



INSTALLATION AND SEALING INSTRUCTIONS

General Product Information

Archipelago Tiles are hand made with a variety of pigments in a cementitious base. Because of the nature of the cement and the pigments, these tiles are subject to color and tonal variation. When installing, we recommend blending tiles from several pallets and boxes.

When taken out of their boxes, some tiles may have residue (efflorescence) on the surface. When cement dries, the lime in the cement rises to the surface and reacts with carbon dioxide to form calcium carbonate, a white powder or film on the face of the tile. The efflorescence can typically be removed during the cleaning and buffing process after installation. Sealing the cement tiles usually prevents efflorescence from re-appearing.

Archipelago Tile provides these general guidelines as suggestions to installers. Since applications and job site conditions vary, the installer is ultimately responsible for ensuring proper installation and sealing of the tiles.

For more detailed information and instructions about installing your tile, we highly recommend consulting the Cement Tile Manufacturers' Association's excellent and free Handbook:

http://concretetile.hypermart.net/docs/Handbook_en.pdf

The Tile Council of North America also produces a very detailed publication entitled the TCNA Handbook for Ceramic, Glass, and Stone Tile Installation that is available for sale at:

www.tileusa.com/publication_main.htm

Installation Equipment and Materials

1. Thinset Mortar (For light colored tiles, use white color thin-set and for darker colored tiles, use gray color thin set material.) DO NOT USE CERAMIC TILE ADHESIVE.
2. Tile Spacers (1/16" or 1/8" if preferred)
3. Trowel with 1/2" with semicircular notches
4. Sponge
5. Bucket
6. Wet Tile Saw with Diamond Blade
7. Grout
8. Grout Float
9. Grout Release for Cement /Concrete Tiles
10. Penetrating Sealer for Cement /Concrete
11. A 17" Floor Polisher, with sand screen #220, green and white pads (for large installations)

Floor and Wall Preparation

1. Prepare a perfectly level, clean, dry, slightly rough surface in concrete 3/4" below the desired finished floor height (5/8" for the tiles and 1/8" for mortar).

2. Let the concrete slab surface dry completely before installing the cement tiles, otherwise the moisture in the concrete will evaporate through the tiles, resulting in powdery white limestone deposits (efflorescence). Do not lay cement tiles directly onto fresh (uncured) concrete.

* HELPFUL HINT: Some slabs may continue to release moisture on the surface even after fully cured. Test your slab by taping a small piece of plastic (polyethylene film) to the area to be tiled. Make sure all edges are thoroughly taped down. If moisture accumulates on the underside of the plastic, you should apply a waterproofing membrane before proceeding with the installation.

3. Archipelago Tile recommends applying a crack isolation membrane to concrete slabs to protect against the transfer of substrate cracks to the tile level.

4. To further prevent cracking or fracturing from the movement of the substrate, be sure to include expansion, construction, isolation, contraction, generic and perimeter joints where appropriate. Consult your architect or engineer.

5. We recommend wall tile is installed over cement block or cement backer board (recommended for moist areas), however in some cases it can be installed over drywall or plaster. The surface should be flat, smooth, and dry. Any loose paint or cracked surface should be scraped off and patched. Be sure to use thinset behind the backer board, not to adhere the backer board but rather to fill voids beneath the surface.

Tile Setting

1. Decide on the layout of the tiles and put them in position to ensure the result prior to installation. If you choose an "area rug" pattern, start with the center pattern, then lay down the border tiles. Finally, lay down the outside tiles and cut them to fit using a wet saw with a diamond blade.

2. Using a sponge, wet the back of the tile completely to enable the thinset to adhere to the tile. For more complete instructions, follow the thinset manufacturer's guidelines for laying floor tile.

3. Evenly apply thinset to the substrate, using a trowel with 1/2" semicircular notches. Then, cover the entire back of the tile with thin set material.

* HELPFUL HINT: Always brush the adhesive in the same direction, otherwise air can get trapped and the tiles could lift up.

4. Lay the tiles, and press them into place with the palm of your hand, ensuring that they are perfectly level with each other. Do not tamp or force the tiles with a tool, such as a rubber hammer, or micro-cracks will begin to appear in the tile over time. Be sure that that the tiles are perfectly level throughout the installation, as they cannot be polished down like marble or granite.

5. Use the 1/16" (or 1/8" if preferred) tile spacers to separate each tile.

6. Move each tile back and forth so that the new tile is leveled with the first tile you installed. Bring the tiles together to a grout joint of 1/16th of an inch and continue laying them until all tiles are set in place.

7. Immediately clean thinset or mortar off the face of the tiles. The longer it is left, the harder it is to clean it off.

* HELPFUL HINT: Do not let thinset or mortar dry on the face of the tiles or it will be very difficult to remove without damaging the surface.

8. Let the thinset mortar dry completely, per manufacturer recommendations (usually 2 - 4 days), before grouting.

Grouting

1. For unsealed tiles, apply the Grout Release following the manufacturer's instructions. This will help to protect the tiles from being stained by the grout.
2. Fill the small gaps between the tiles with grout, using a rubber float.
3. Immediately remove any excess grout with a clean damp cloth or sponge. As you clean the tiles of any grout, you will also be removing the Grout Release.

* HELPFUL HINT: Do not let any excess grout dry on the surface as it may be difficult to remove and may stain the tiles.

Cleaning Cement Floor Tiles With a Floor Polisher (recommended for large applications)

1. After the grout is dry (usually after 48 hours), use a 17" floor polisher with a sand screen pad over the green pad to clean the cement floor tiles thoroughly. Wet the floor enough so that the floor polisher is always working on a wet surface. Use a back and forth motion, turning slowly from right to left until the entire area has been covered. (A sand screen pad #220 should clean approximately 50 square feet.)
2. Drain any remaining water on the tiles and finish drying with a dry cloth. Don't worry if it appears that the tile color is running- it isn't. The sand screen pad is sanding off a fine layer of the tile's surface. Since this surface layer has color, the fine powder produced by the sanding is also colored, creating the impression that the color is running. It is important to thoroughly rinse and dry.

Sealing

1. Cement tile surfaces must be cleaned, free of grease, oil, dirt, wax or any other foreign matter including grout release material.
2. Apply the first coat of high quality penetrating sealer for cement/concrete tiles following manufacturer's instructions, and a second/final coat after the first has dried. Archipelago Tile recommends using a concrete penetrating sealer such as Custom Building Products TileLab. Do not place anything on the tile until the sealer is completely dried per manufacturer's instructions.
3. If desired, buff the tiles with the floor polisher and white pad using a back and forth motion. This will give your tiles the shine desired. Do this step as long as you like.

* GENERAL NOTE ABOUT SEALERS: Like natural stones, cement tiles are porous in nature and therefore need to be sealed to avoid staining. There are two different categories of sealers: Penetrating and Topical. Penetrating sealers coat the cement particles in the tile making it less likely they will retain stains. Topical sealers create a barrier on the surface of the tile so that stains do not reach the cement. Topical sealers come in different finishes: shiny and matte. According to Desert Brand, matte topical sealers are produced by adding a chemical that cuts the shine, but also weakens the sealer. Topical sealers are not generally recommended for exterior applications as the sun may deteriorate them quickly.

Maintenance

The tiles should be washed regularly with soapy water.

* CAUTION: NEVER USE ACID-BASED OR ABRASIVE CLEANERS.