NEW TERRACOTTA

CEMENT TILES

Technical Guide

2nd Edition 2020

INSTALLATION & MAINTENANCE

Please note these tips are guides only and should be used in addition to the relevant industry standards for encaustic cement tiles. Note that installation may vary from site to site with varying conditions experienced on site. The contractor and specifier should decide if these suggestions are suitable for their application or require further adjustment.

? TILE UNDERSTANDING

Shade Variation

These are hand-crafted products and so there will, of course, be some variations in colour tone and natural character that make them unique. Shade variation is inherent in encaustic cement tiles and certain tiles will show greater variation within their lots.

A TILE PREPARATION

Meticulously plan your layout. The time you take for preparation and placement will greatly impact the finished result.

- Prior to the installation allow tiles to season in their final environment.
- Pre-sort your tiles so you can distribute the range of variation throughout the installation.
- Blending is recommended.
- Inspect each tile deformities that make its use inappropriate for the application intended.
- Both sides of the tiles should be wiped cleaned of any dust before installation.
- The tiles can be cut using a diamond-blade (ideally a water-cooled machine).

OPTIONAL

Before installation, once the tiles are perfectly dust cleaned apply two coats of an impregnating sealant with a wide brush or roller.

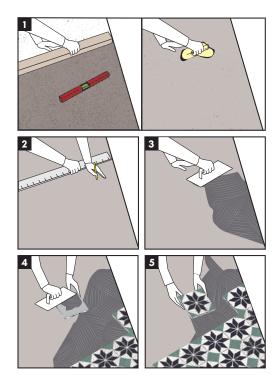
TILE LAYING

Proper substrate preparation and the right choice of adhesives and grouts for the type of tile and specific project conditions are critical for achieving a long-lasting installation.

Laying General Methods:

- 1. Prepare the surface. Cement tiles must be installed on a well leveled, clean and dry surface. Humid subsoil will cause fur deposits on the tile's surface.
- **2.** Determine the layout and mark the surface. For aesthetic and technical optimisation, define starting points and cuttings.
- **3.** Apply the proper tile adhesive. Use a large-toothed trowel to spread the adhesive.
- **4.** Back butter tiles. Apply adhesive on the back of the tile using a large-toothed trowel.
- **5.** Install the tiles. Lay the tiles and press into place using your hands leaving a thin gap (1 or 2 mm) for the joint.

Ensure tiles are completely level throughout the installation, as unevenness cannot be rectified later.



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TILE SURFACE PREPARATION BEFORE SEALING AND GROUTING

Once the adhesive dry, clean the surface by scrubbing it using a diluted solution of alkaline cleaner and rinse with warm water. It will remove any dust and dirt that may have accumulated during the installation process, eliminating as well the thin layer of pigmented dust that can still cover the tiles.

Tiles should then be allowed to set for 24 hours before applying sealant and grout.





TILE SEALING BEFORE GROUTING

An impregnating sealing is an essential step in protecting the beauty and ensuring the longevity of cement tiles, as it accentuates the appearance and helps to protect against fading and staining.

The sealant is a solvent based liquid that limits water and oil penetration. It impregnates the tile, protects it and keeps its natural matt aspect.

Apply with a brush or a roller on a dry and clean surface. This should be applied in successive applications until the tile is fully saturated. Saturation has been achieved when an even layer of sealant is still visible on the surface after 30 minutes.

Do not apply too much. The excess would leave glistening stains on the surface (brush traces).

Always try the sealer on a loose tile before applying it on the entire surface in order to measure the grade of absorption of the tiles.

H TILE GROUTING

It is recommended to use a non-pigmented, flexible, cementitious grout compound suitable for the application of cement tiles. Pigments from the joint might stain the tiles irreversibly.

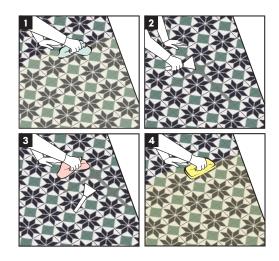
Grouting General Methods:

1. Seal the tiles. Always ensure that surfaces are properly sealed before grouting.

In order to prevent the soiling or staining, a proper sealant must be applied, so that the grout residues do not get deeply adhered to the tiles layer of pigments and these can be removed easily.

- 2. Grout the joints. Fill the gap between the tiles using a spatula, without spreading the grout on tiles.
- 3. Remove excess. Clean the excess grout immediately, using a damp cloth. Do not use chemical cleaners.
- **4.** Clean the floor. Remove any cement residue stains immediately, using a pH neutral cleaner.

Never use cement remover, strong detergents or bleach as these will damage the tiles. Stains or spots can be delicately removed with a scouring pad or fine-grained sandpaper.



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FINISHING AFTER GROUTING

The finishing completes the protection against wear and dirt.

Always apply a final coat of impregnating sealant making sure to cover the grout joints as well.

Further to the above you can also apply a surface wax. This will offer extra protection and give an attractive patina.

For larger surfaces or high traffic floor (bars, restaurants and other public spaces), a special protection and attention on a daily maintenance is recommended. Using a polishing machine may accelerate the process and protect the entire floor evenly.

MAINTENANCE

Keep the surface as free as possible of loose dust and grit with regular vacuuming or sweeping. This will reduce the sandpaper effect of dirt getting compacted into the surface and joints.

Wash the floor using a pH neutral cleaner (ideally biodegradable and environment friendly) to remove the dirt that a vacuum won't pick up and for hygiene purposes.

We strongly recommend avoiding the use of bleach based cleaners, washing-up liquids or any other acid cleaners.

The right choice of materials and installation methods is essential to the sucess of your installation. Some adhesives carry a warning that they may react adversely with certain types of tiles. New Terracotta recommends the using of MAPEI fixing materials and suggests contractors contact a MAPEI specialist for more information about their products.

For typical installations please consider:

PRODUCT	USE	ADHESIVE	GROUT
■ ENCAUSTIC CEMENT TILES	Interior Floors + Walls Interior Wet Areas Exterior Floors + Walls	MAPEI Keraflex Extra S1	MAPEI Ultracolor Plus

TREATMENT ANCILLARY PRODUCT

The finest New Terracotta surfaces can be kept at their beautiful best if protected carefully. New Terracotta recommends the using of FILA products and suggests clients contact a cleaning specialist for a professional consultancy.

For typical treatments please consider:

PRODUCT	USE	PROTECTOR	FINISHER
■ ENCAUSTIC CEMENT TILES	Interior Floors + Walls	FILA Hydrorep coverage 20 m² per liter + FILA Filafob coverage 10 m² per liter	FILA Matt / FILA Satin coverage 20 m² per liter
	Interior Wet Areas		N/A
	Exterior Floors + Walls		N/A

The New Terracotta technical support team is available to assist you in determining the best practice for your installation. For more information contact us.

Technical Features	Standards	Test Results	Compliance
Determination of water absorption	EN ISO 10545-3-97	6,4 %	YES
Determination of flexion resistance and breaking load	EN ISO 10545-4-97	R = 7,6 N/mm ² (distance between supports = 180mm)	YES
Determination of chemical resistance	EN ISO 10545-13-98	Class UA, ULA, UHA	YES
Determination of abrasion resistance	Wide Disk Method	Print Length 28,0	YES
Determination of slip resistance	UNE EN 12633	53 USRV	YES

NWT Cement Tiles, Cement Portland Class 3. Test report, ELABORA - Agencia para la Calidad en la Construcción, S.L.

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