

# Mutina

## Rombini

by Ronan & Erwan Bouroullec



**EN**

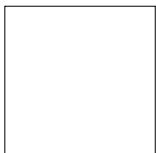
Carré  
Losange  
Triangle

General information  
Laying and maintenance tips  
Colors  
Technical features  
Packing

## General information

collection	Rombini
design	Ronan & Erwan Bouroullec, 2015
production	Industrial + Artisanal
material	CARRÉ: glazed porcelain stoneware. LOSANGE: double charge porcelain. TRIANGLE: glazed pressed body.
features	CARRÉ: squared and rectified slabs each one exactly the same as the others
thickness	CARRÉ: 11 mm TRIANGLE: 22 mm LOSANGE: 4,7 mm
nominal sizes	CARRÉ: 40-40 cm (16"-16") TRIANGLE SMALL: 5 pcs 31,5-3,5-2,2 cm (12"-1"-1"), on net 18,6-31,5 cm (7"-12") TRIANGLE LARGE: 3 pcs 31,5-6-2,2 cm (12"-2"-1"), on net 18,6-31,5 cm (7"-12") LOSANGE: 27,5-25,7 cm (11"-10")
specification	<p>CARRÉ:</p> <ul style="list-style-type: none"> <li>– 2 engraved textures: Uni and Light</li> <li>– 1 base color on Uni texture</li> <li>– 4 color families. Each families is composed of solid color on Uni texture and bicolor version on Light texture</li> <li>– Uni and Light version match each other on the same color</li> </ul> <p>Carré, 40x40 rectified slabs in glazed porcelain stoneware, are produced on a mould made of many little embossing diamonds on a matt surface which gives a strong ceramic identity to the collection. Carré is available in two versions: Uni, where colour is evenly distributed throughout the whole slab, and Light, where colour is used to underline the white diamonds outlines.</p> <p>LOSANGE:</p> <ul style="list-style-type: none"> <li>– 4 base color Grey, Blue, Green and Red</li> <li>– 4 tone sur tone grout</li> <li>– 1 base color White</li> <li>– 1 tone sur tone grout + 4 grouts matching the 4 base colors</li> </ul> <p>With Losange, the shape of the rhombus becomes bigger and turns into a chip of a mosaic. Made of double charge porcelain stoneware, each piece is installed on 27,5x25,7 cm sheets. The chromatic range results to be deep and intense, thanks to the matt surface which gives a natural character to the product. Even in this case the element is available in two versions, through the usage of matching or with contrasting grout, for a stronger vibration.</p> <p>TRIANGLE:</p> <ul style="list-style-type: none"> <li>– 2 shapes: Small and Large</li> <li>– 5 colors</li> </ul> <p>Complementary Pieces:</p> <ul style="list-style-type: none"> <li>– Terminal Small and Large in 5 colors</li> <li>– "Listello" in 5 colors</li> </ul> <p>In Triangle, the shape of the rhombus is interpreted in its three-dimensional shape, in order to create games of lights and shadow on the surface: the elements, made in Large and Small versions, seem to arise from the floor and to carry on the wall covering.</p> <ul style="list-style-type: none"> <li>– The Triangle's shape is obtained by pressing in special-made 3D mould, then glazed, cut and assembled on net.</li> <li>– Being assembled on a net (like a mosaic) Triangle can be used also on concave or convex curved surfaces.</li> </ul>
complementary pieces	LOSANGE: Raccordo TRIANGLE: Terminal Small and Large in 5 colors, "Listello" in 5 colors
awards	Archiproducts Design Award 2016
patents	Registered design n° 002889055-0019/0024 - date of registration 03/12/2015
category	Carré UNI EN 14411 App G (BIA group) GL Losange UNI EN 14411 App G (BIA group) UGL Triangle UNI EN 14411 App J (BIA group) GL

CARRÉ



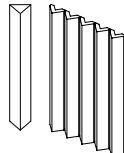
40-40 cm  
16"-16"

LOSANGE



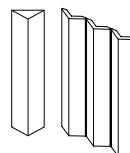
27,5-25,7 cm  
11"-10"

TRIANGLE SMALL



5 pcs 31,5-3,5-2,2 cm  
12"-1"-1"  
on net 18,6-31,5 cm  
7"-12"

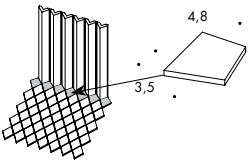
TRIANGLE LARGE



3 pcs 31,5-6-2,2 cm  
12"-2"-1"  
on net 18,6-31,5 cm  
7"-12"

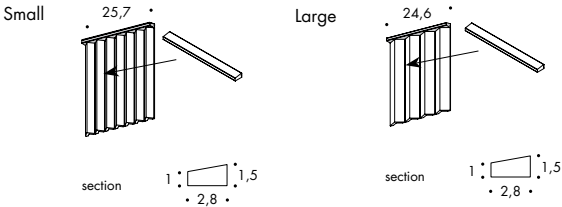
Raccordo  
Losange - Triangle Small  
  
3,5-4,8 cm  
2"-2"

Chips of mosaics with particular sizes to be used as a connector between Losange and Triangle Small. Product sold in bulk. Available in all colours of the collection.



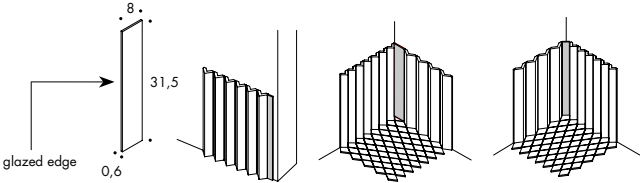
Terminal Small/Large  
  
Small: 25,7 · H 1,5 · 2,8 cm  
10" · H 1" · 2"  
Large: 24,6 · H 1,5 · 2,8 cm  
10" · H 1" · 2"

Closing piece available in all colours of the collection. 1 piece of Terminal Small is modular with 7 pieces of Triangle Small. 1 piece of Terminal Large is modular with 4 pieces of Triangle Large.



Listello di chiusura  
  
8 · 31,5 · 0,6 cm  
3" · 12" · 1"

Listello with a glazed edge to be used in the corner as wall closure or as a connector between Triangle (Small and Large) and Losange. Available in all colours of the collection.



## Carré

### Laying and maintenance tips

use	Floor, wall – indoor, outdoor.
installation	For an even, smooth shading effect when laying, alternate material from several different boxes.
recommended adhesive	Adhesive for porcelain stoneware.
recommended joints	2mm joints. Use wedges to fix the caliber differences in work size between tiles.
recommended fillers	Cement-based grout / epoxy grout Grout 1 m2 at a time and wash thoroughly with clean water. Remove all traces of grout carefully before it dries completely.
cleaning at the end of installation	CEMENT-BASED GROUT: Buffered acid (e.g. DETERDEK PRO by FILA, or similar). Wet the floor with water, dilute the product 1:5 with water and pour it on the floor. Wait for 2 or 3 minutes then use a white scotch brite pad and rinse well with clean water. EPOXY GROUT: Alkaline detergent (e.g. FILA CR10 by FILA). FILA CR10: apply pure, wait for 30 minutes then use a green scotch brite pad. SILICONE: Solvent for silicone (e.g. FILA ZERO SIL). Pour it straight onto the stain, wait for 20 minutes and remove the mark using scotch brite. PAINT: Can usually be removed using water, but if resin-based paints or particular enamels have been used, it is best to ask the manufacturer which solvent is most suitable. RUST: stain remover es. FILA NO RUST. Apply the product onto the stain, leave for 15 minutes, remove the residue and rinse thoroughly.
general cleaning (installed tiles)	You are recommended to use ordinary neutral detergent diluted in water. Avoid using acid or alkaline products, waxes and/or impregnants. During ordinary cleaning it is recommended to use extremely abrasive items (such as scourers and iron or steel sponges) as little as possible. This recommendation must be adhered to rigorously in the case of tiles with a glossy surface finishing as they are more susceptible to the risk of scuffs, scratches and loss of shine, etc. In the event of heavy dirt or particularly textured surfaces, use an alkaline detergent and rinse after washing. For large surfaces, the use of a floor washing machine is recommended. During every-day cleaning procedures, it is necessary to remember that certain types of dirt (dust, sand) increase the abrasive effect of foot-traffic. Therefore we recommend that you avoid bringing in this type of dirt, which comes in from the outside, by placing a door-mat at the entrance.
calibers (real size)	40 cm x 40 cm -> 397 mm x 397 mm

# Losange

## Laying and maintenance tips

use	Floor, wall – indoor, outdoor.
installation	Lay on perfectly flat, dry walls
recommended adhesive	NON-RAPID-DRYING adhesive for porcelain stoneware to make it easier to fix the sheets.
recommended joints	Place the sheets with the same joint as within the sheet.
recommended fillers	CEMENT-BASED GROUT: wash thoroughly with clean water. Remove all traces of grout carefully before it dries completely. EPOXY GROUT: wash thoroughly with clean water. Remove all traces of grout carefully before it dries completely.
cleaning at the end of installation	CEMENT-BASED GROUT: Buffered acid (e.g. DETERDEK PRO by FILA, or similar). Wet the floor with water, dilute the product 1:5 with water and pour it on the floor. Wait for 2 or 3 minutes then use a white scotch brite pad and rinse well with clean water. EPOXY GROUT: Alkaline detergent (e.g. FILA CR10 by FILA). FILA CR10: apply pure, wait for 30 minutes then use a green scotch brite pad. SILICONE: Solvent for silicone (e.g. FILA ZERO SIL.). Pour it straight onto the stain, wait for 20 minutes and remove the mark using scotch brite. PAINT: Can usually be removed using water, but if resin-based paints or particular enamels have been used, it is best to ask the manufacturer which solvent is most suitable. RUST: stain remover es. FILA NO RUST. Apply the product onto the stain, leave for 15 minutes, remove the residue and rinse thoroughly.
general cleaning (installed tiles)	You are recommended to use ordinary neutral detergent diluted in water. Avoid using acid or alkaline products, waxes and/or impregnants. During ordinary cleaning it is recommended to use extremely abrasive items (such as scourers and iron or steel sponges) as little as possible. This recommendation must be adhered to rigorously in the case of tiles with a glossy surface finishing as they are more susceptible to the risk of scuffs, scratches and loss of shine, etc. In the event of heavy dirt or particularly textured surfaces, use an alkaline detergent and rinse after washing. For large surfaces, the use of a floor washing machine is recommended. During every-day cleaning procedures, it is necessary to remember that certain types of dirt (dust, sand) increase the abrasive effect of foot-traffic. Therefore we recommend that you avoid bringing in this type of dirt, which comes in from the outside, by placing a door-mat at the entrance.
calibers (real size)	–

# Triangle

## Laying and maintenance tips

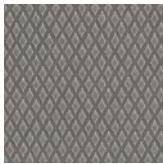
use	Wall – indoor, outdoor.
installation	Lay on perfectly flat, dry walls.
recommended adhesive	NON-RAPID-DRYING adhesive for porcelain stoneware to make it easier to fix the sheets.
recommended joints	Place the sheets with the same joint as within the sheet.
recommended fillers	CEMENT-BASED GROUT: Grout 0.5 m2 at a time and wash thoroughly with clean water. Remove all traces of grout carefully before it dries completely. EPOXY GROUT: Grout 0.5 m2 at a time and wash thoroughly with clean water. Remove all traces of grout carefully before it dries completely.
cleaning at the end of installation	CEMENT-BASED GROUT: Buffered acid (e.g. DETERDEK PRO by FILA, or similar). Wet the floor with water, dilute the product 1:5 with water and pour it on the floor. Wait for 2 or 3 minutes then use a white scotch brite pad and rinse well with clean water. EPOXY GROUT: Alkaline detergent (e.g. FILA CR10 by FILA). FILA CR10: apply pure, wait for 30 minutes then use a green scotch brite pad. SILICONE: Solvent for silicone (e.g. FILA ZERO SIL.). Pour it straight onto the stain, wait for 20 minutes and remove the mark using scotch brite. PAINT: Can usually be removed using water, but if resin-based paints or particular enamels have been used, it is best to ask the manufacturer which solvent is most suitable. RUST: stain remover es. FILA NO RUST. Apply the product onto the stain, leave for 15 minutes, remove the residue and rinse thoroughly.
general cleaning (installed tiles)	You are recommended to use ordinary neutral detergent diluted in water. Avoid using acid or alkaline products, waxes and/or impregnants. During ordinary cleaning it is recommended to use extremely abrasive items (such as scourers and iron or steel sponges) as little as possible. This recommendation must be adhered to rigorously in the case of tiles with a glossy surface finishing as they are more susceptible to the risk of scuffs, scratches and loss of shine, etc. In the event of heavy dirt or particularly textured surfaces, use an alkaline detergent and rinse after washing. For large surfaces, the use of a floor washing machine is recommended. During every-day cleaning procedures, it is necessary to remember that certain types of dirt (dust, sand) increase the abrasive effect of foot-traffic. Therefore we recommend that you avoid bringing in this type of dirt, which comes in from the outside, by placing a door-mat at the entrance.
calibers (real size)	–

Colors

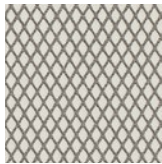
CARRÉ



Carré Uni White



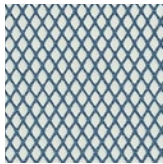
Carré Uni Grey



Carré Light Grey



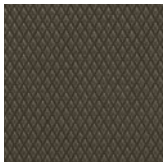
Carré Uni Blue



Carré Light Blue



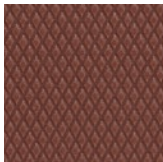
skirting Carré Uni  
3,8-40 cm (2"-16")  
White, Grey, Blue,  
Green, Red



Carré Uni Green



Carré Light Green

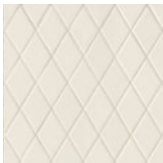


Carré Uni Red

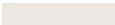


Carré Light Red

LOSANGE



Losange White



grout: calce 01



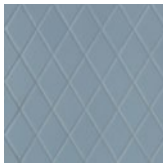
Losange Grey



grout: cemento 60



Losange White



Losange Blue



grout: Kerakoll Lissoni 14



Losange White



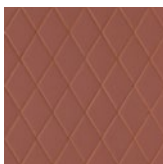
Losange Green



grout: piombo 53



Losange White



Losange Red



grout: Kerakoll Lissoni 35



Losange White

# Carré

## Technical features

STANDARD	FEATURES	VALUE REQUIRED	ROMBINI CARRÉ
ISO 10545/3	water absorption	< 0,5%	< 0,5%
ASTM C373		< 0,5%	< 0,5%
ISO 10545/4	breaking strenght	Sp ≥ 7,5 min 1.300 N	resistant
ISO 10545/9	resistance to thermal shock	no visible alteration	resistant
ASTM C484		no samples must show visible defects	unaffected
ISO 10545/12	frost resistance	no visible alteration	resistant
ASTM C1026		unaffected	unaffected
ISO 10545/13	resistance to chemical attacks	no visible alteration	GA-GLA
ASTM C650			GA-GLA
ISO 10545/14	stains resistance	minimum 3	5
DIN 51130-04	slip resistance	medium values 6÷10° R9 10÷19° R10 19÷27° R11 27÷35° R12 > 35° R13	R10
DIN 51097		–	–
DCOF		> 0,42	0,54 Uni 0,74 Light
Pendulum AS/NSZ 4586-13			26 P2 Light 22 P1 Uni
Pendulum ENV 1263:2006			47 P3 Light 21 P1 Uni
LEED CERTIFICATION 4.1			6% recycled material
Robinson Test		–	
LRV ASTM C609-07			73 / 73,2 / 73,1
VOC Emission			available upon request
Declaration of Contents			available upon request
EPD			available upon request
SDS			available upon request
BPD3			available upon request
HPD			available upon request
MANAGEMENT SYSTEM CERTIFICATE ISO 9001: 2004			

# Losange

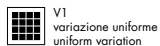
## Technical features

STANDARD	FEATURES	VALUE REQUIRED	ROMBINI LOSANGE
ISO 10545/3	water absorption	< 0,5%	< 0,5%
ASTM C373		< 0,5%	< 0,5%
ISO 10545/4	breaking strength	Sp<7,5 min 700	in conformity
ISO 10545/6	resistance to deep abrasion	<175 mm3	in conformity
ISO 10545/9	resistance to thermal shock	no visible alteration	resistant
ASTM C484		no samples must show visible defects	unaffected
ISO 10545/12	frost resistance	no visible alteration	resistant
ASTM C1026		unaffected	unaffected
ISO 10545/13	resistance to chemical attacks	no visible alteration	resistant
ASTM C650			unaffected
ISO 10545/14	stains resistance	minimum 3	5
DIN 51130-04	slip resistance	medium values 6÷10° R9 10÷19° R10 19÷27° R11 27÷35° R12 > 35° R13	R10
VOC Emission			available upon request
Declaration of Contents			available upon request
EPD			available upon request
SDS			available upon request
BPD3			available upon request
HPD			available upon request

# Triangle

## Technical features

STANDARD	FEATURES	VALUE REQUIRED	ROMBINI TRIANGLE
ISO 10545/3	water absorption	3% < x < 6%	in conformity
ISO 10545/9	thermal shock resistance	no alteration	no alteration
ISO 10545/13	acids and alkalis resistance	min B	A
ISO 10545/14	stains resistance	class 3	class 5
LEED 4.1		–	24% recycled material
Robinson Test		–	
VOC Emission			
Declaration of Contents			
SDS			
BPD3			
HPD			



## Packing

SIZE	PCS-SQM	PCS-BOX	SQM-BOX	BOX-PAL	KG-BOX	KG-PAL	SQM-PAL
carré 40-40 cm	6,25	8	1,28	48	28,12	1350	61,44
skirting 3,8-40 cm	–	10	4,00 ml	–	3,25	–	–
losange 27,5-25,7 cm	14,00	7	0,50	90	5,00	450	45,00
raccordo losange - triangle small 3,5-4,8 cm	–	–	–	–	–	–	–
triangle small su rete/ on net 18,6-31,5 cm	17	9	0,53	63	11,00	693	33,40
triangle large su rete/ on net 18,6-31,5 cm	17	9	0,53	63	10,00	630	33,40
terminal small	–	10	2,57 ml	–	3,25	–	–
terminal large	–	10	2,46 ml	–	3,25	–	–
listello di chiusura 8-31,5-0,6 cm	–	–	–	–	–	–	–