finishing.

The ridge line and hip line must be completed with RIDGES, RIDGES ACCESSORIES (22 or 23 or see page nº 128 for accessories) and UNIVERSAL UNDER RIDGE (21), in order to guarantee better covering and better aesthetic finishing. At the end of the ridge line, the END CAP (16, 17 or 19) is placed and, SENSE CHANGEMENT, 3 WAYS (26) or 4 WAYS pieces are used, when needed. At the starting position of the hip line, the HIP STARTER (25) is placed. In case of monopitch the UNIVERSAL ANGULAR EDGE (11) shall be used placing it under the ridge.

When the eave line is solved with DECOCURVA® pieces, these have to be placed according to the specific constructive details for TB-4 Quattro® roof tile, or in general, according to the recommendations from Installation guide, page 174.

FIXING
- WITH BATTENS (This is the recommended type of installation):
Wood, metal or PVC battens can be used. Place them perpendicular to the maximum pitch line, spacing each piece every 2 meters to allow the ventilation through the underside part of the tiles, ensuring a minimum air passing thru of 30 mm.

Keep in mind that in order to fix of the edges, the counter battens are prepared, parallel with the maximum pitches 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*.

- 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.

VENTILATION
The underside part of the tiles must be suitably ventilated to guarantee the adequate conservation of the roof, to prevent the formation of condensations and to prevent the ceramic pieces getting to the degree of saturation, issues that cause serious problems, especially in climatic zones with a high risk of frosts, throughout time.

Always provide an air entrance, an under tile air flow for the entire surface and en air exit on the highest past of the roof, usually to the ridge line and hip line (on each face of the deck).

The air entrance is done on the eave line, without closing it off with mortar, using the plastic bird barrier or the TB-4® EAVE CLOSURE (5). The same goes for the valleys, if there are any.

The air flow over the entire roof face it's obtained placing 1 TB-4® VENTILATION ROOF TILE for every 5 m^2, for a continuous deck (fixing with mortar) and 1 tile for every 10 m^2 for discontinuous deck (fixing with battens). Minimum 4 ventilation tiles are needed, two in the lower part of the roof and two in the upper part.

The air exit through the ridge line and hip line; be sure not to close these off with mortar, while placing RIDGES (22 or 23) (see page 128 for accessories) and under ridges (21). Use VENTILATED ENCLOSURES FOR RIDGE LINE.

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
Depending of the length of the deck and the geographical area or the place where it is situated (depending or wind, rain, altitude, nearness to the sea, etc.)

PITCH PANNEL (according to the roof length and geographical area)

	up to 6,5m.	from 6,5 to 9.5m.	from 9,5 to 12m.
Protected place	30%	33%	35%
Normal place	33%	36%	40%
Exposed place	40%	43%	50%

Check with us for roofs longer than 12m.

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

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