



CURVED

Mission Barrel



La Escandella



# 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.

PAJA

FLAMED PAJA

T4 / T5

T4 / T5



RED

JASPEE RED

HISPANIA

AITANA

CARTAGO

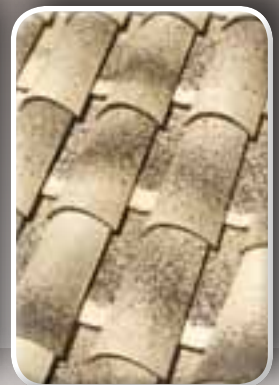
T4 / T40 / T45 / T5 / TT5

T4 / T45 / T5 / TT5

T4 / T40 / T5 / TT5

T4 / T5 / TT5

T4 / T5





### Colours and Textures

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

### High Water Impermeability

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

### Great Versatility

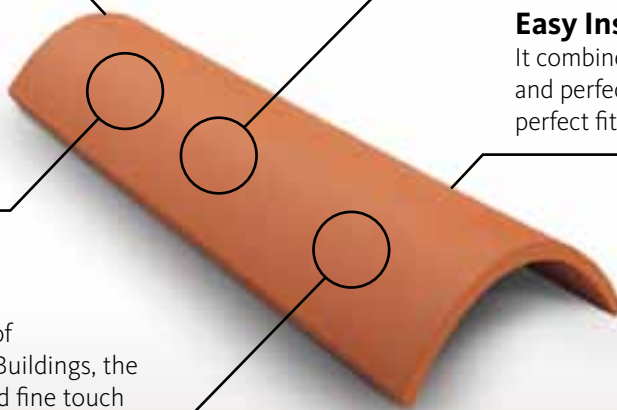
For both the Renovation / Restoration of Emblematic buildings as for the newer Buildings, the Curve tile offers a high quality finish and fine touch

### Higher Resistance

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

### 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



An updated classic

LUCENTUM

TOSSAL

GALIA

BROWN

MILENIUM

T4 / T5

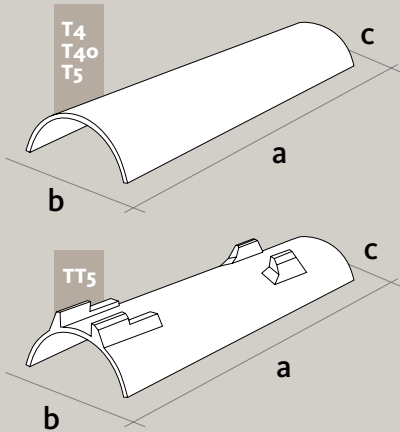
T5

T4 / T40 / T5

T4 / T40 / T5

T5





GUARANTEE  
**35**  
YEARS

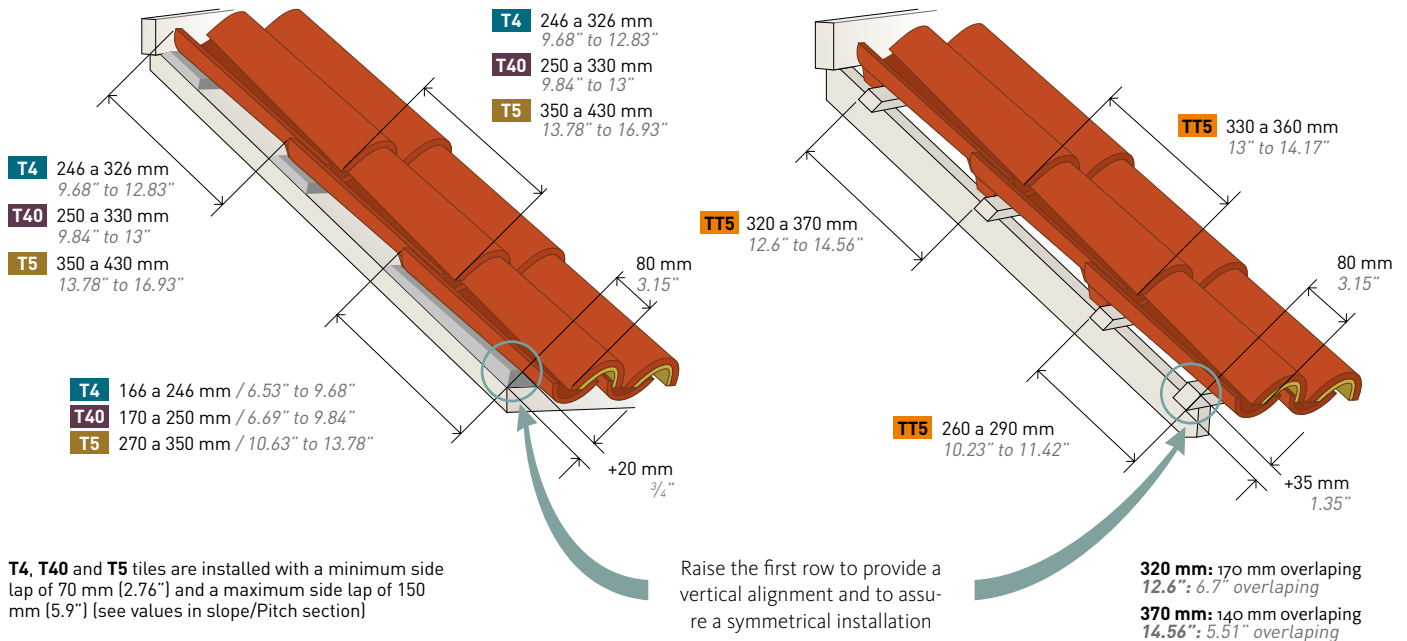


	Application Standard	Requirements	CURVED Roof tile
<b>Flexural Strength</b>	EN 538	Resistance > 1200N	Above
<b>Water Impermeability</b>	EN 539-1	Complies with level 1 (Method 1)	Above
<b>Frost Resistance</b>	EN 539-2	Level 3 Resistance (Method E - 150 cycles)	Above

	T4 Red clay	T4 White clay	T40 Red clay	T45 Red clay	T5 Red clay	T5 White clay	TT5 Teton
<b>Dimensions</b>	a: 396 mm b: 182 mm c: 130 mm a: 15.6" b: 7.16" c: 5.12"	a: 400 mm b: 185 mm c: 134 mm a: 15 3/4" b: 7.28" c: 5.27"	a: 400 mm b: 150 mm c: 110 mm a: 15 3/4" b: 5.9" c: 4 1/3"	a: 450 mm b: 220 mm c: 160 mm a: 17.71" b: 8 1/2" c: 6.3"	a: 500 mm b: 220 mm c: 163 mm a: 19.69" b: 8.66" c: 6.41"	a: 500 mm b: 225 mm c: 168 mm a: 19.69" b: 8.86" c: 6.61"	a: 500 mm b: 220 mm c: 170 mm a: 19.69" b: 8.66" c: 6.69"
<b>Pieces /m<sup>2</sup> /square</b>	28 / 301	28 / 301	34 / 315	22,7	18 / 167	18 / 167	9 / 83
<b>Weight piece</b>	1,600 gr 3.53 lbs	1,550 gr 3.4 lbs	1,250 gr 2.75 lbs	2,000 gr 4.4 lbs	2,550 gr 5.62 lbs	2,300 gr 5.29 lbs	2,800 gr 6.17 lbs
<b>Pieces /pallet</b>	648 / 660	648 / 660	840	300	275	275	120 / 150
<b>Average weight /sq.</b>	1,037 / 1,056 kg 2,286 / 2,328 lbs	1,004 / 1,023 kg 2,214 / 2,255 lbs	1,050 kg 2,315 lbs	600 kg 1,323 lbs	702 kg 1,547 lbs	632.5 kg 1,394 lbs	420 kg 926 lbs

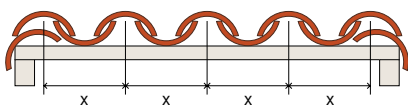
NF Standard has been achieved for both T4R and T5R. ICC-ES standard is valid just for La Escandella T5R

## Longitudinal fit



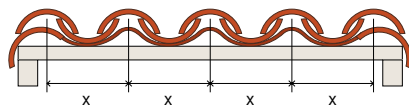
## Transversal fit

### Mortar fixing of clay roofing tiles



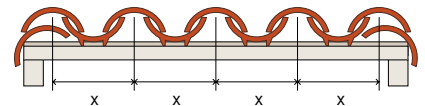
**T4** x=230 mm **T40** x=180 mm **T5** x=270 mm

### 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

# ACCESSORIES

To satisfy all needs and allows a perfect finish to your roof, La Escandella offers a wide range of specific accessories for the Curved Roof Tile, available in all its colours.

## 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

## Ridge end Curved 50 / 50 Mission

**Q69**

2,800 gr  
6.17 lbs

## End cap Curved 50 / 50 Mission

**Q68**

4,200 gr  
9.26 lbs

## End cap round ridge

**Q83**

2,600 gr  
5.7 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"

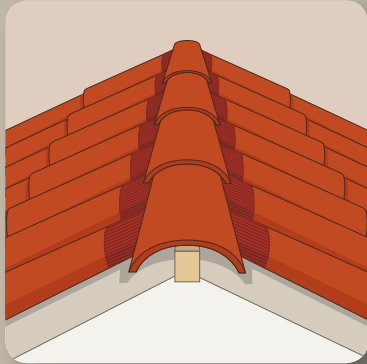
With Q66

## Wedge Curved Roof Tile 40x15

**Q52**

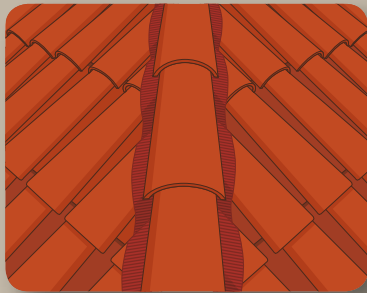
580 gr  
1.28 lbs

# INSTALLATION DETAILS



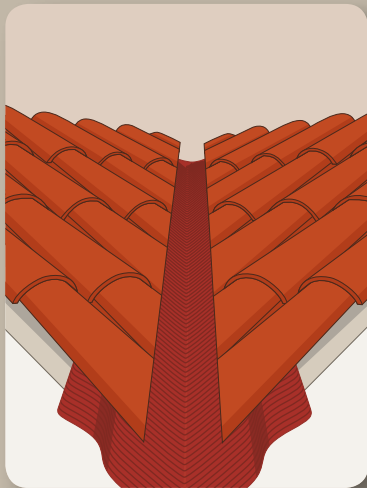
## RIDGE

- 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) 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.



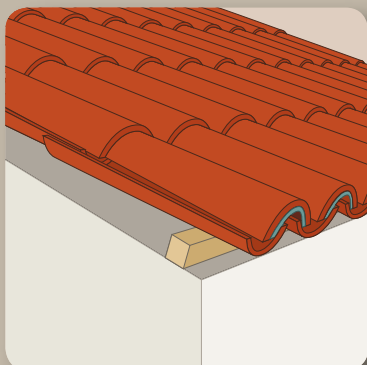
## HIP

- 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) 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.**



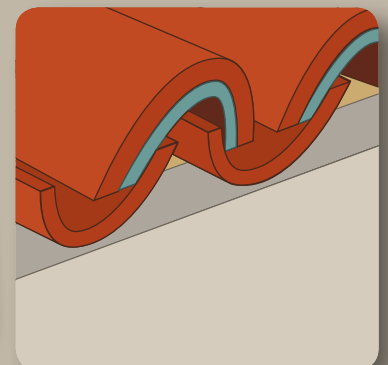
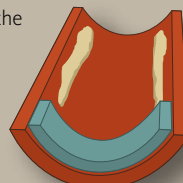
## VALLEY

- 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 (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 (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.



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

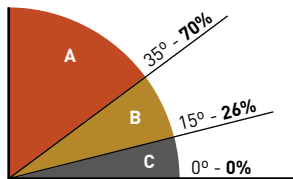
Since tile is installed across a wide range of climatic and geographic conditions, there are a variety of details that must be considered in preparing an effective installation. Local building officials should always be consulted to learn of special requirements that may exist.

<b>PROTECTED LOCATIONS:</b> hollow area which is surrounded by hills that protect the hollow from the winds in all directions.	<b>Slope (%)</b>	32	34	36	38	40	42	44	>46
	<b>Slope (°)</b>	18	19	20	21	22	23	24	>25
	<b>Overlapping (cm)</b>	13,0	12,5	12,0	11,5	11,0	10,0	10,0	7,0
<b>NORMAL LOCATIONS:</b> Flat area, plateau with minimal elevation changes.	<b>Slope (%)</b>	32	34	36	38	40	42	44	>46
	<b>Slope (°)</b>	18	19	20	21	22	23	24	>25
	<b>Overlapping (cm)</b>	14,0	13,5	13,0	12,5	12,0	11,0	10,0	7,0
<b>EXPOSED LOCATIONS:</b> 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.	<b>Slope (%)</b>	32	34	36	38	40	42	44	>46
	<b>Slope (°)</b>	18	19	20	21	22	23	24	>25
	<b>Overlapping (cm)</b>	15,0	14,5	14,0	13,5	13,0	12,0	11,0	7,0

**Note:** Where roof pitches fall between 32% (3:12) and the standard recommended minimums, or in regions where ice dams may occur, a self-adhering modified bitumen membrane or waterproofing underlayment on the entire deck **MUST** be applied

# FASTENING METHODS

The manner in which roof tiles are installed makes them a highly effective water shedding assembly that affords years of service and protection. The effectiveness of a tile roof system as a weather resistant assembly however depends on the proper installation of all the tile roof components, and installing them properly is critical to the performance of the installed system.



- A:** Every tile (pan and cover) should be securely fastened (nailed, screwed, clipped, so on).
- B:** All Channel (Pan) tiles must be fixed; cover tiles shall be fixed every 5 rows.
- C:** La Escandella recommended minimum slope requirements is 32%.

**Note:** The Locking Function is performed by the metal clamps / hooks, whereas the polyurethane foam acts only as a positioner.

# VENTILATION

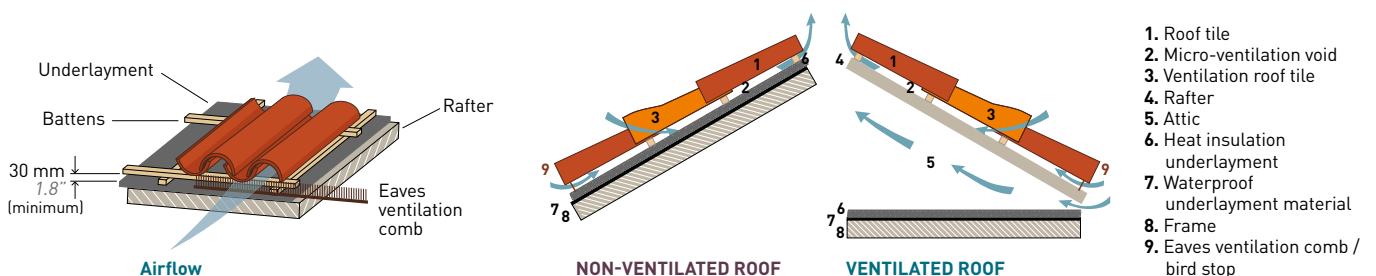
Ventilation is one of key elements to assure a good hygrothermal behavior of the roof and preservation of the roof structure. The key to a good and well preserved roof is a good ventilated roof. Proper installation of Ventilation tiles combined ventilated roof will increase material life and reduce energy consumption.

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 1 interlocking **Curved / Mission Barrel ventilation tile (Q22 and Q23)** for every 7 m<sup>2</sup> (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.



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.



# La Escandella

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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 Care Service.

This catalogue, printed in April 2014, replace the existing ones.