TRADITIONAL
La Escandella

CURVED

La Escandella
ROOFING THE WORLD

CURVED
MISSION BARREL

Renewal of a beautiful tradition

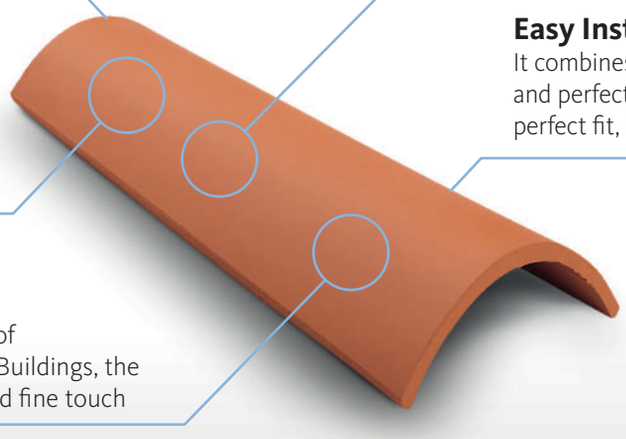
Traditionally, this 2 piece tile, also referred to as Mission barrel, has been the most frequently used roof tile in Europe and in Spanish Colonial Buildings in the New World. Today, this tile is used in the construction of new homes, due to the beauty and wide variety of colours available. It is also used to restore beautiful historic roofs that have been enhanced by natural weathering over time.

01

Colours and Textures
A variety of colours and textures allow accurate imitation of aged tiles with the guarantee of modern tiles

Higher Resistance
The composition of the clay and its perfect design, allow higher flexion than the standards require

High Water Impermeability
A selection of quality clays together with high temperature cooking/baking grant the tile very low water absorption



Easy Installation
It combines the Curve´s Elegance, Technique and perfect Design. Its round edges allow a perfect fit, tile upon tile and better handling

Great Versatility
For both the Renovation / Restoration of Emblematic buildings as for the newer Buildings, the Curve tile offers a high quality finish and fine touch

An updated classic

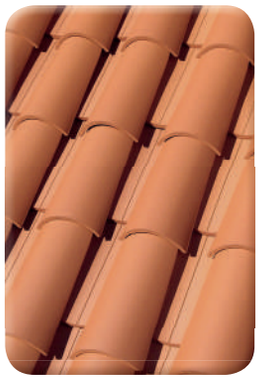
COLOURS & FINISHES

TOSSAL
T5

AITANA
T4 / T5

LUCENTUM
T4 / T5

CASTELL
T4 / T5

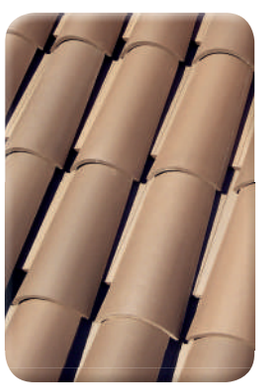


RED
T4 / T40 / T45 / T5 / TT5

JASPEE RED
T5 / TT5

HISPANIA
T40 / T5 / TT5

GALIA
T5



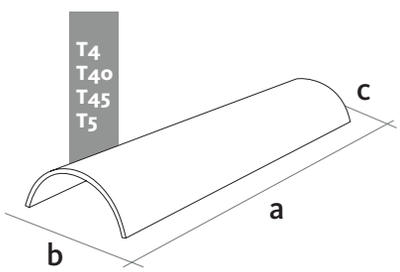
BROWN
T4 / T40 / T5

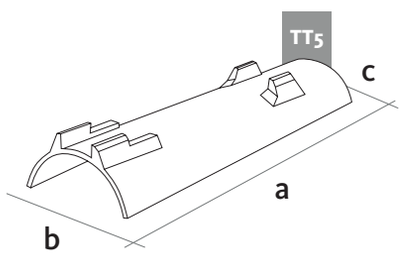
MILENIUM
T5

PAJA
T4 / T5

FLAMED PAJA
T4 / T5

The names of the colours shown in the photos, only represent the finishes of the models identified as Curved Mission Barrel





CURVED

	T5	T45	T4	T40	TT5
Dimensions*	**A** 500 mm / 19.68"	**A** 450 mm / 17.7"	**A** 396 mm / 15.6"	**A** 400 mm / 15.75"	**A** 495 mm
	B 220 mm / 8.66"	**B** 220 mm / 8.66"	**B** 182 mm / 7.16"	**B** 160 mm / 5.9"	**B** 220 mm
	C 163 mm / 6.42"	**C** 160 mm / 5.9"	**C** 127 mm / 5"	**C** 112 mm / 4.33"	**C** 170 mm
Pieces per m2/sq	**Depending on overlapping / 162	22,7 / 244.3	28 / 301.4	34 / 366	9 / 97
Pieces per lm	2,4	2,7	3	4	2,4
Weight piece	2,55 kg / 5.62 lbs	2 kg / 4.4 lbs	1,6 kg / 3.5 lbs	1,25 kg / 275,6 lbs	2,8 kg / 61,7 lbs
Pieces per pallet	275	300	660	840	175
Weight pallet	701 kg / 1545,4 lbs	600 kg / 1322,77 lbs	1.056 kg / 2328.1 lbs	1.050 kg / 2314,8 lbs	490 kg / 1080,3 lbs

*The Tile dimensions indicated in this chart, allow a tolerance of approximately 2%
** Overlapping: 70 mm/2.75" (18 piezas / m²); 100 mm/3.93" (18,9 piezas / m²); 150 mm/5.9" (20 piezas / m²).

GUARANTEE 35 YEARS La Escandella

AENOR Certified Product

EN 539-2 Test of frost resistance

EN 539-1 Impermeability

EN 538 Flexural strength test

EN 1024 Geometric characteristics

NF *For T5 and T4

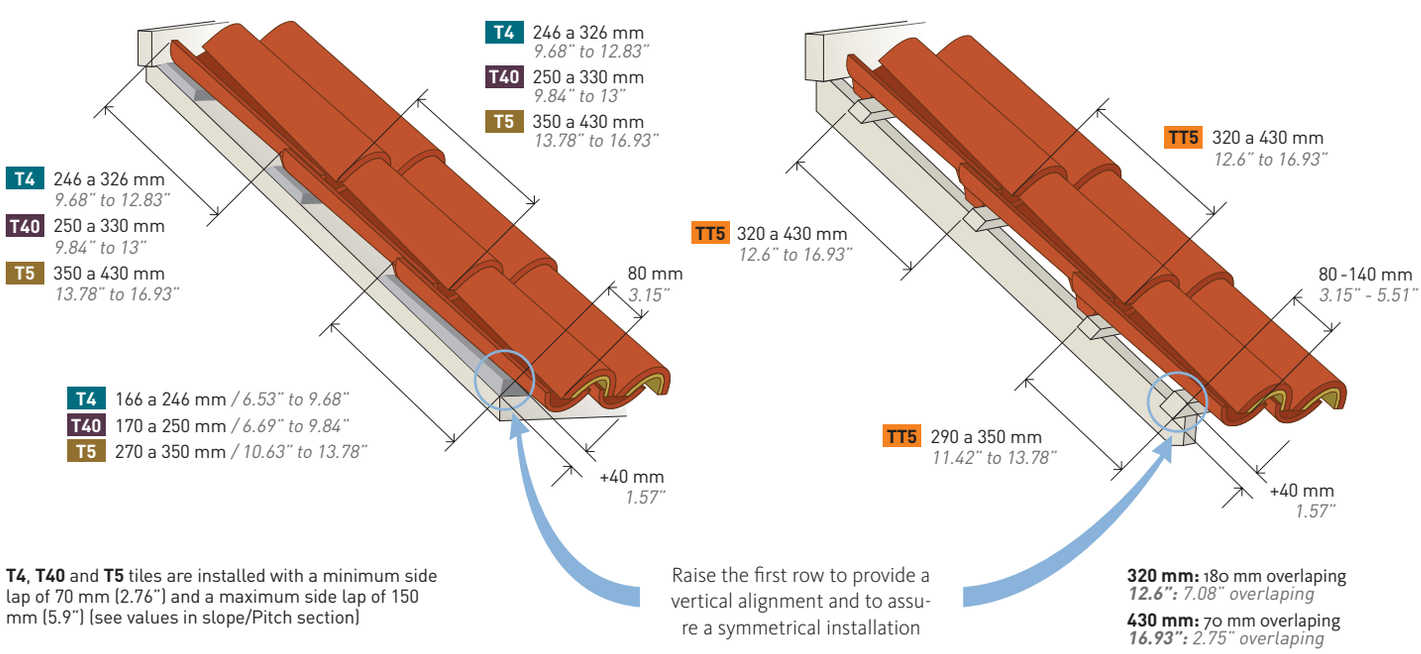
CE

ICC ES ** For T5

MIAMI-DADE COUNTY APPROVED **

	Application Standard	Requirements	CURVED Roof tile
Flexural Strength	EN 538	Resistance > 1200N	Above
Water Impermeability	EN 539-1	Complies with level 1	Above
Frost Resistance	EN 539-2	Complies 150 cycles	Above

LONGITUDINAL FIT



T4, **T40** and **T5** tiles are installed with a minimum side lap of 70 mm (2.76") and a maximum side lap of 150 mm (5.9") (see values in slope/Pitch section)

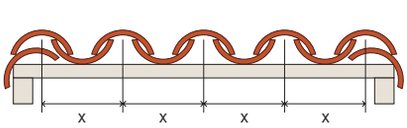
Raise the first row to provide a vertical alignment and to assure a symmetrical installation

320 mm: 180 mm overlaping
12.6": *7.08" overlaping*

430 mm: 70 mm overlaping
16.93": *2.75" overlaping*

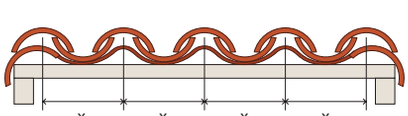
TRANSVERSAL FIT

Mortar fixing of clay roofing tiles



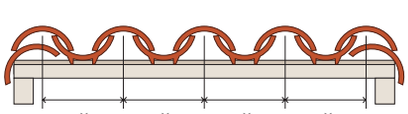
T4 x=230 mm **T40** x=180 mm **T5** x=270 mm

Fibre cement corrugated sheets fixing Escandella (pre-engineered roof system)



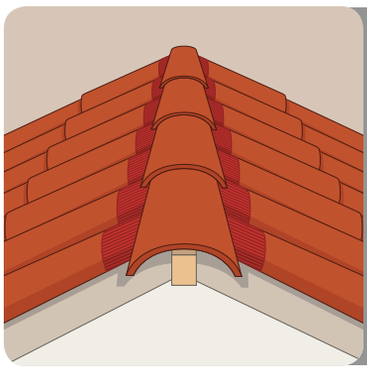
T4 x=230 mm **T40** x=180 mm **T5** x=230 mm

Teton (Barrel nose) tile fixing



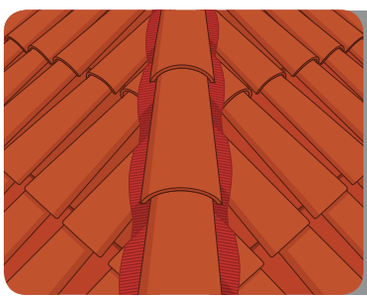
TT5 x=270 mm

INSTALLATION DETAILS



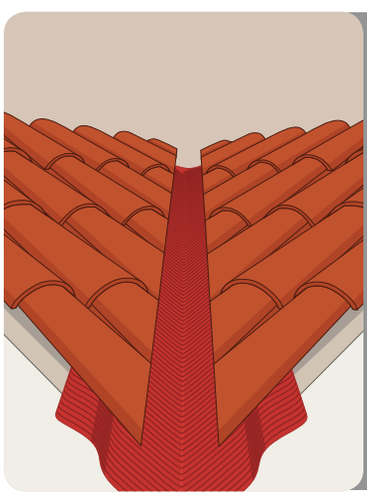
RIDGE

- Ridge tiles must be installed lap facing away from the prevailing winds, in order to assure water tightness.
- Field tiles at top course should be secured directly either into the deck or top batten with stainless ring screw nails or similar.
- All ridges and hips shall be covered with self adhesive Alu-Roll, La Escandella Aluminum roll for hip and ridges (CAM01), or similar approved breathable waterproof underlayment. Underlayment should be secured over the ridge nailer with non-corrosive roofing nails.
- Apply ridge tiles with a minimum overlapping of 5 cm (2") throughout the ridgeline facing away from the prevailing wind-driven rain.



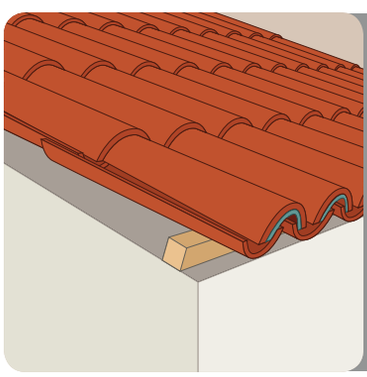
HIP

- Hip tiles must be installed in the same way as in the ridge.
- Field tiles must be cut parallel to the hip line and secured.
- All ridges and hips shall be covered with self adhesive Alu-Roll, La Escandella Aluminum roll for hip and ridges (CAM01), or similar approved breathable waterproof underlayment.
- **Air should be able to flow through the ridge and hip area. Be sure not to close these off with mortar or similar. Closing them off could result in cracks, peeling off,.. in freezing and thawing cycles.**



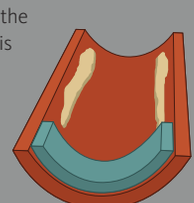
VALLEY

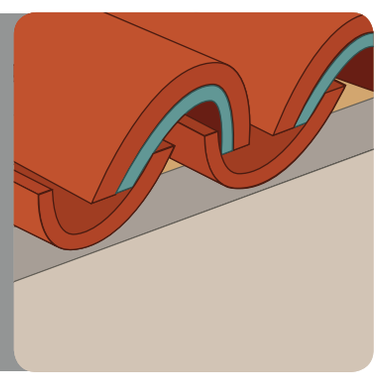
- Both Valley and eave line channel are particularly vulnerable to water migration and leakage. Valleys should have a clear and unobstructed pathway for quick water drainage.
- Install valley battens on each side of the valley crease. Alu-roll Valley (CAM18), or similar approved adhered waterproof valley underlayment, shall be laid vertically up all valleys in addition to other required underlayment that should be fixed by using glue, resin or similar.
- Where valley intersects with ridge line, apply Alu-roll Valley (CAM18), or similar approved underlayment, which should be covered by the ridge tile. Valley should be extended along the eaves to overhang the fascia board by 5cm (2") or over the gutter.
- Tiles should be laid parallel to the valley line, at same relative angle and should overhang the valley battens by at least 10 cm (4").
- Tiles at each side of the valley crease should be laid to provide a minimum 15 cm (6") width gap (tiles should held back minimum 7.5 cm (3") from the center of the valley each way).
- Valley tiles must be secured.
- **Proper Valley flashing installation is required to ensure water tightness in order to avoid cracks, peeling off,...**



EAVE

- The tiles structuring the eave will have a min. 5cm (2") and max. 8cm (3.15") overhang at the eave.
- A booster tile is set and fastened over the lower edge of each pan tile. A starter tile is then fastened over the booster tile at the eave.





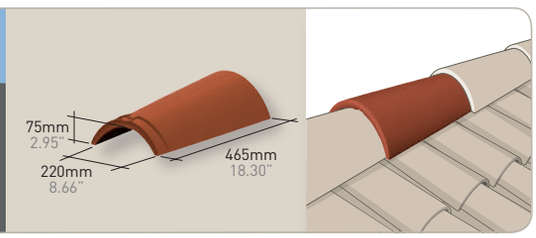
ACCESSORIES

La Escandella offers a complete line of Curved Roof tile accessories, available in any standard color, to customize your roof.

Round ridge / Hip

Q02

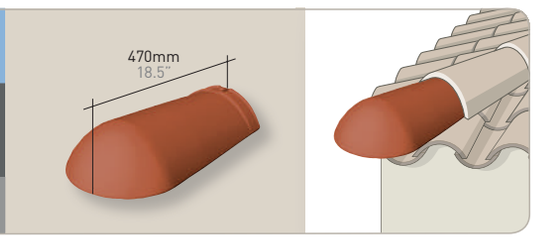
3,400 gr
7.5 lbs
2.5 pcs/ml
0.75 pcs/lft



Round ridge end / Hip starter

Q04

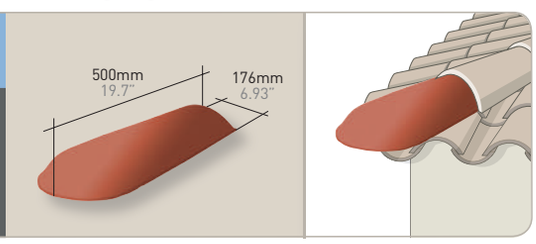
3,600 gr
7.94 lbs
With Q02



Ridge end Curved 50 / 50 Mission

Q69

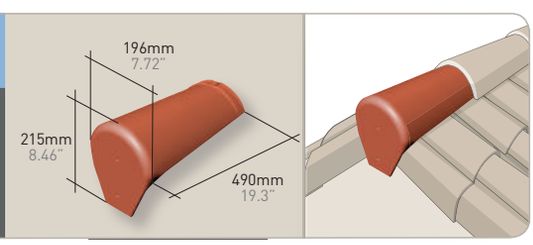
2.800 gr
6.17 lbs



End cap Curved 50 / 50 Mission

Q68

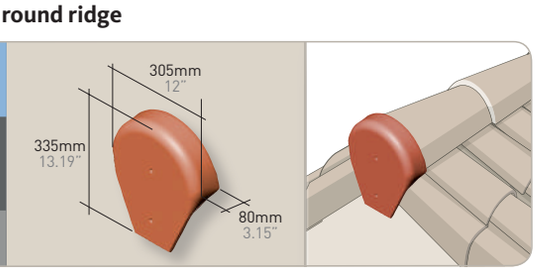
3.700 gr
8.16 lbs



End cap round ridge

Q83

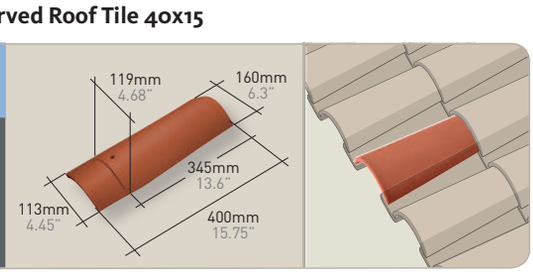
2,500 gr
5.51 lbs
With Q02



Eave Curved Roof Tile 40x15

Q67

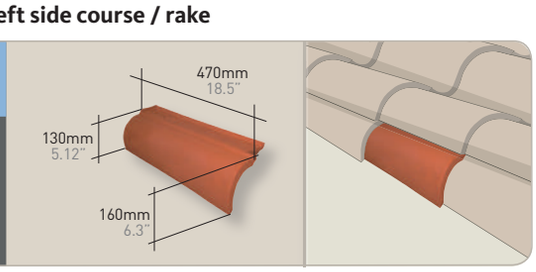
1.300 gr
2.86 lbs



Round left side course / rake

Q12

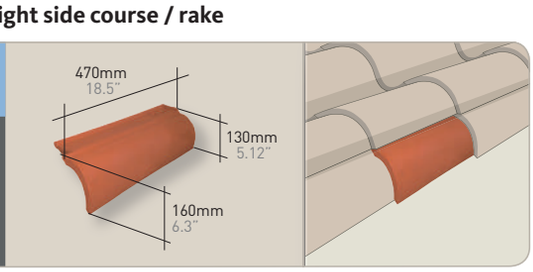
2,600 gr
5.7 lbs
3 pcs/ml
0.9 pcs/lft



Round right side course / rake

Q13

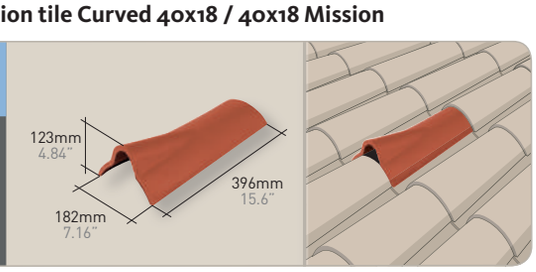
2,600 gr
5.7 lbs
3 pcs/ml
0.9 pcs/lft



Ventilation tile Curved 40x18 / 40x18 Mission

Q22

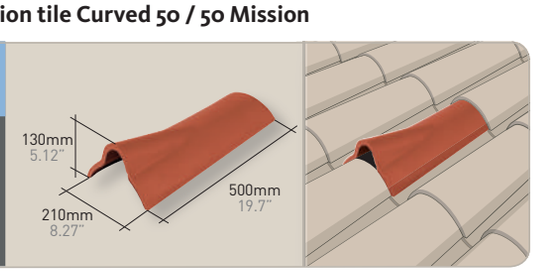
2.400 gr
5.3 lbs



Ventilation tile Curved 50 / 50 Mission

Q23

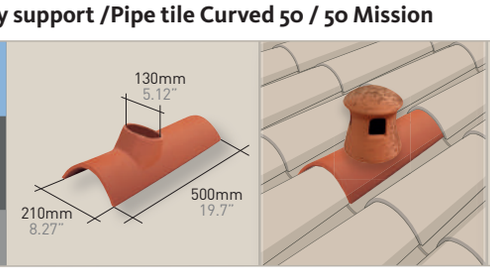
2.900 gr
6.4 lbs



Chimney support /Pipe tile Curved 50 / 50 Mission

Q66

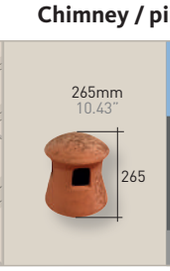
2.900 gr
6.4 lbs
With Q54



Chimney / pipe cover

Q54

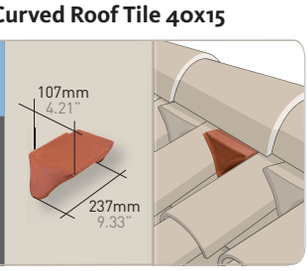
2,760 gr
6.08 lbs
Ø 11.5 cm
Ø 4.53"
With Q66



Wedge Curved Roof Tile 40x15

Q52

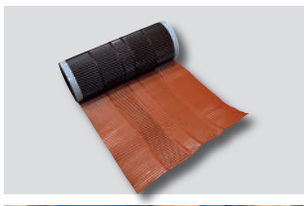
580 gr
1.28 lbs



ROOFING COMPONENTS

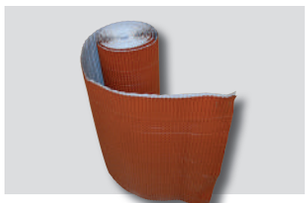
La Escandella offers a wide range of non-ceramic accessories which help finish off any type of roof. From waterprofing to ventilation, fixing and batten installing, safety implementation and multiple profiles can be found here. (Ask for wider range in last Price List).

CAM01 / CAMF1
Alu-Roll With Micro Cut



Width: Several sizes
Colours: Red, paja, brown, black.

CAM08 / CAMF8
Alu-Flex

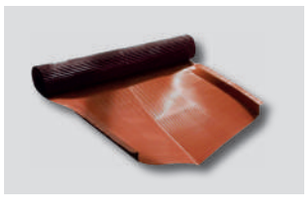


Width: Several sizes
Colours: Red, paja, brown, black.

CAM09 / CAMF9
Alu-Roll Membrane

Width: Several sizes
Colours: Red, brown, black.

CAM18
Alu-Valley Tape



Width: 50 mm / 1.96"
Colours: Red, black, brown.

CAM65 / CAM21 / CAM52 / CAM53
Waterproof membrane

Dimensions: 1,5 m x 50 m / 1.64 yd x 54.68 yd
Weight: several weights.

CAM27 / CAM70 / CAM07 / CAM10
Ridge Tile Hook

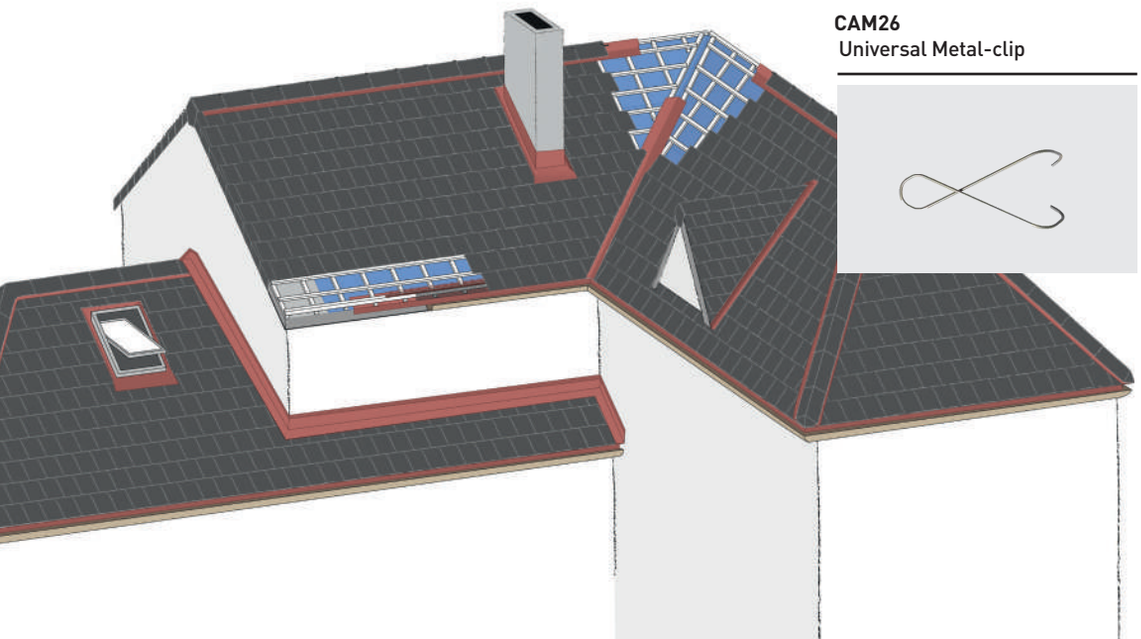
Colours: Red, brown, black.

CAM05 / CAM010 / CAM51
Ridge Batten Bracket

Dimensions: Several sizes.

CAM16
Eaves Ventilation Comb

Dimensions: 6cm x 1m / 2.36" x 39.37"
Colours: Red, brown, black.



CAM26
Universal Metal-clip

CAM62
Universal Eave hook-clip

TECHNICAL INFORMATION

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 capillarity action, wind-driven rain, and runoff or ice damming. Because of this possibility, the underlayment is critical to the success of the roof.

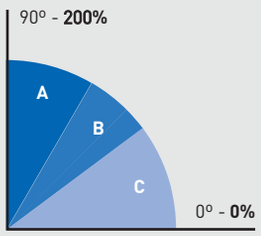
Hollow area which is surrounded by hills that protect the hollow from the winds in all directions.	PROTECTED LOCATIONS	**Slope**	26%	28%	30%	32%	34%	36%	38%	40%	42%	44%	>46%
		Slope	15º	16º	17º	18º	19º	20º	21º	22º	23º	24º	>25º
		Overlaping	15,0	14,0	13,5	13,0	12,5	12,0	11,5	11,0	10,0	10,0	7,0
Flat area, plateau with minimal elevation changes.	NORMAL LOCATIONS	**Slope**	26%	28%	30%	32%	34%	36%	38%	40%	42%	44%	>46%
		Slope	15º	16º	17º	18º	19º	20º	21º	22º	23º	24º	>25º
		Overlaping	*	15,0	14,5	14,0	13,5	13,0	12,5	12,0	11,0	10,0	7,0
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.	EXPOSED LOCATIONS	**Slope**	26%	28%	30%	32%	34%	36%	38%	40%	42%	44%	>46%
		Slope	15º	16º	17º	18º	19º	20º	21º	22º	23º	24º	>25º
		Overlaping	*	*	*	15,0	14,5	14,0	13,5	13,0	12,0	11,0	7,0

* Critical situation: a waterproofing underlayment on the entire deck MUST be applied.

NOTE: For hips LESS than 6.5 m long. in normal locallitions or unfovarable climatic zone, the 32% slope MUST BE APPLIED.

FIXATION

The slope of a roof determines the level of fixation of the tiles required. The fixation of the tiles may be necessary to prevent the sliding of the rooftiles or to prevent their lifting by the effect of the air. I**n eaves, right and left side course, lines of ridge, valleys, encounters with vertical walls and other singular points, all the pieces will be fixed.** For all other parts, the level of fixation will depend on the pitch.



A: 60º - **173%**
B: 45º - **100%**
C: 0º - **0%**

A: Every rooftile should be securely fastened by nailed, screwed, clipped,...

B: Rooftiles will be fixed at least once every **two or three**, depending on the exposure of the roof and the height of the building**.**

C: The rooftiles shall be fixed at least in the proportion of **one in five** from a horizontal line, initiating fixation by rows alternately and regularly on the batterns.
In case of high wind exposure, all rooftiles must be fixed.

VENTILATION

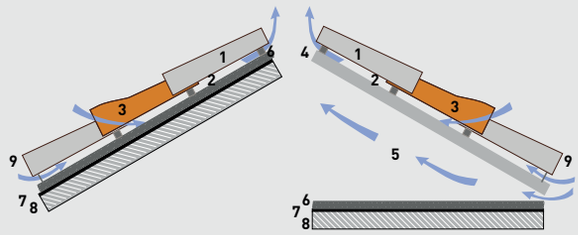
Ventilation is one of key elements to assure a good hygrothermal behavior of the roof and preservation of the roof structure. The key to a good and well preserved roof is a good ventilated roof. Proper installation of Ventilation tiles combined with ventilated roof can result in energy savings, in a 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 ventilation tile (Q23) for every 7 m^2 (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.



NON-VENTILATED ROOF

VENTILATED ROOF

1. Roof tile
2. Micro-ventilation void
3. Ventilation roof tile
4. Rafter
5. Attic
6. Heat insulation underlayment
7. Waterproof underlayment material
8. Frame
9. Eaves ventilation comb/bird stop

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.

GUARANTEE 35 YEARS La Escandella

www.laescandella.com

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 Service.

This catalogue, printed in March 2020, replaces the existing ones.