

# **GALLO-ROMANE**









- ✓ Recognised levelness
- ✓ Outstanding finishes

## TECHNICAL CHARACTERISTICS

Туре	Clay roof tile,
Double lock and double	e lapping, interlocking for low pitch roofs
Number of tiles per m <sup>2</sup>	≈ I2,7
Unit weight	≈ 3,4 kg
Weight per m <sup>2</sup>	≈ 43,2 kg
Overall length	≈ 44 cm
Overall width	≈ 28 cm
Linear cover	≈ 21,7 cm
Theorical gauge	≈ 36,3 cm
Longitudinal fitting tolerance	± 0,5 cm*
Transversal fitting tolerance	± 0,2 cm*
Linear meter of battens/m <sup>2</sup>	2,8 ml
Laying	Laid with straight joints right to left
Product standard	NF EN 1304
Application standard	NF P 31-202 [DTU 40.21]
	AT n° 5/02 - 1602 dated July 2002
Silicon product	An addendum is required for seals
Number of tioles per pallet	240
Weight per pallet	820 kg

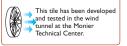
## PRESCRIPTION RECOMMENDATION

The tile will be in Terracotta, from the large-format bold-profile tile family, double lock and double lapping, more or less 12,7 per square meter, type Gallo-Romane from Monier or similar. Its game of usual assembly shall be 1 cm in longitudinal and 0,4 cm in transversal. It shall be laid straight joints from right to left, on battens according to the standard of NF application NF P 31-202 [DTU 40.21], (Technical Advice n°5/02 - 1602 from July 2002). Its installation shall be carried out using all parts specially designed for dry mortarless laying of ridges and edges as specified in the DTU.

## **GUARANTEE**









\* Usual fitting tolerance stated apply from actual average gauges and widths checked on delivery as per DTU.

For any projects developed within the context of an  $\mbox{HQE}^{\mbox{\tiny B}}$ approach, an Environmental and Health Declaration Sheet for this tile is available on request.

## **COLOR KEY**





Valmagne Copper (6C)

Ochre (ID)



Valmagne Beige (6E)



Antique Brown(6L)

Earth Brown (3F)





Silvacane Littoral (6A)



Silvacane Xahara (6B)





Atlantic Mixed Shades (3X)

The firing process of the clay may produce slight differences in colour. To obtain a roof with a homogeneous appearance, we recommend mixing tiles from different pallets. The printing processes do not necessarily guarantee a faithful reproduction of colours. Ask to see them in situ. These values are given for information purpose only and are likely to change.

## THE MAIN FEATURES

#### **VERGES**

The wide range of Gallo-Romane fittings offers choice of three verge finishes:

- round verge,
- cloaked verge,
- bardelis verge.

Verges direction is determined by placing them facing the pitch. A neoprene washer is used for fastening.



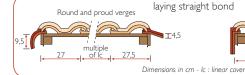


36.8

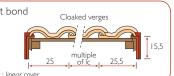
3/4 gauge double tile

Screw 70

Screw 50



Verge "Saintongeaise"



Working height: 15 18 Working width: 9.5 16.2 11.5 18,2

Bardelis verge

#### HIP / RIDGE

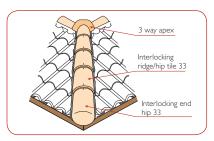
Monier recommends laying

dry with ventilated weather stripping in a roll. This system enables the ridge and hip to adapt to the nature movements of the roof.

The ridge courses are made by cutting the tiles closest to the ridge board.

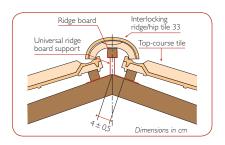
All ridges and hips must be fastened with a clip or a screw.

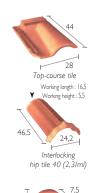
The dry ridge/hip is quick to lay, provides good ventilation, and makes future work easier.



36.8

Double tile





31.5

End ridge

19.5



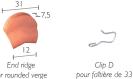
Half gauge top-course

tile = 17.5







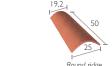






Round verge

(right and left)



(28 or 56 cm)



Working width: 14,6 Working height: 5



Cloaked verge

(right and left)









(28/32 cm)

#### AERATION, VENTILATION AND ILLUMINATION

The underside of the tile and their support must be ventilated. This ensures overall correct behaviour of roofing components over time.

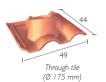
The use of ventilation tiles is recommended at the upper and lower parts of the roof. The total of ventilation openings must be distributed equally between lower part of the roof slope and near the ridge. Humid or foul air outlets from the ventilation or extraction of living areas by forced mechanical ventilation or other systems, must be routed out of attic spaces.

For further information on these two points, please refer to the DTU in force.

Preferably, exhaust tiles are to be located at the top of the slope.

Type of attic	Total ventilation section (1)
S	S = 1/5 000
S	S = 1/3 000
S) S)	$S_1 = 1/5 000$ $S_2 = 1/3 000^{(2)}$
\$ 5	$S_1 = 1/5 000$ $S_2 = 1/3 000 (2)$

- (I) Related to the surface area projected horizontally
- (2) Except for Spirtech® type breathing roof underlays.





(Ø 175 mm)







(Ø 120 mm)





(Ø 120 mm)

Ventilation tile with grid (opening 21 cm²)

#### Note: for better performance, the through tiles must be laid as much as possible near ridges.

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## THE MAIN FEATURES

#### VALLEY AND EAVES

All tiles on the eaves must be fastened.

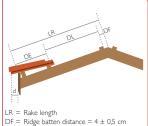
Please refer to the DTU in force :

- Tranchiclip for cut tiles.
- Europanneton® FCR Inox
- CLIP E for eaves.

Monier proposes a range of preformed valleys.

Laying of an eaves comb prevents rodent and bird intrusion.

It is placed at the rake bottom, along the valley.



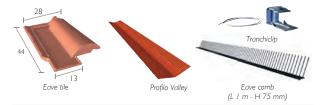
DL = Battening distance DE = Eaves batten distance = 34 cm

d = Eaves overhang = 8 cm

The dimension DE mentionned by Monier is given as an example. This dimension will vary according to several parameters: cant height, gauge, roof pitch and overhang d, and may be adjusted to achieve the required overlap. The interlocking part

(water flow) must to be taken into account when defining dimensions DE and d.





#### **UNDER-ROOF**



## LAYING TILES IN A SQUARE LAYOUT

For violent winds, MONIER recommends going beyond the DTU recommendation and therefore fastening all tiles.

- (I) The wind zones considered are those designated by the snow and wind loads code (NV 65) and the sites by the reference building code recommendations.

  (2) One tile fastened in every five tiles laid.

On verges and eaves, all tiles must be fastened.

Use of Europanneton® FCR Inox recommended by Monier.

Pitches in %	Zones I Protected and	and 2(1) normal sites(1)	Zones I and 2(1): Exposed site(1) Zones 3 and 4: All sites		
	Verges Running and eaves portion		Verges and eaves	Running portion	
p ≤ 100	all	free	all	1/5(2)	
$100$	all	1/5(2)	all	1/5(2)	
n > 175	ااد	الد	الد	الد	

## **ORNAMENTS**









Pine-cone finial Omementa (available in 44,5 cm)

## THE REGULATIONS

#### MINIMUM PITCH TABLE IN %

#### MINIMUM ACCEPTABLE PITCHES AND OVERLAP IN % (NO UNDERLAY)

Zones	Rake length (ground plan)								
Sites	up to 6,50 m			6,50 m to 9,50 m			9,50 m to 12 m		
Sites	Zone I	Zone II	Zone III	Zone I	Zone II	Zone III	Zone I	Zone II	Zone III
Sheltered	22	24	27	26	28	30	27	30	35
Normal	25	27	30	28	32	36	32	35	40
Exposed	33	37	40	35	39	43	42	45	50

#### MINIMUM ACCEPTABLE PITCHES AND OVERLAP IN % (WITH UNDERLAY)

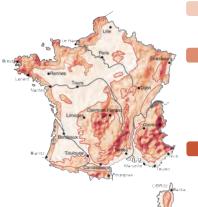
Zones	Rake length (ground plan)								
Sites	up	to 6,50	) m	6,50 m to 9,50 m			9,50 m to 12 m		
Sites	Zone I	Zone II	Zone III	Zone I	Zone II	Zone III	Zone I	Zone II	Zone III
Sheltered	19	21	23	22	24	26	23	26	30
Normal	21	23	26	24	27	31	27	30	34
Exposed	28	32	34	30	33	37	36	39	43

These data are applicable to slopes whose horizontal projection does not exceed 12 m. Building code recommendations.

### MINIMUM SLOPE ZONE

France is divided into 3 zones where minimum slope calculations apply (in conjunction with wind-rain)

Note: If in doubt regarding which zone applies, please refer to the definition of the zones below.



#### ZONF I

The entire inland territory of the country and the Mediterranean coast, at altitudes below 200 m.

#### 70NF II

- The Atlantic coast extending 20 km inland, from Lorient to the Spanish border.
- A strip ranging 20 to 40 km from the coast, from Lorient to the Belgian border
- Altitudes between 200 m and 500 m



## ZONF III

- Atlantic, English Channel and North Sea coasts extending 20 km inland, from Lorient
- to the Belgian border. Altitudes above 500 m and below 900 m.

### DEFINITION OF SITES ACCORDING TO THE DTU

SITES	DEFINITION
Scheltered	Low ground, entirely surrounded by hills which protect it against all wind directions. Site partial bounded by hills in the direction of the most violent winds that provide protection against win in this direction only.
Normal	Plain or plateau with slight vertical intervals, whether extensive or not (valleys, undulations).
Exposed	Near the sea: inland to a distance of 5 km; the tops of diffs, islands or narrow peninsulas, estuaries or sheltered bays and ria. Inland: narrow valleys into which the wind is channelled, isolated and high mountains (for example: Mont-Aigoual and Mont-Ventoux) and certain mountain passes.
This brea	akdown into three zones should not be confused with the breakdown

into Snow and Wind regions given in the NV (Snow and Wind) rules.

To prevent ingress of powder snow, the DTU recommends the use of an underlay.

This use is also advocated by SNEST in order to catch and lead down to the gutter any small amounts of water as well as to protect against the ingress of dust or soot.

MONIER reserves the right to change the technical characteristics of its range.



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