

PREMIUM roof tiles



TEJAS BORJA
Since 1899





> Klinker



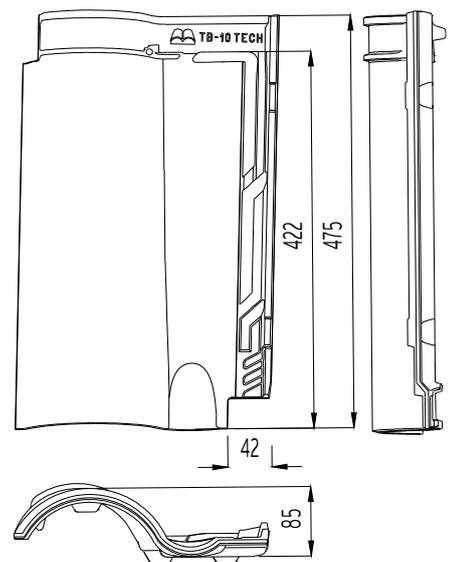
Easy to install



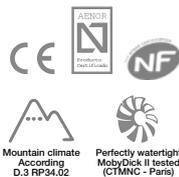
Mountain climate



Longitudinal Overlap 20 mm



Dimensions	475 mm x 282 mm
Minimum pitch recommended	30% - 17° (*)
Weight	3,45 Kg./Unit
Units / sq. m.	10,4 Units
Units per LM eave line	4,25-4,54 Units
Useful width	235-220 mm
Useful length (Batten distance) VARIABLE	390-410 mm
Pallet data	
T7 - Standard	(T7) 210 Units / 720 Kg.
T8 - Exclusive container	(T8) 140 Units / 480 Kg.
Minimum order	5 Units**



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 EN 1024.

The certified characteristics for the **NF** Terracotta tiles are: Structural faults, the geometric characteristics, resistance to flexural strength, impermeability, frost resistance for all products made with red clay. AFNOR Certification / 11 rue Francis de Pressensé / 93571 LA PLAINE / SAINT-DENIS CEDEX / www.marque-nf.com

Type: Double lateral overlapping and double longitudinal overlapping. 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 geographical area.

☰ NATURE



Red



Moss Red



Fosca



Manoir®



Edetania®



Lamalou®

☰ PLAIN COLOUR



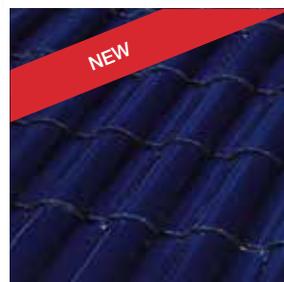
Chocolate



Graphite



Glazed Green



Glazed Cobalt Blue



Glazed Mocca

☰ CENTENARIA®



Ground



Sand



Entrepins



Irati

NOTES:
TB-10 Tech Centenaria® finishes are models without texture. Finishes for the TB-10 Tech roof tile are produced only one side.

ACCESSORIES

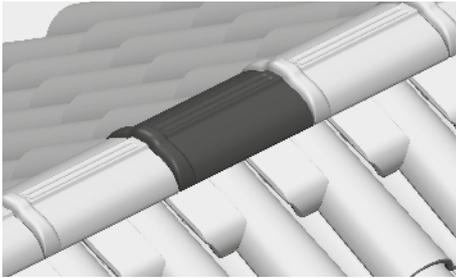
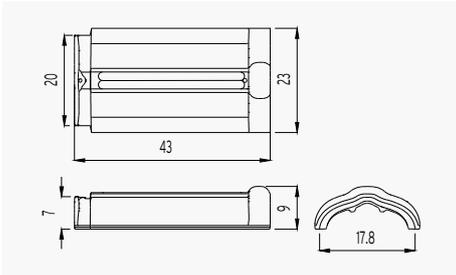
S-INTERLOCKING ROOF TILES

 <p>1</p>	 <p>2</p>	 <p>3</p>	 <p>4</p>	 <p>5</p>
<p>Circular Ridge 43 x 23 x 9 cm. 2,5 Units/ml / 2,90 Kg. Max. Slope. 47%-25.10°</p>	<p>Circular Hip Starter 43 x 20 x 8,5 cm. 2,95 Kg.</p>	<p>Circular 3 Ways 37,5 x 23 x 9,5 cm. 4,20 Kg.</p>	<p>Circular 4 Ways 38,5 x 44,5 x 13,5 cm. 4,50 Kg.</p>	<p>Circular Straight End Cap 7,5 x 24,5 x 27,9 cm. 2,40 Kg.</p>
 <p>6</p>	 <p>7</p>	 <p>8</p>	 <p>9</p>	 <p>10</p>
<p>Circular Curved End Cap 17,5 x 26,7 x 27 cm. 2,80 Kg.</p>	<p>Cover+ Ridge 44 x 28,5 x 10,5 cm. 2,5 Units/ml / 3,40 Kg. Max. Slope. 47%-25.10°</p>	<p>Cover+ Hip Starter 43,5 x 23 x 8,5 cm. 3,20 Kg.</p>	<p>Cover+ 3 Ways 32,5 x 42,5 x 14,5 cm. 3,10 Kg.</p>	<p>Cover+ 4 Ways 40,5 x 40,5 x 14 cm. 4,00 Kg.</p>
 <p>11</p>	 <p>12</p>	 <p>13</p>	 <p>14</p>	 <p>15</p>
<p>Cover+ Straight End Cap 6,5 x 27 x 31 cm. 2,00 Kg.</p>	<p>Cover+ Curved End Cap 14,7 x 27,5 x 29,5 cm. 2,25 Kg.</p>	<p>Under Ridge 24 x 12,2 x 5,6 cm. 5 Units/ml (on monopitch) 0,80 Kg.</p>	<p>Straight Edge Left 47 x 9 x 17 cm. 2,5 Units/ml 3,00 Kg.</p>	<p>Straight Edge Right 47 x 9 x 17 cm. 2,5 Units/ml 3,00 Kg.</p>
 <p>16</p>	 <p>17</p>	 <p>18</p>	 <p>19</p>	 <p>20</p>
<p>Curved Edge Left 47 x 24,5 x 16 cm. 2,5 Units/ml / 3,30 Kg.</p>	<p>Curved Edge Right 47 x 24,5 x 16 cm. 2,5 Units/ml / 3,30 Kg.</p>	<p>Universal Angular Edge (on monopitch) 43 x 14,5 x 14,5 cm. 2,5 Units/ml / 2,85 Kg.</p>	<p>Chimney d.140 22,5 Øext-20 Øint x 23,5 cm. 2,35 Kg.</p>	<p>Ventilation Cap 24,5 Øext-22 Øint x 6 cm. 1,70 Kg.</p>
 <p>21</p>	 <p>22</p>	 <p>23</p>	 <p>24</p>	
<p>Half TB-10 Tech 47,5 x 18 x 7,5 cm. 2,10 Kg.</p>	<p>Tile and a Half TB-10 Tech 47,5 x 40 x 7,5 cm. 5,40 Kg.</p>	<p>Ventilation TB-10 Tech 47,4 x 28,2 x 7,5 cm. 3,6 Kg.</p>	<p>Chimney Carrier TB-10 Tech 47,5 x 28,2 x 18 cm. 20 Øext-14 Øint / 4,6 Kg.</p>	

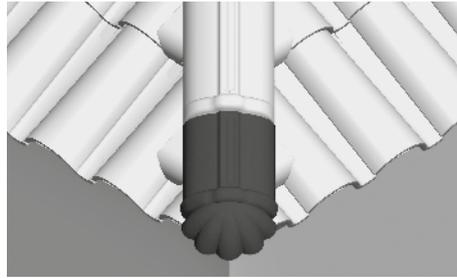
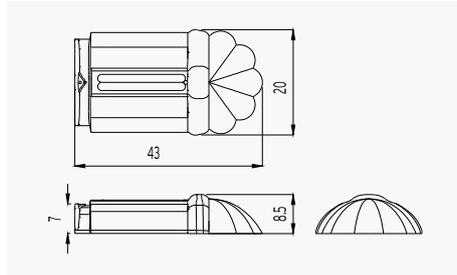
A tolerance of $\pm 2\%$ is allowed on the dimensions according to EN 1024. Dimensions in centimeters. Check finishing colours for different accessories. Accessories are subject to minimum order and must be multiples thereof. Accessories for ridge line and edges available in Centenaria Entrepins and Centenaria Irati finishes are available in compatible colours, not digital.

ACCESSORIES

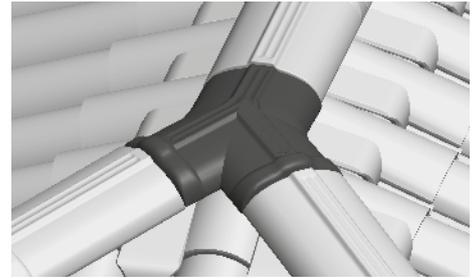
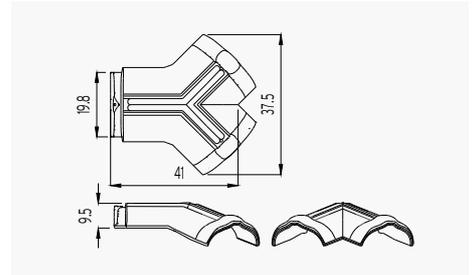
1 Circular Ridge



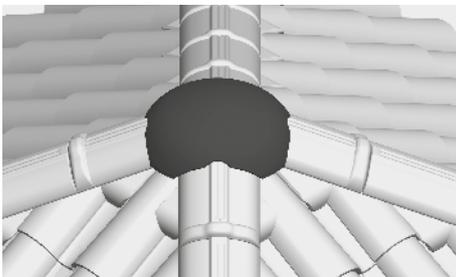
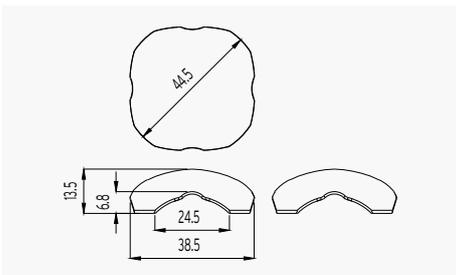
2 Circular Hip Starter



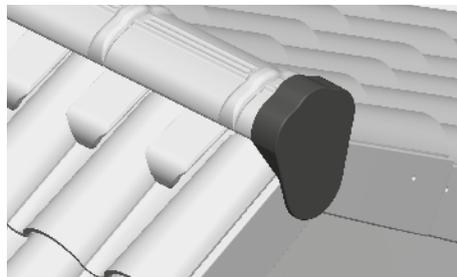
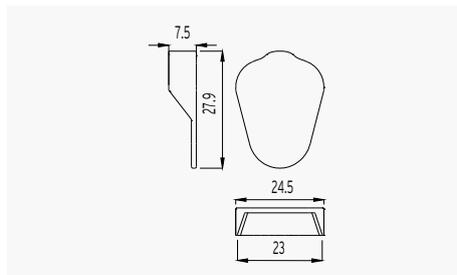
3 Circular 3 Ways



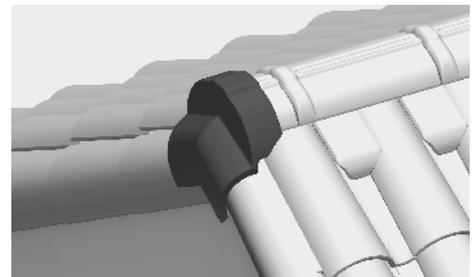
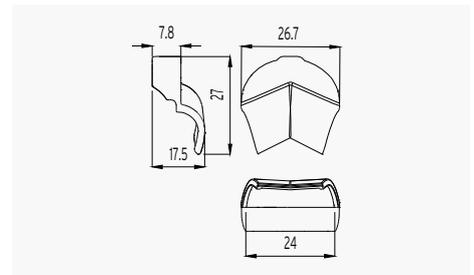
4 Circular 4 Ways



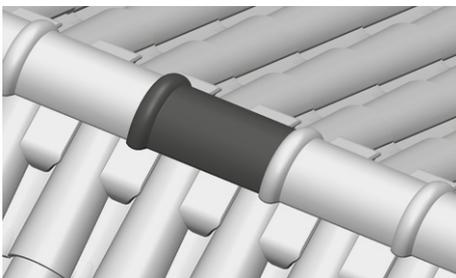
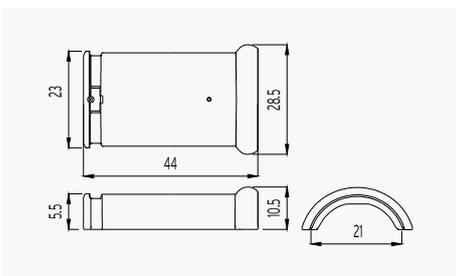
5 Circular Straight End Cap



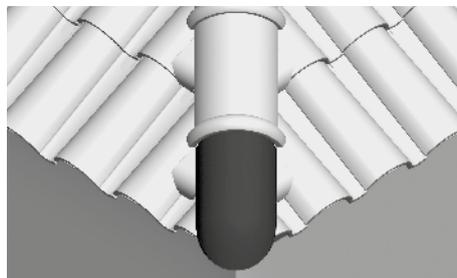
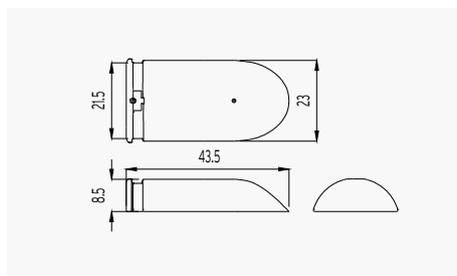
6 Circular Curved End Cap



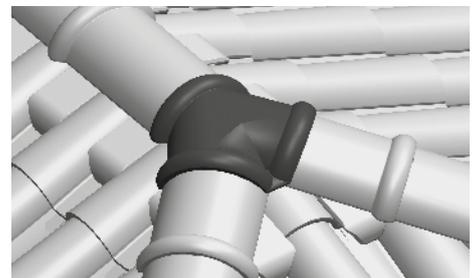
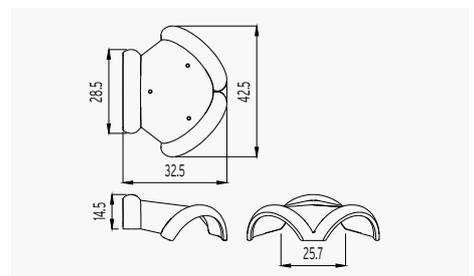
7 Cover+ Ridge



8 Cover+ Hip Starter

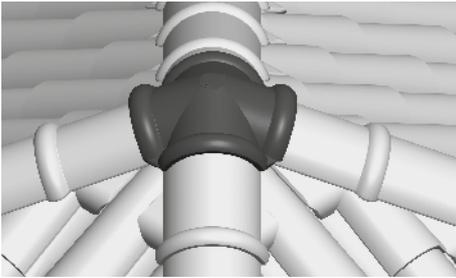
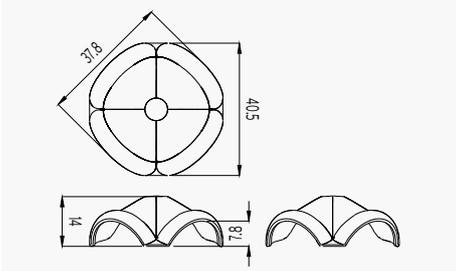


9 Cover+ 3 Ways

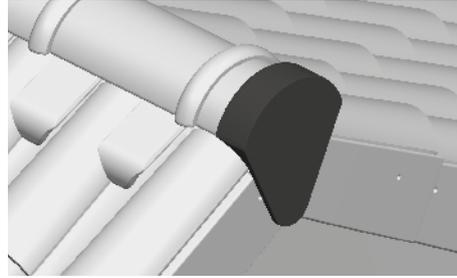
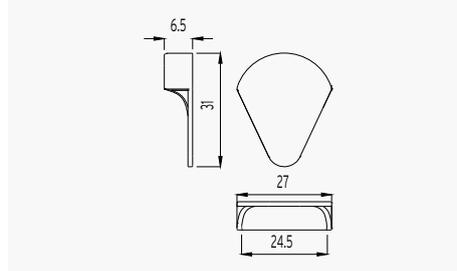


ACCESSORIES

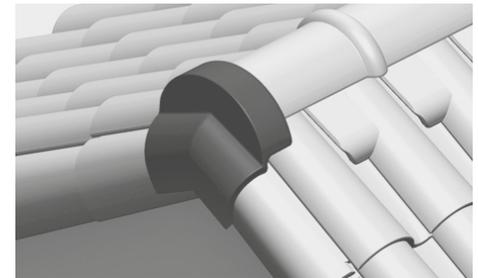
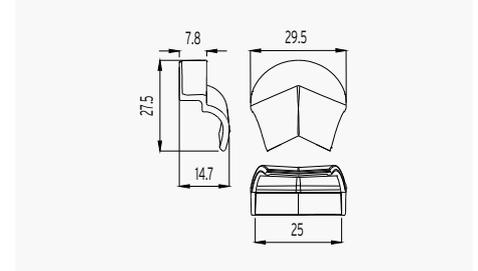
10 Cover+ 4 Ways



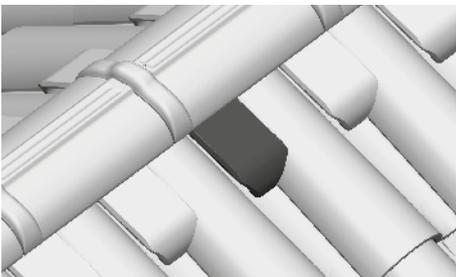
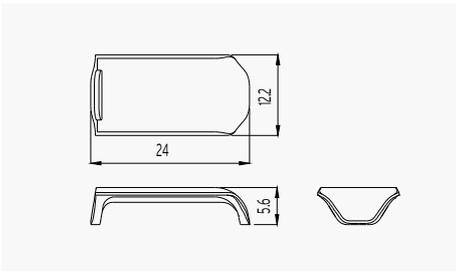
11 Cover+ Straight End Cap



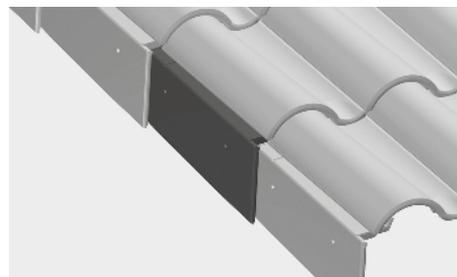
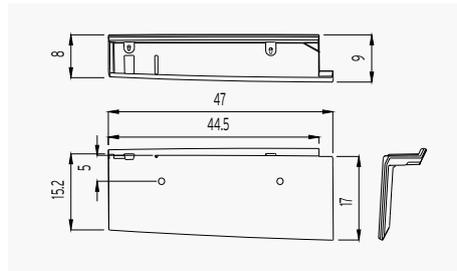
12 Cover+ Curved End Cap



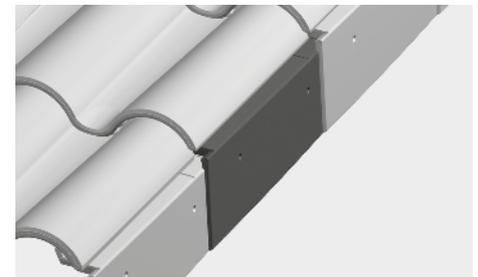
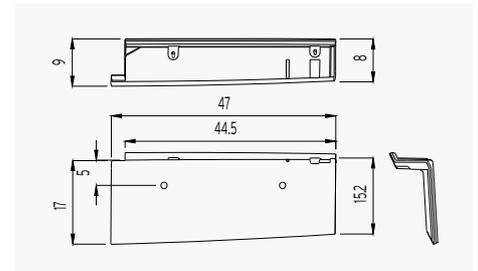
13 Under Ridge



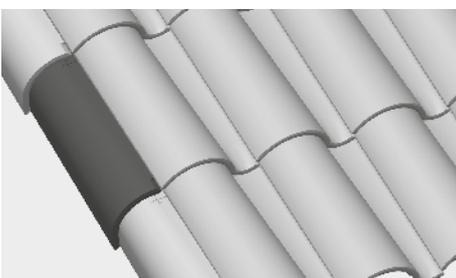
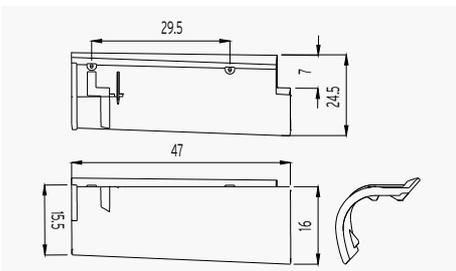
14 Straight Edge Left



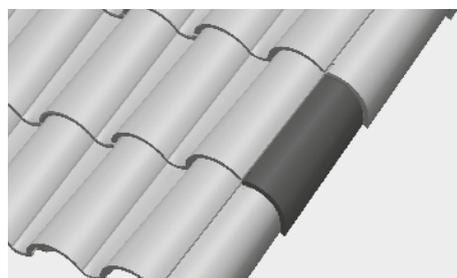
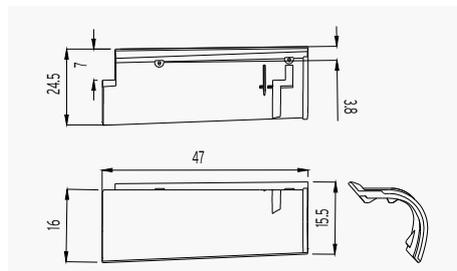
15 Straight Edge Right



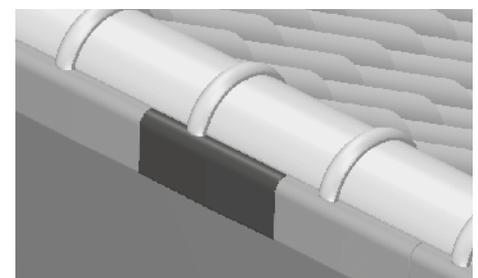
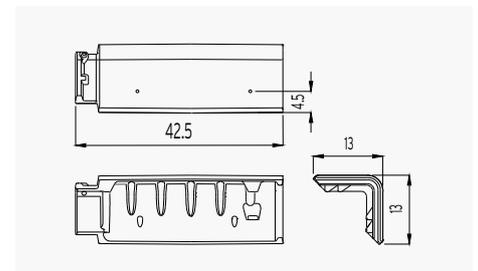
16 Curved Edge Left



17 Curved Edge Right

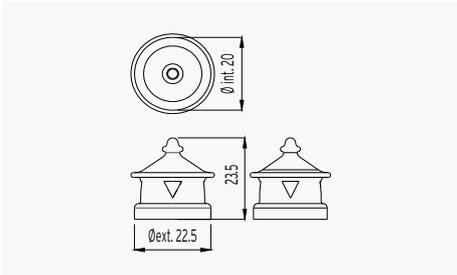


18 Universal Angular Edge (on monopitch)

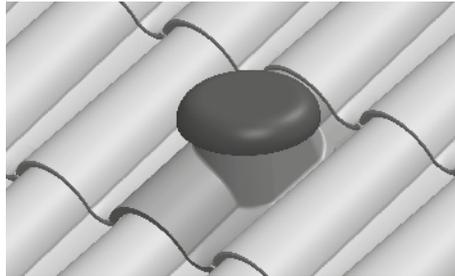
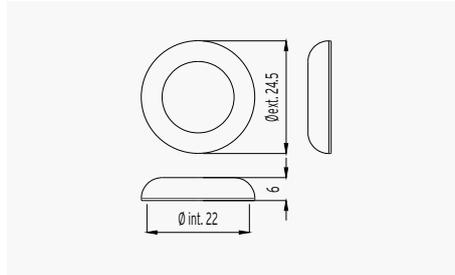


ACCESSORIES

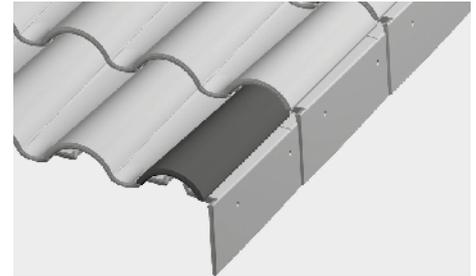
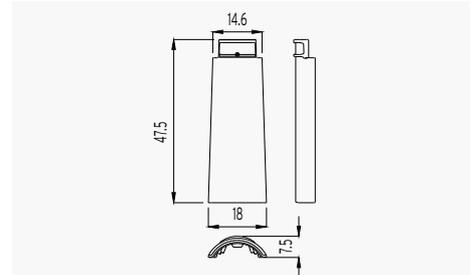
19 Chimney d.140



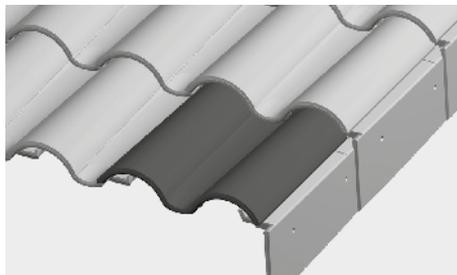
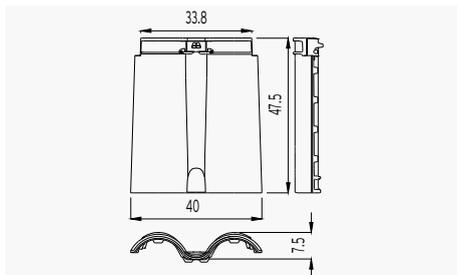
20 Ventilation Cap



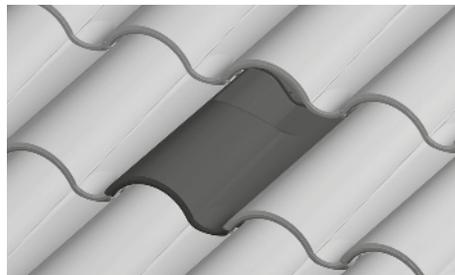
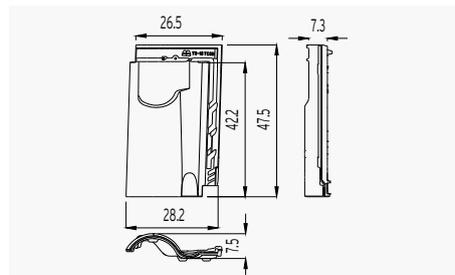
21 Half TB-10 Tech



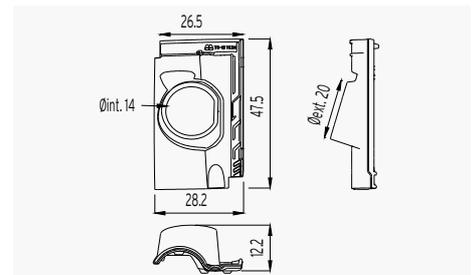
22 Tile and a Half TB-10 Tech



23 Ventilation TB-10 Tech



24 Chimney Carrier TB-10 Tech



S-INTERLOCKING ROOF TILES INSTALLATION

ROOF SLOPES

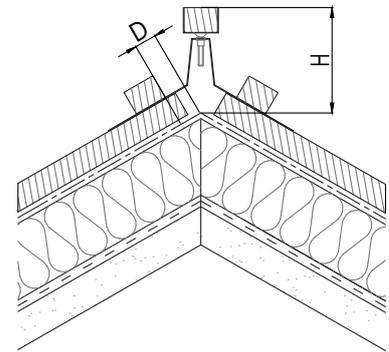
Pitch panel according to the roof length and the location.
(according to UNE - 136020)

	Location	Roof length up to 6.5 m	Roof length from 6.5 to 9 m	Roof length from 9 to 12 m
Zone 1	Protected	25% - 14°	26% - 15°	27% - 15,5°
	Normal	25% - 14°	28% - 16°	32% - 18°
	Exposed	33% - 18,5°	35% - 19,5°	42% - 23°
Zone 2	Protected	25% - 14°	28% - 16°	30% - 17°
	Normal	27% - 15,5°	32% - 18°	35% - 19,5°
	Exposed	37% - 20,5°	39% - 21,5°	45% - 24,5°
Zone 2	Protected	27% - 15,5°	30% - 17°	35% - 19,5°
	Normal	30% - 17°	36% - 20°	40% - 22°
	Exposed	40% - 22°	43% - 23,5°	50% - 26,5°

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.

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).

	TB-10 Tech Cover + Ridge		TB-10 Tech Circular Ridge	
°	20°	30°	20°	30°
D (mm)	58 mm	40 mm	42 mm	23 mm
H (mm)	100 mm	95 mm	85 mm	70 mm



D - Distance between the last batten and ridge line; H - Height of ridge batten; ° - Pitch
The technical drawing is an example of construction. The roof tiles must be overlapped approx. 7-9 cm with the ridge."

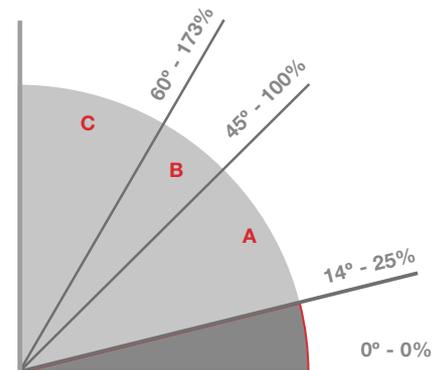
FITTING

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:	Screws, nails and clips (depending on the support)
	Roof tiles adhesives

- A** 25% - 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.



Less than 25% - Total waterproof of the entire roof surface is required for any pitch.

Installation must comply with the technical standards applicable in each territory Code of practice for design and fixing of roofs with clay roofing tiles and Tejas Borja specifications.

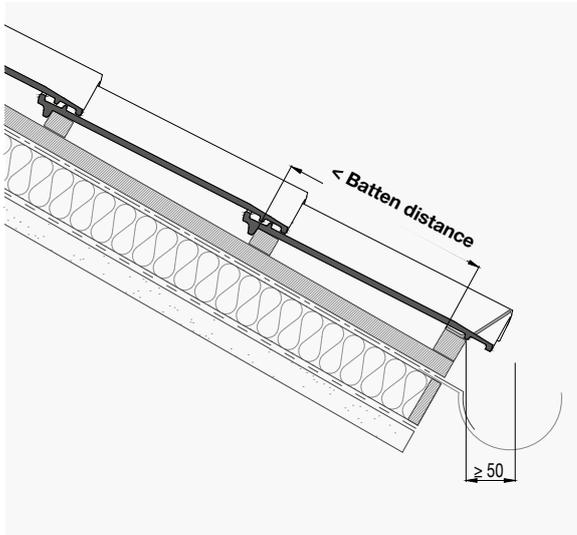
VENTILATION

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.

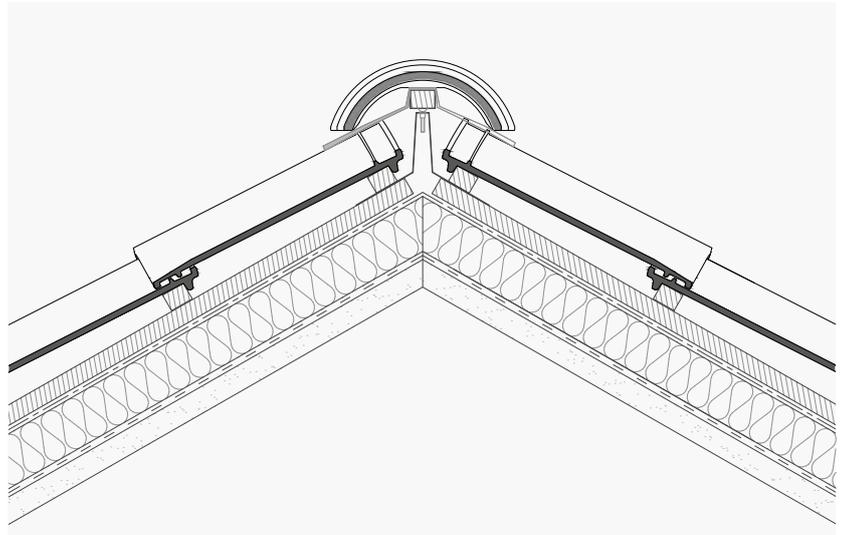
There must be a continuous air flow between eave lines and ridge line. Therefore, a space must be left between the roof tiles and the support. As a result, eave lines, ridge lines and singular points must never be filled in with mortar, as this will impede micro-ventilation.

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 each roof skirt.

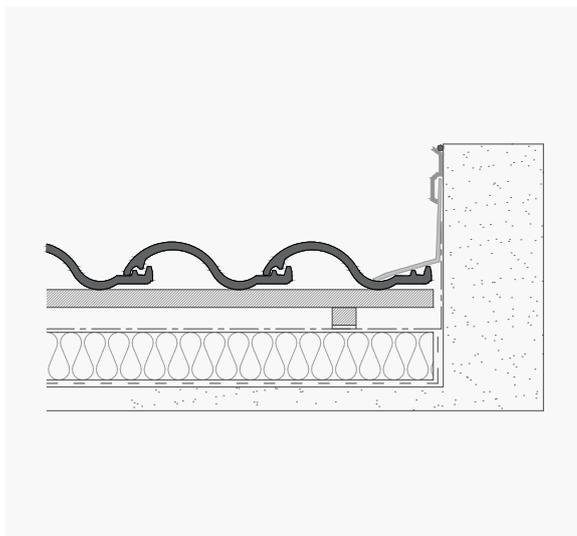
EAVE LINE



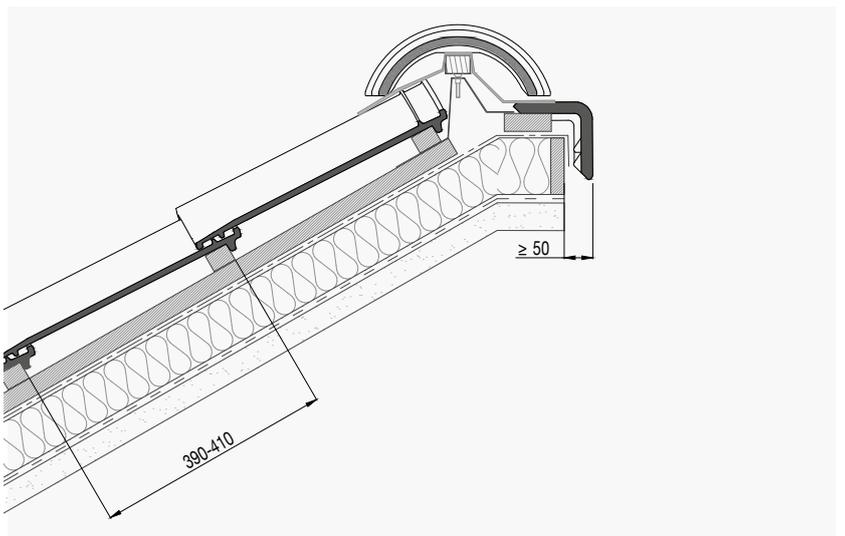
RIDGE LINE



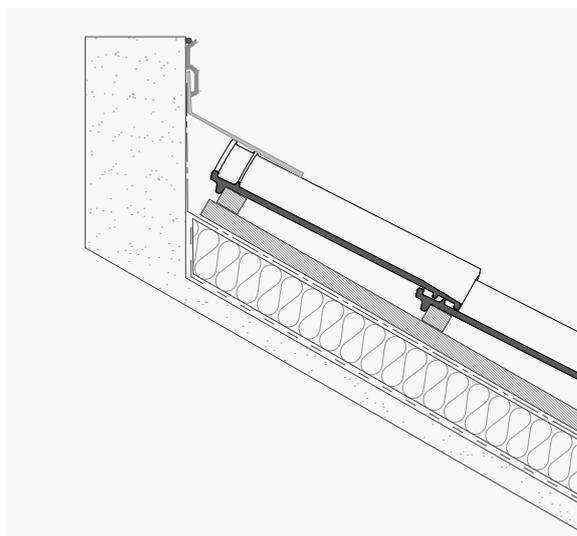
HORIZONTAL FLASHING



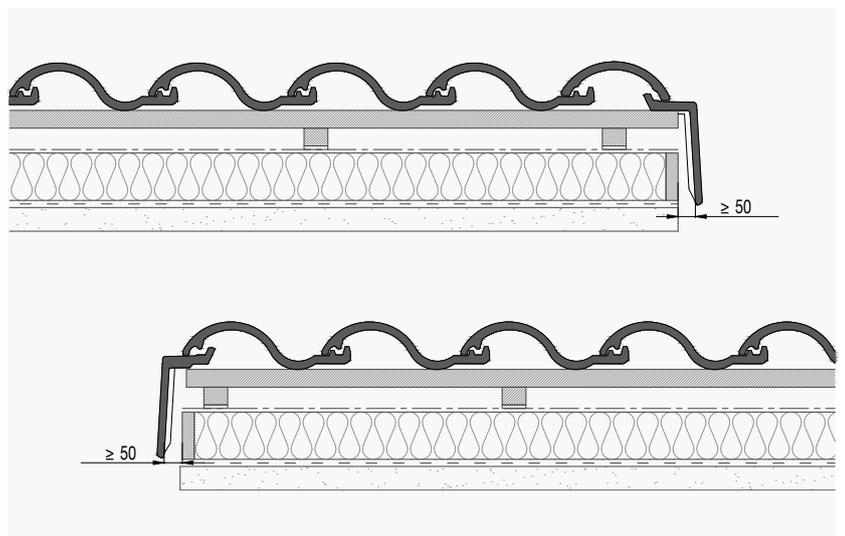
MONOPITCH



UPPER FLASHING



GABLES



ROOF COMPONENTS

WATERPROOFING OF ENCOUNTERS



Multi-Use Premium 300/450
(waterproofing flashing)



Multi-Use Alu 300
(waterproofing flashing)



Counter Flashing
Profile



Valley Adjustable
Alu Flashing



Auto-adhesive
Butyl Band 300



BATTENS



Metall-Lattung Batten
30x30



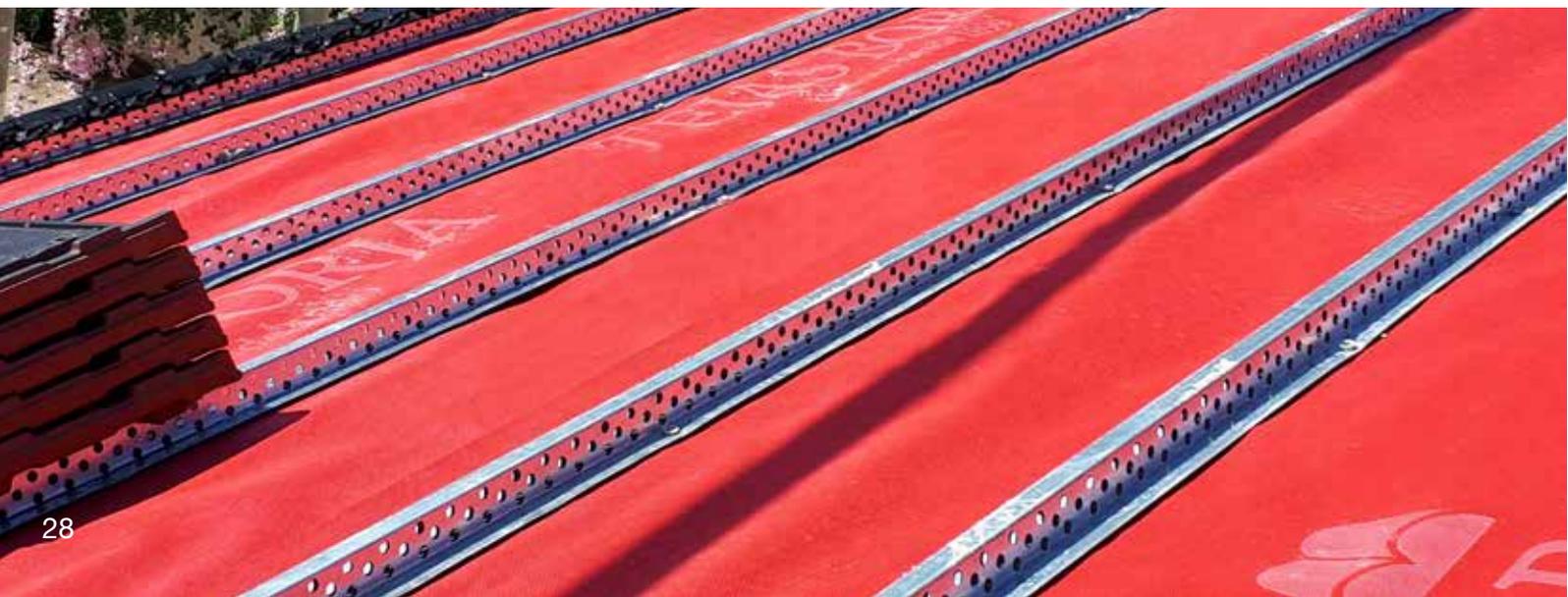
Ventilated Batten
30x20



Treated Wooden
Batten 40x30



PVC Batten 30x20
(bitumen sheet)



ROOF COMPONENTS

WATERPROOF AND BREATHING



Waterproof and Breathing Membrane 180 Premium



Waterproof and Breathing Membrane TB 160



Waterproof and Breathing Membrane TB 130



Vapour Barrier 100 (installation under insulation)



Bitumenous Waterproof Membrane ALU (low pitch)



Nail Sealing Tape



Roofing Adhesive Tape 50 mm

ROOF SHEETS



Fiber Cement Sheet 234 Reinforced (For curved roof tiles 45 and 50 cm)



Corrugated Bitumen Sheet for Tiles with Battens (INTERLOCKING Roof Tiles)



Corrugated Bitumen Sheet 235 (For curved roof tiles 45 and 50)

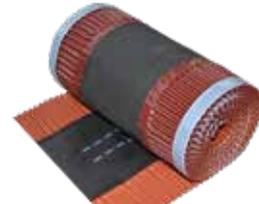
RIDGE LINE VENTILATION



Under Ridge Mixed Roll Tape



Under Ridge Alu Roll Tape



TB-Roll Ridge Tape (under ridge waterproof)



NOTE: The roof components are subject to minimum order and must be multiples thereof.

ROOF COMPONENTS

FIXING



Roof tiles adhesives



Ridge batten supports



Fixing clips for roof tiles



Ridge clips



Straight snow stopper



Fixing screws

EAVE LINE VENTILATION



Ventilation Comb 100 mm



Ventilation Comb 60 mm



Bird Stop Grate 80 mm



Batten + Ventilation Comb
(Batten 30 mm; comb 60 mm)



PAINT



Touch-up paints

NOTE: The roof components are subject to minimum order and must be multiples thereof.

BORJATHERM®

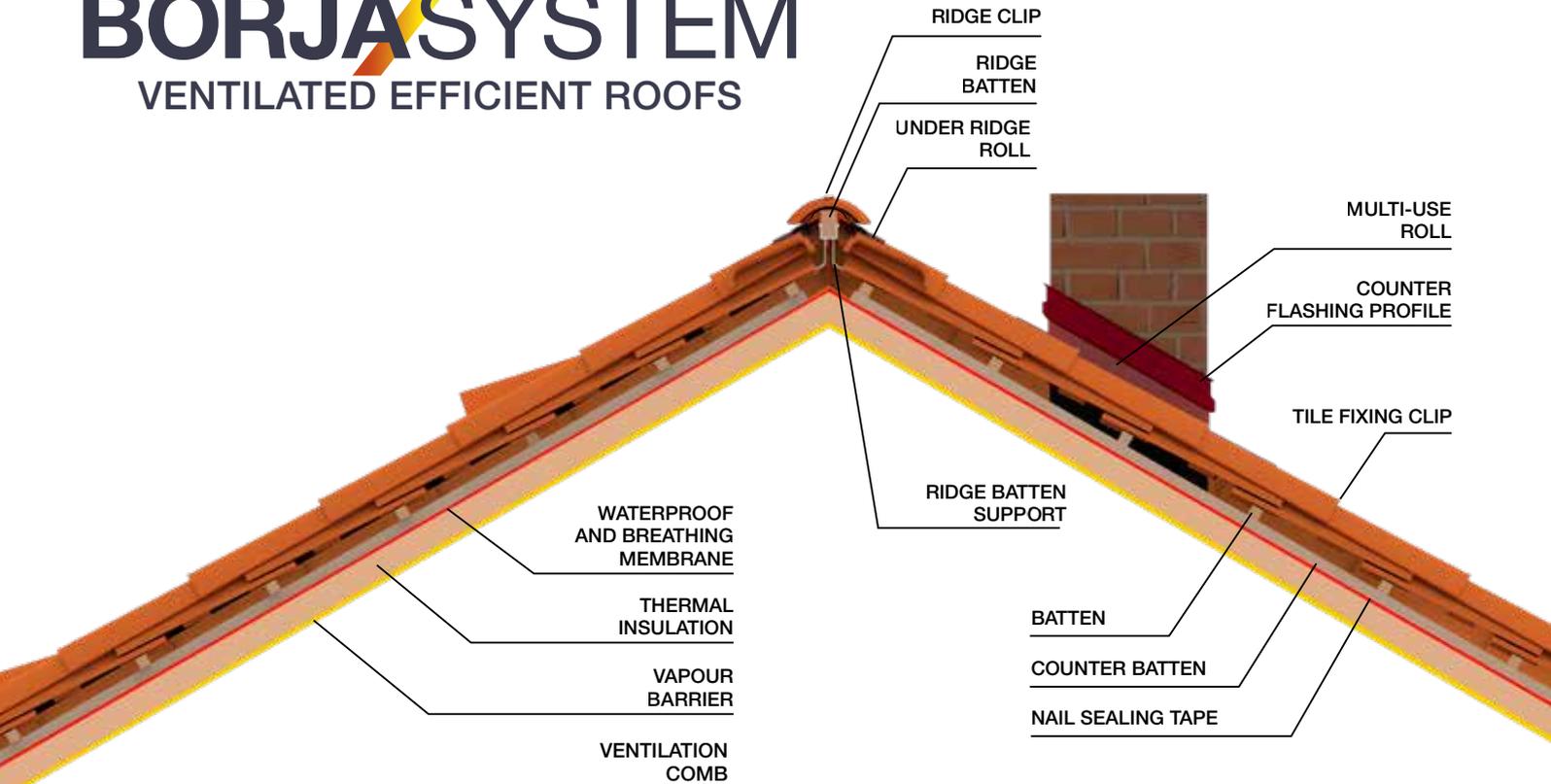
Thermal insulated roofing SYSTEM



Installation on any support

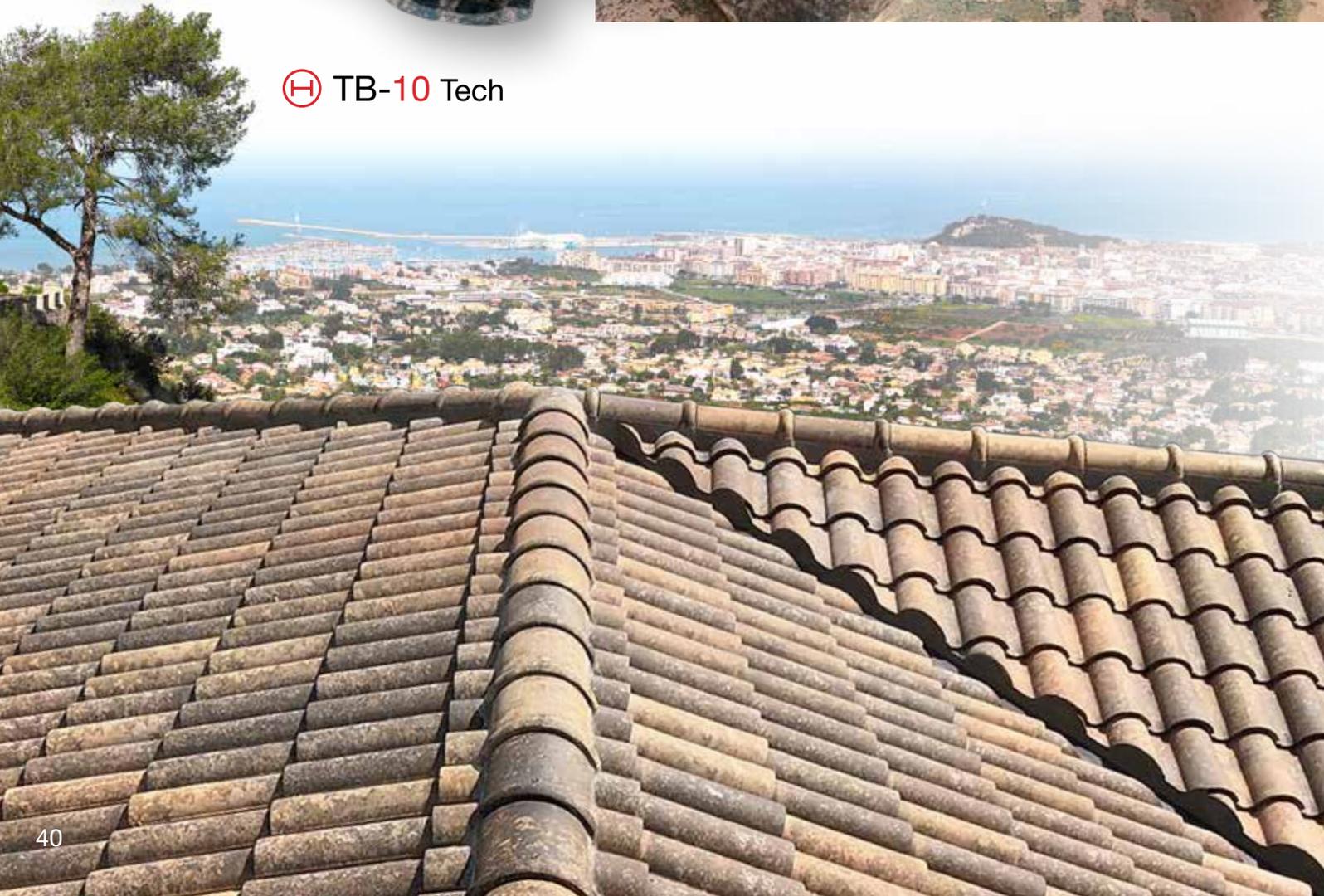
BORJASYSTEM

VENTILATED EFFICIENT ROOFS





 **TB-10** Tech





 **CENTENARIA**®
Irati



 TB-10 Tech





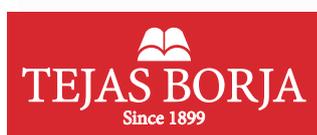
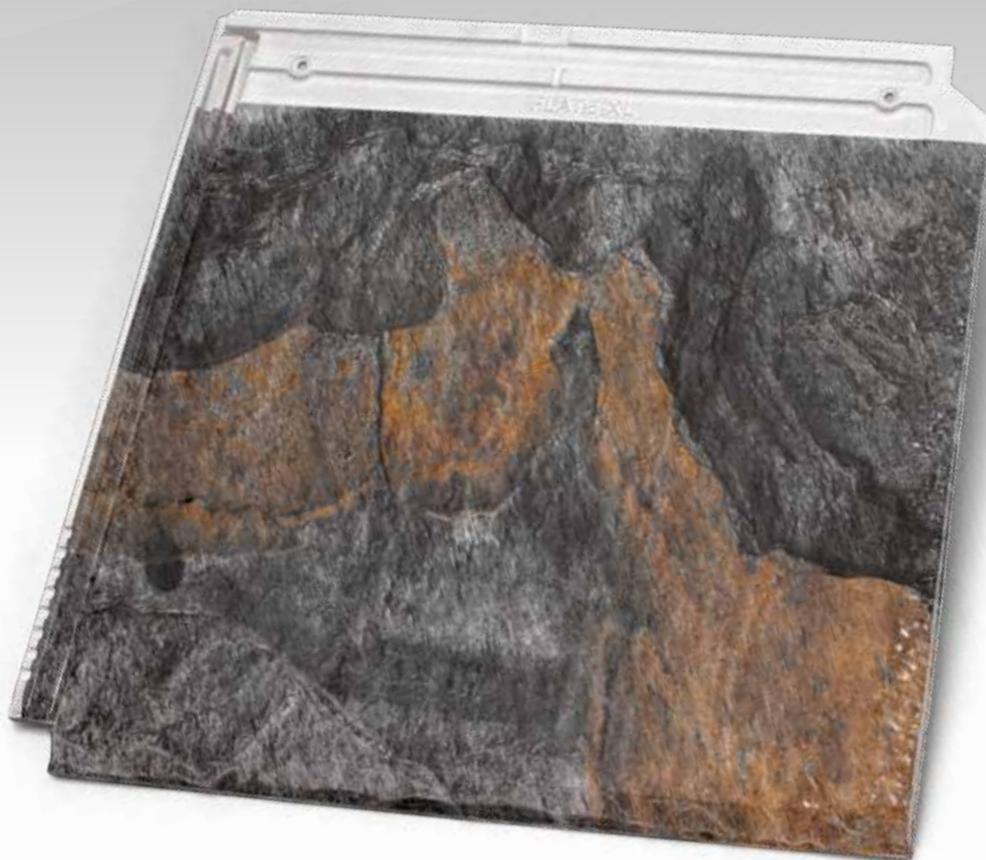
Tejas Borja S.A.U. reserves the right to change the characteristics and availability of the products and colours displayed in this catalogue without prior notice. The colours of the pieces shown may vary slightly from the originals. The settings shown in this catalogue are decorative suggestions for publicity purposes only and in real installations the fitting instructions published by Tejas Borja must be followed.

THE ® EVOLUTION
of the ceramic tile sector

FLAT-5XL[®] Borja JET



reddot award 2019
winner



TEJAS BORJA, S.A.U.

Ctra. Lliria a Pedralba, Km. 3
46160 Lliria, Valencia, SPAIN
T.+34 96 279 80 16
F. +34 96 278 25 63
orders@tejasborja.com

tejasborja.com

