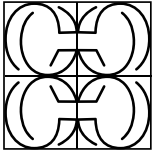




**CAROCIM**





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## Laying and treatment

Before choosing the cement tiles for your project, you please keep in mind that cement tiles are handmade piece by piece. Each tile is unique, which implies that there may be nuances from one box to another or even in the same box.

Its laying is not difficult, but requires a careful work respecting the order of the different steps detailed below.

To have tiles settled in perfect conditions, the laying must be done in a the last trade of construction or renovation, after all teams have completed their work.

### Step 1, Layout:

Make a very precise layout and settle the tiles dry to blend the shades well. The support must be perfectly dry and well graded.

For a floor installation, you must leave 20 mm of reserve; 16 mm for the tile and 4 mm for the adhesive.

The tiles with dominant black color must be washed before the settling to avoid the bleeding of the black color to the lighter colored parts. The washing of the tiles is done with water, a neutral soap without oil or a scouring cream and a Scotch-brite sponge.

Cutting is mainly done with a water saw (full diamond disk).

### Step 2, gluing:

Evenly apply the adhesive to the floor subsurface, using a trowel. Then, cover the entire back with adhesive. Do not use an adhesive too flexible. Always brush the adhesive in the same direction, otherwise air will be trapped and the tiles may lift up. Lay the tiles, and press them into place with the palm of your hand, ensuring that they are perfectly level with each other. (Don't beat the tiles with a tool - such as a rubber hammer - or microcracks may appear over time.) Be sure that the tiles are perfectly level throughout the installation. If any of the tiles are not level, remove them and backfill with a small amount of mortar to make them level. Use the 15mm tile spacers to separate each tile.

### Step 3, cleaning:

It is essential to clean the tiles as they are laid (and

not at the end of the site) with a sponge, water and a ph7 neutral soap without oil or a scouring cream. Use the scrubbing side of the Scotch-brite sponge to smooth out the roughness of the tile. For large surfaces, use a monobrush with a hard Scotch-brite disc (black disc) and a wet vacuum to facilitate this operation. Repeat the operation until you obtain a clean surface, and smooth on touch. Since cement tiles are unfired, it is normal and necessary that the tile disgorges (producing a foam of the color of the tile). If you pose your tiles checkerboard style, ensure to rinse the foam as it is produced so that the colors do not rub off on each other. Noteworthy the black upon the white. This operation must absolutely precede the treatment.

Never use acid (even diluted) or bleach on cement tiles. To get rid of construction marks and white streaks, there is only one remedy: rub the tiles with Scotch-brite, water and neutral soap (without oil) or with auto body sandpaper (never dry). If there are still a few traces, they will fade by themselves as you wash them.

### Step 4, treatment:

Once the cleaning is done, the tiles must be perfectly dry before being treated with the first coat of waterproof sealer, pore filler or resin.

To test if the cement tile is dry, place a sheet of white paper on the tiles overnight, in the morning, if it curls, it is still wet.

We recommend the FILAWET treatment product, which we can supply. It is not a varnish but an impregnating agent, designed to penetrate the

colored layer, which will not leave on the floor a shiny finish. It must be applied a thin layer with a white cloth.

A resin can be used instead of FILAWET for walk-in showers and exterior walls. It must be applied with a brush roll to create a protective film (stain and UV resistant) on the surface of the tile and before grouting, to prevent the joint from penetrating the tile and dirtying it. Let the tiles dry for at least one day.

#### **Step 5, grouting:**

With the support of 1.5 mm spacers, make well filled joints with a quality product. Use light gray or white grout in all cases. Do not use colored grout for cement tiles because the pigments could diffuse into the tiles and stain them irreversibly. Clean the surface of the tiles thoroughly to remove any residue of grout paste, scrub with a sponge, water and a pH7 neutral oil-free soap, rinse, finish by wiping with a chamois or cloth (to avoid drips) and let dry.

#### **Step 6, treatment:**

Apply the second coat of pore filler with a white cloth or resin with a brush roller to protect the tiles and joints.

To protect the tiles during the work, avoid covering them with plastic that will trap moisture and cause stains, use cardboard protection instead.

#### **Step 7, finishing (optional):**

For rooms: kitchen, living room, dining room, entrance, etc... it is possible to apply a light coat of FILASATIN natural colorless wax with a white cloth that will give a satin effect and increased protection. (Do not polish).

The wax is not suitable for wet rooms as it makes the floor slippery when wet.

#### **MAINTENANCE :**

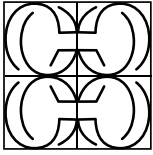
On daily bases cement tiles should be washed with PH7 neutral oil-free soap diluted in water and fully rinsed with clear water which will naturally produce the true sheen to the surface. Washing will gradually remove the treatment applied to the benefit of the natural patina.

Reminder: Never use acidic products, even diluted, such as vinegar, anti-limescale, etc. or pure bleach on cement tiles.

Install a cutting board or stone on the kitchen bench. (cement tiles are not sustainable to resist knives frictions)

The treatment should not be repeated, except in the case where a very abrasive cleaning has been performed and the impermeability of the tiles has been compromised.

Please note that the installation and treatment of the tiles are not under our control, Carocim cannot be held responsible for any sort of issues.



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## MANUFACTURING

**What is cement tile?** It is an unfired, cement-bonded tile handmade, one at a time. Composed of 3 layers that are mechanically compressed and manufactured upside down in a steel or cooper mold. The metal mold is also handmade following the specifications of a drawing. The first layer is composed by a liquid mixture of high-quality white cement, marble powder, fine sand, and natural mineral color pigments. The second layer is a mix of dry cement and very fine sand that will fix the colored layer by absorption. The third layer or the base is made of grey cement and a mixture of sand of larger grading. Once the mold is fulfilled with these 3 layers, it goes under the electric-powered hydraulic presse at a minimum pressure of 130 bar. After demolding and a period of pre-setting of the cement, the cement tile is soaked in water and then left to dry for 3 weeks.

**Short History of the cement tiles** - The first hydraulic presses were designed around 1850 in Viviers sur le Rhône, next to the Lafarge cement works. The technical and aesthetic qualities of this new flooring encouraged its development. 1 million m<sup>2</sup> were produced in Avignon in 1900. CAROCIM was born in APT in 1986.

**What are the thicknesses of cement tiles?** Cement tiles exist in 16mm thickness for the floor (in 18 mm for the 25x25), and in 10mm thickness for the walls ONLY. Cement tiles in 16mm can also be used for walls as well.

What is the weight per m<sup>2</sup> of cement tiles?

Floor tiles in 16mm thickness: 33kg/m<sup>2</sup>

Wall tiles in 10mm thickness: 23kg/m<sup>2</sup>

**Can we create custom-made tiles?** Yes, we can reproduce an existing model. Just send us photo to [ventes@carocim.com](mailto:ventes@carocim.com) or a sample tile to ensure the feasibility of the project. The minimum order is a box (12 or 18 pieces depending on its thickness). The price per m<sup>2</sup> will be increased of 10% to its reference. The price of the manufacturing of the steel/cooper

## FAQ - FREQUENTLY ASKED QUESTIONS

mold (375 euros HT) must be added. The delivery time frame of the mold and the tiles is 8 to 10 weeks.

**Can the colors of the cement tiles be changed?**

Yes, we can change the colors of an existing model by choosing a color among our colors palette. The minimum order quantity is a box (12 or 18 pieces depending on its thickness), to which it will be increased 10% to its price reference

## LAYING AND MAINTENANCE

**Can cement tiles be used in a bathroom/shower room?**

Yes, as long as the right protection is applied. It is recommended to use a waterproof resin sealer on the tiles to increase the resistance to water projections. We recommend RESIPROTECT\*. Bathroom floor and walls can be treated with a solvent-based penetrating sealer excellent for reviving the colors and protecting it from watery and oily stains. We recommend STONEPLUS FROM FILAWET\*. This product is well suited for cement tiles, it penetrates into the colored layer and does not modify the colors, it has to be applied with a white cotton cloth.

**Can cement tiles be used as a kitchen splashback?**

Yes, the treatment will be the same as for a shower. You can treat it with a waterproof resin sealer on the tiles to increase the resistance to water projections. We recommend RESIPROTECT\*.

**Are they heat resistant behind a stove?**

Yes, it can be used behind a stove, the treatment will be the same as for floors or walls. You can treat it with an impregnator, a reviving protector based on solvent-based resin, suitable for cement tiles, it penetrates the colored layer and does not modify the colors, it must be applied with a white cotton cloth. This sealer it is not film-forming. It protects against watery and oily dirt. We recommend STONEPLUS FROM FILAWET\*.

**Can cement tiles be used outdoors?**

Yes, a slope of 1 cm per meter must be respected, so that the water runs off easily and does not stagnate and therefore

the risk to freeze is limited.

The treatment will be carried out with a sealer applied with a brush roll, which will provide resistance to weather conditions, UV and heat variations. We recommend RESIPROTECT\*.

Please note that the blue, green and violet pigments are sensitive to UV rays and they tend to fade in the sun.

**Are cement tiles compatible with underfloor heating?** Yes, cement tiles are compatible with underfloor heating according to the heating engineer's instructions. It is necessary that the heating engineer's tests have been done before installation and that a flex adhesive is used.

**Can cement tiles be laid over wooden flooring?**

To lay on a wooden floor, it must be perfectly fixed and well maintained on the floor. It is necessary to do grading and a layer of uncoupling.

**Can cement tiles be laid over existing tiles?** If the existing flooring is solid, clean and perfectly flat the installation is not a problem. The surface will need to be degreased and if the existing tiles are slick, it will be necessary to mechanically abrade the floor (or wall) or to use a primer to improve adherence.

**Does the installation of cement tiles need to be done by a professional?** It is not necessary to hire a professional to lay cement tiles, but it is necessary to follow instructions (refer to our laying procedures).

**What grout should be used for cement tile?** We recommend using a grey grouting compound, (unless you only have white tiles) with 1.5mm crosses. Colored grout must not be used.

**Should the tiles be laid on a liquid screed or a dry slab?** The slab must be perfectly dry before installing the cement tiles.

**How should the tiles be cut?** Tiles are easily cut with a water saw.

**Is special treatment required after the cement tiles have been laid?** Yes. Once laid, the cement tile must be thoroughly cleaned using a liquid soap without oil and with a PH value 7 (neutral). Rinse it well as you go along. Once it is clean and dry, you must treat it with a solvent-based penetrating sealer excellent for reviving the colors and protecting it from watery and oily stains. We recommend STONEPLUS FROM FILAWET\*, well suited for cement tiles, it penetrates into the colored layer and does not modify the colors; this product must be applied with a white

cotton to avoid film-forming. It protects against watery and oily stains. Then the maintenance will be done in the classical way, using a PH7 neutral soap.

**What is the daily maintenance for cement tiles?**

The maintenance should be done in a conventional way, using a liquid soap without oil and with a PH value 7 (neutral).

**What products should be avoided on cement tiles?**

Never use pure acid, pure bleach, anti-lime scale spray or white vinegar.

## ORDER

**Are all tiles in stock?** Mainly yes.

**How many offcuts do we have to count?** Cutoff margins are in between 5% to 10% more.

**What is the minimum order?** As all our tiles are sold by unit, there is no minimum order.

**Do you deliver everywhere in France and abroad?**

Yes we do, you can estimate your delivery costs for France and many European countries once your shopping cart is completed on our shop on line [www.shop-carocim.com](http://www.shop-carocim.com), simply by indicating your postal code.

For other destinations, please contact us by mail at our commercial services [ventes@carocim.com](mailto:ventes@carocim.com)

**How are the shipping costs calculated?** Delivery costs are based on destinations and the weight of the order. You can estimate your costs for France, and most European countries once your shopping cart on [www.shop-carocim.com](http://www.shop-carocim.com) is filled, by simply indicating your postal code. For other destinations, please contact our commercial services [ventes@carocim.com](mailto:ventes@carocim.com)

**What is the delivery time?** If the items are in stock, and depending on the quantity ordered, delivery can be made by chronopost (in 24 to 48 hours) or by a lorry/truck (about 8 to 12 days) who will contact you for the delivery appointment.

**Can I reserve tiles and have them delivered later?**

Yes, when you order online on [www.shop-carocim.com](http://www.shop-carocim.com), please fill in «comments» the desired delivery date.

**Can I pick up the tiles at the Carocim depot in Aix-en-Provence?**

Yes, of course, you just have to indicate at the end of your shopping cart, «pick-up at the warehouse» and choose the date for the pick up.

\* Find your products on [www.shop-carocim.com/impregnants-c102x3639375](http://www.shop-carocim.com/impregnants-c102x3639375)

## • CAROCIM FRANCE - GENERAL TERMS AND CONDITIONS OF SALE •

### 1- PREAMBLE :

1.1 - The fact of placing an order implies full and unconditional acceptance of these general conditions of sale by the purchaser.

No particular condition shall prevail on the general conditions of sale, except formal and written acceptance of the seller. Any condition of a contrary nature raised in objection by the purchaser, except in the case of a formal written acceptance of the seller, would be void by the seller whenever the moment he may have been informed of the condition.

### 2- ORDERS :

2.1 - All orders are firm and cannot be cancelled for any reason whatsoever by the sole will of the buyer.

2.2 - The materials or products sold comply with the conditions and specifications set out in the order or delivery form and the technical specifications in the catalog received or viewed on the website [www.carocim.com](http://www.carocim.com).

### 3- DELIVERIES :

3.1 - Deliveries are carried out, in principle, on the date indicated. Please take notice that these dates are only indicative, priority is given to oldest orders and delays shall never be attributed to the seller.

3.2 - The purchaser shall remain liable for any damage to the goods (in particular loss or damage) during transport or after delivery once the goods have left CAROCIM France's warehouses.

3.3 - It is the responsibility of the purchaser to exercise any claims against the carriers in accordance with the provisions of articles 105 and 106 of the French Commercial Code.

3.4 - Claims for defects or non-compliance of the product delivered with the ordered goods or packing list\* must be specified with the regulations in force to the seller by certified letter with acknowledgement of delivery within eight days following the reception of these goods.

3.5 - Return of goods will not be accepted, unless expressly authorized by CAROCIM France. In this case, the goods must be shipped carriage paid.

3.6 - In the event of refusal to take delivery of the goods ordered, CAROCIM France may dispose of them after notification by registered letter with acknowledgement of receipt that has remained without effect. In case of CAROCIM France shall retain, when applicable, the deposit payment as compensation without prejudice to any other damages.

3.7 - Any product returned without the agreement of the seller or damaged will be held at the disposal of the purchaser and will not give rise to any credit note.

3.8 - It is the responsibility of the customer, in the event of damage to the goods delivered or missing items, to mention this on the consignment note and to have it confirmed by the carrier and to make all necessary reservations to the carrier by registered letter with acknowledgement of receipt within three days of receipt in accordance with article L.133-3 of the French Commercial Code.

### 4- RESERVATION OF OWNERSHIP :

4.1 - The goods remain in the ownership of the seller until full payment of the purchase including all related receivables and any penalty fees has been settled.

4.2 - In case of default on payment of a single installment, CAROCIM France may, without any formal notice, simply take back the products or materials that are the subject of the sale.

4.3 - If the goods are damaged or suffered deterioration while in the custody of the buyer, and their for the latter shall suffer all the consequences.

4.4 - CAROCIM France shall also automatically enforce the retention of title clause under the conditions provided for in Articles 65, 66 and 59 of the Act of July 13, as amended by the Act of May 12, 1980, and any subsequent case law.

### 5- LATE PAYMENT :

5.1 - The non-payment of installment automatically leads to the cancellation of payment facilities, and the outstanding balance becomes immediately due and the forfeiture of the terms being acquired immediately for all in progress.

5.2 - In addition, failure to meet the deadlines will result in the application of late payment interest from the first day following the deadline at the legal interest rate plus two points.

5.3 - When the buyer's credit deteriorates, we reserve the right, even after partial shipment of an order, to demand from the buyer the guarantees that we deem appropriate for the proper execution of the commitments made. The refusal to comply with these guarantees gives us the right to cancel all or part of the contract.

### 6- JURISDICTION OF THE COURTS :

6.1 - It is expressly agreed that in the event of any dispute, the Commercial Court of AIX-EN-PROVENCE has sole jurisdiction.

\* Excluding any transport dispute