



A successful installation of Barcelona Cement Tiles is highly affected by the installation process. Tierra y Fuego strongly recommends hiring or consulting a skilled professional tile installer, even for small projects. Tierra y Fuego is not liable for tile that has been altered from its original state due to improper handling during the installation process. Inspect the tile prior to installation as installation signifies acceptance.

## Installation Recommendations

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- Carefully choose a skilled tile installer. Make sure he/she is informed of all the procedures and products; and carefully follows the manufacturer's instructions of any solutions such as sealers, grout releases, and cleaners that may be used or come in contact with the tile during the installation process.
- **Note:** Always test a small sample tile with the chemical solutions that might be used during installation before applying to an entire area.
- **Concrete surfaces Floor Preparation:** Concrete surfaces to be tiled must be flat, structurally sound, dry and free from oil, grease, dust, loose paint, sealers or curing compounds. Remove baseboards and or any contaminants with tile neutral cleaner, or by sanding, scraping or chipping. Any imperfections the floor should be patched with a waterproof patching compound. If cracks are present on the concrete, an anti-fracture membrane for tile floors is recommended.
- Install an isolation membrane (also called an anti-fracture membrane) that will span random cracks in the floor. It will isolate the tile from the concrete with a cushion of plastic encased fiberglass fibers. The membrane absorbs the stress-not the tile and its thin-set adhesive. First, carefully examine the entire concrete surface to find and mark all the cracks, then follow these steps specified by membrane manufacture.
- The perfectly level surface of concrete has to be at least 7/8" below the line of the intended floor height. The area to be tiled must be completely dry before installing the Mexican mosaic cement tiles, otherwise if there is any humidity in the concrete it will evaporate through the tiles, resulting in efflorescence. Efflorescence is a white crystalline or powdery, often fluffy/fuzzy deposits that may appear on the surface of masonry materials like concrete, brick, clay tile, etc. It is caused by water seeping through the concrete material. Water dissolves salts inside the object while moving and then evaporates leaving salt residue on the surface.
- At this time it is recommend to strategically mix all cement tiles. Decide on the layout, and put them in position to ensure the result before installing them. If you choose a traditional carpet style pattern, you must first frame the center part, and then lay down the border tiles. Continue with the outside tiles and cut them to fit against the walls. A wet saw is required to make any tile cuts.
- **Lay out your tile floor:** Snap chalk lines with a 90-degree intersection, preferably in the center of the room, and work your way out. The more time you invest in laying out your area the better your project will go. Solve your layout questions before the adhesive is even mixed.

- Before the installation process begins. It is recommended to **pre-seal only the surface of the tile with a penetrating sealer**, be careful not to saturate the tiles with sealer. Do not seal the sides because the grout may be repealed. The pre-sealing process will help to maintain the tiles clean and prevent staining, it may also prevent efflorescence. We recommend using the 511 Impregnator from Miracle Sealants Company. For best results follow the sealer manufactures instructions.
- Mix the thin set according to Manufacturer's instructions and have all your tools at the ready before the tiling process starts. Apply thin set onto the concrete surface using the flat side of the trowel. Follow the "keying in" process by combing out the thin set to a uniform depth using the notched side held at a consistent 45° angle.
- Start laying the tiles one at a time. Make sure to wet the back of each tile with a wet sponge and back butter each tile with thin set using a notched trowel. This damping will speed the adhesion process to the floor.
- As the tiles are being installed, put them into place using only hand pressure, ensuring that they are perfectly level with each other. Do not use any tools to put the tiles in place. Immediately clean any excess thin-set or stains during installation.
- The typical installation for Barcelona Cement tiles is the butt joint method, leaving a very narrow grout line of approximately 1/16". Take care to align the tiles so that a regular pattern is maintained throughout the floor. Ensure that the tiles are perfectly leveled throughout the installation.
- Once the installation is completed allow 48 to 72 hours for the tiled area to dry, and then **apply another coat of penetrating sealer before grouting**.
- Apply a grout release (like Aqua Mix's) before grouting following the manufacturer's instructions; this process helps to protect textured surfaces, and reduce grout staining.
- **Grouting:** After the mortar and sealer have dried completely you are ready to grout, we recommend non-sanded grout for this material. There are a variety of grout colors available to enhance the look of your tile floor. Depending on the desired overall look, there are three basic approaches to selecting the grout color: matching, contrasting, and neutral. Grout will affect the product's final appearance.
- When working with grout it is necessary to keep conditions as consistent as possible throughout the job: moisture, temperature, mixing and application. Use a grout float to work the grout into the tile joints. Skim off the excess grout with the edge of the grout float and wipe the tile immediately with a damp sponge (rinse the grout sponge frequently and change the rinse water regularly). It is better to grout small areas at a time so no grout will dry on the face of the tile.
- **Sealing the Grout:** After grout has dried 48-72 hours, seal all grout joints with penetrating sealer to reduce maintenance and to retain the grout color.
- Once installation and grouting is completed clean the area with a PH neutral soap and water. Grout Haze Clean-up from Aqua Mix can be used to clean tiles. If stains, grout haze or any other sediment cannot be removed with soap and water use a #600 sandpaper for removal and buff the area.

- After the installation has been completed and everything is dried completely, seal the entire area once again with a penetrating sealer. This surface sealer provides resistance to chemicals, stains and dirt. To further protect the tile, we recommend the use of Durawax™ Finish Wax for Concrete Floors.
- As part of a normal maintenance procedure, cement floor tile requires re-sealing on a regular basis.

This guide is intended to provide information on frequently asked questions. Opinions vary in the tile industry about the proper installation of terra cotta and cement tiles.