

CARQIS

TECHNICAL SHEET
Update 04/07/2022



MARIUS AURENTI

CARQIS TILES

High performance concrete tile dyed in the mass

This concrete tile lead you the Mediterranean universe of Marius Aurenti. Carqis are hand moulded in France, they are unique and sprinkled of thousands of little holes , and in wonderful small sizes.
Concrete and mineral pigmentation in the mass , they can be left raw or protected by a mate or glossy varnish.

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| <p>USE Decorative tiles for interior use. Straight fitting or in chevron.</p> <p>MATERIAL High Performance Concrete (BHP)</p> <p>SIZES 15 x 2,4 cm (+/- 1 mm) 15 x 5 cm (+/- 1 mm)</p> <p>THICKNESS 1 cm (+/- 1 mm)</p> <p>COLORS 20 colors available (refer to IRIS Marius Aurenti color chart)</p> <p>FINISHING Raw, Mat (High performance varnish), Glossy (High performance varnish)</p> | <p>PACKAGING Cardboard of 60 tiles Carqis - size 15 x 5 cm - Around 0,45 m² . or of 120 tiles Carqis - size 15 x 2,4 cm - Around 0,45 m²</p> <p>Cardboard size : 21 x 15,5 x 15,5 cm height</p> <p>Total weight /cardboard: around 8,8 kg</p> <p>MAINTENANCE Use a cleaner with a neutral Ph from Marius Aurenti.</p> <p>TECHNICAL CHARACTERISTICS AND PERFORMANCE</p> <p>Product finishing: mat or glossy</p> <p>Mechanical features of the High Performance Concrete at 28 days : Bending strength (Rf) – prism 4x4x16 cm : 11MPa Compressive strength (Rc) – prism 4x4x16cm : 75 MPa</p> |
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Carqis tiles fitting must be done in compliance with DTU 52.2 standards in force. If substrates are not complying with NF DTU 52.2 P1-1-1 standards, the company must advise the project manager.

The cleaning of the premises before fitting the carqis tiles must be done and in charge of the company responsible of the previous works and does not concern the fitter (see NF P03-001 standards).

PREMISES CONCERNED:

Dry premises or slightly humid (EA) and premises mildly humid (EB).

SUITABLE SUBSTRATES

Interior walls :

Substrates concerned :

- Decorative slab in plaster not damped proof (carton sided) and damped proof.
- Partition in plaster tiles
- Walls made with raw aerated concrete blocks
- Plaster coatings for walls and masonry walls
- Cement coatings on concrete walls or masonry walls
- Concrete walls or precast concrete panels

Old or new substrates must be sanded mechanically and then suck mechanically .

Substrates must be sound , clean , without any crack, cohesive (any superficial scratch with metallic tool must not provoke any dust, grain, flake ; breaking point exertion perpendicular traction > 0,5 MPa generally), dry, flat(inner arrow inferior to 5 mm under 2 meters ruler and 1mm under 20 cm small ruler), normally porous (between 1 and 5 minutes at the water drop test) , clean (without any grease, dust and other non adhesive parts), according to the DTU standards in force.

CONDITIONS OF IMPLEMENTATION

Selecting a gluing product depends on the criteria determined according to the standard characteristics and on the attributes declared by the manufacturer, in relation with the type of use of the premises and the exposure to a substrate with tiles .

Gluing application conditions must be respected.

Referring to the technical sheet of the glue to be used is a compulsory requirement.

The gluing must not be done on a frozen substrate.

STORAGE AND SAFETY

Store in its original packaging and not open, sheltered from the weather, the sun, the frost , in a temperate premise (+15°C minimum)

For further information concerning safety, please refer to the Safety Data sheet.

| | |
|-----------------------|-----------------|
| AMBIENT TEMPERATURE | >+ 5°C et <35°C |
| SUBSTRATE TEMPERATURE | >+5°C et <30°C |

TOOLS REQUIREMENT

- Tiles cutting tools: dry cut systems, diamond hole saws, wire cutter or other adequate cutting tools.
- Fitting tools: Glue for tile, notched trowel, cross pieces to ease the adjustment of the ended works to be flat.

TILES CUTTING

The planned lay out determines the location of the tiles cutting. Cutting is made with tools mentioned previously Tools requirements. Focus on circular cuts and on the extremity of the tiles.

GLUING

In order to avoid any adhesive defects , the rear side of the CARQIS tiles must be free of dust.

Mortier-colle C2 (1) (mortar glue) is applied on the substrate with a trowel (single gluing), then the product is spread with an adequate notched trowel for the product. The surface which is glued in one time must not exceed the tolerance time of the glue at the ambient air which is 10 to 20 minutes.

The consumption and the gluing operating manner must respect the following rules (Ref to DTU 52.2):

| | CONSUMPTION OF MORTIER-COLLE C2 (1) (MORTAR GLUE) | TYPE OF TROWEL |
|--------------------------|--|--------------------------------------|
| CARQIS TILES 15 X 2,4 CM | 1,5 kg powder /m ² | U3 (Square tines 3 mm x 3 mm x 3 mm) |
| CARQIS TILES 15 X 5 CM | 3,5 kg powder /m ² | U6 (square tines 6 mm x 6 mm x 6 mm) |

(1) Warning : Only one adhesive (paste) D1 or D2 is required for glue fitting :

-On a wall with plaster tiles (refer to S8)
-On plaster coatings (refer to S4 and S5)
Adhesive consumption : 3 kg/m² (trowel V6 – triangle tines 6mm side)

The glue fitting on damped proof plaster (refer to S9 and S10) is not possible with mortar glue and adhesive (paste).

On concrete substrate , only a mortier-colle C2 (mortar glue) is required.

If 2 different dimensions of Carqis tiles are used for the same works consider the highest consumption of the mortar glue and the corresponding trowel.

Without any specific requirements on trowels , please refer to the attributes and the characteristics declared by the manufacturer of the mortier-colle C2 (mortar glue) to make your choice.

TILES FITTING
The ceramic tiles are placed on the substrate. Potential mortar glue coming over by excess have to be removed the seams must be clear.
The ceramic tiles must be fit correctly because once placed on the substrate , it is difficult to remove them.

WIDTH OF SEAMS
Fitting without seam is not required. This document is only dealing with seams aligned or shifted. The minimum width of seams is 2 mm.

SEAMS IMPLEMENTATION
With a sealing mortar with normal hardening , the sealing has to be done the day after and with a temperature from 15 °C to 20 °C. With lower temperatures than 15°C (cold and /or humid weather), the lead time can be longer.

CARQIS TILES CLEANING AFTER SEALING
The cleaning consists in removing all wastes and residues caused by the installation . Cleaning must be done with water after the sealing operation , before the sealing mortar begins set.

WALL /CEILING AND WALL/ FLOOR JUNCTION

Not any Carqis tile must rest against the lower part of the ceiling or a finished or raw floor.

JUNCTION WITH SANITARY APPLIANCES AND WALL CROSSINGS

The junction with sanitary appliances and the wall and as well wall crossings must be done before fitting the Carqis tiles in order to avoid any water ingress (ref NF DTU 60.1). After the fitting , the left space of 5 mm between the edge of the sanitary appliance and the first rank of tiles has to be fulfil with a sanitary filler in compliance with NF EN 15651-3 standards. A profile can be used to replace the filler.

INTERNAL OR EXTERNAL ANGLES

Accessories or profiles such as the one mentioned in NF DTU 52.2 P1-2 standards can be used for the mechanical protection of the edges of the coating elements, junction of the coating element with other materials and the angles to be achieved with tiled surfaces.

Those profiles are for the fitting with glue which thickness must fit with the thickness of the coating element. T gets lost during the Carqis tiles fitting in the mortier-colle C2.(Mortar glue C2)

Those profiles can be made with ferrous metal(stainless steel for example) or non ferrous (aluminium or brass for example) or with plastic material of different shapes and colours.

SEPARATING SEAMS , PERIPHERAL SEAL AND EXPANSION JOINT

It is a space fully dedicated, filled in during the finishing works with a putty in compliance with NF EN ISO 11600 standards, that does not stain the ceramic tiles . A metallic profile or PVC profile with compressible trim can be used . They are placed every 60 m² approximately (it is corresponding to horizontal seams at last every 6m and to vertical seams every 10 m).

For humid or collective premises , a 25E putty « sanitary » is used.

Due to the material and works specificities , it is required to measure the risk with previous validation tests in adequation with the project. Those tests have to be done , in the approval of the factory the supplier of the putty and according to one of the following standards ISO 16938-1 or 16938-2.

POLES AND CURVED SURFACES

The maximum width of the Carqis tiles to be used depends on the bending radius R of the substrate and the following table:

| BENDING RADIUS (IN CM) | 15 | 60 | 140 | 250 |
|------------------------|----|----|-----|-----|
| MAXIMUM WIDTH (IN CM) | 5 | 10 | 15 | 20 |

On poles or curved surfaces , the Carqis tiles must be fitted only with double gluing with a fully consumption of glue product to ensure a complete bath , without air on the perimeter of the tile.

FLATNESS

Tolerances of the finished coating are equal to the ones of the substrate, with an addition of the tile tolerance . A difference between the edges of 2 adjacent elements is measured perpendicularly to the gluing scheme. It is caused by the tolerances of the substrate and the manufacturing of the elements. This difference can be acceptable if it is inferior to the third of the width of the seal between the tiles, in addition with the tolerance of the tile.

FINAL ASPECT

The final aspect of the coating can be measure at an approximate 1,65 m distance, with a non low angled lighting (angle between the coating and the incident light natural or artificial superior to 45°).

SEAMS ALIGNMENT

A 2 m ruler must not show any difference of alignment superior to 2 mm to which the acceptable tolerance on the dimensions of the Carqis tiles is added.

START LEAD TIME

The premise can be used the day after the seals finish. Anyway, it is recommended to refer to the requirements on the technical sheets of the manufacturer of the sealing mortar.



Hand made, the Carqis tiles are unique products.

Despite the care devoted to manufacturing , aspects and colours may vary.

Carqis tiles have a mat or glossy surface protection finish.

Despite the high performance and specifics of the protection , it is not insensitive to long time and often exposure to chemical products or stagnant water, etc.. that may be aggressive for the Carqis tiles.

Avoid the long or permanent contact with aggressive chemical products like acids, bases, vinegar, solvents, bleach, hydroalcoholic gel...

Splashes of hydroalcoholic gel on the Carqis tiles surface can provide irreversible damages. It is required to fully protect the surfaces that may be exposed.

It is not recommended to use Carqis tiles in case of contact with hot oils (as for kitchen splashback).



MARIUS AURENTI

For 40 years, we continue innovating to improve the purity of our materials and the feeling that they provide.

A mineral and plant aesthetic , close to Nature for which our works pay tribute to and our environmental commitment is fully engaged.

MA's , with its trainings and support, is at skilled French crafts sides that every day in our workshops as well as on sites strive to make each place unique, nice and timeless.



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