



# General Information

Villa Lagoon Tile - Cement Tile Basics

Welcome to the World of Cement Tiles...We hope you find our selection of tiles and colors the best available. We are confident the tiles we make and sell are of the highest heirloom quality. If properly installed and cared for your tiles will last for generations.

## ==== *About Cement Tile* ====

- Cement tiles are completely hand crafted one at a time by skilled artisans. No two tiles will ever be exactly alike.
- Cement tiles are not painted...the color layer is poured 3-5mm deep and composed of ground marble, white Portland cement, white sand, and color pigments. The remainder of the tile is Portland cement, sand, and aggregate...just like your sidewalk
- The basic process is unchanged since it was invented in Europe, in the mid-19th Century.
- Like all natural stone, cement tile will patina gracefully with time.
- Cement Tile is non-fired; it cures naturally like standard concrete
- Cement Tile is a "Green" product. All mineral-based, with low energy requirements to produce.
- All cement tiles have some variation in color...Remember, they're hand-made. The variation in color is part of their character and provides "movement" to the floors or walls. It is part of their charm...not a defect.
- With proper installation and sealant, cement tile can be used indoors and out, on both commercial and residential floors and walls, as well as in wet areas and heated floors.
- Cement Tile is porous, and must be sealed to protect against moisture, stains, and ground in dirt.
- **All cement tiles MUST be sealed. This is the KEY TO HAPPINESS with your floor.**

## ==== *When Your Tile Arrives...* ====

- **Inspect** the pallet and a couple boxes of tile to ensure the tiles are not damaged. Any damage **MUST** be noted on the driver's paperwork.
  - Take photos and call Villa Lagoon Tile immediately if you see damage.
  - Villa Lagoon will make every effort to try and provide full replacement of any broken tiles, of the same or comparable type and color.
  - Villa Lagoon Tile **MUST** be notified within 30 days of any manufacturing defect claim.
  - No claims will be accepted on installed tiles.
- Villa Lagoon Tile makes no guarantee with regard to installation, including but not limited to: suitable use of the tile for a particular use, wear and tear due to improper installation and sealing.
  - Installation costs are not included in any agreement with Home Depot.
  - During installation, pull tiles from different boxes to minimize any color variation between boxes of tiles.
- Your shipment of tiles will be raw tiles...unsealed and **MUST** be stored indoors until they are installed. If the boxes get wet, it may stain your tiles.
- Please be sure your tile-setter follows our Installation Guide.



## ■ Product Description:

-Floor and wall tiles are made of cement and composed of two layers: Wear layer or colored layer and tile body.

## ■ Product Components:

### A. Wear Layer or Color layer

3-5 mm thickness affixed to the tile body by 1,500-1,700 PSI mechanical pressure. The layer is composed of:

- White Portland Cement
- Marble Dust
- Silica Sand
- Mineral Pigments for Color (i.e. Iron, Cobalt and Chromium Oxides)

### B. Tile Body

10-12 mm in thickness, this part of the tile is composed of:

- Gray Portland Cement
- Sand

## ■ Standard Dimensions:

- 200x200x12 mm (7-7/8" x 7-7/8")
- 1.20 kg/tile (2.650 lbs)
- 25 tiles/m<sup>2</sup> (2.32 tiles per sqf)

## ■ Average Coefficient of Friction on Raw Tiles:

ASTM C1028-07 Standard Test Method for Determining Static Coefficient of Friction

- Dry Surface = 0.89
- Wet Surface = 0.65

## ■ ANSI A137.1 Dynamic Coefficient of Friction Test on Sealed Tiles:

- Wet Surface = 0.44

\*Tested on tiles with commercial grade sealant (JFB Hart HP300) by  
*TorTest Floor Friction Testing Service*  
*Sotter Engineering Corporation Consultants*



## Equipment Needed

- Tile Wet Saw - Diamond Blade
- Notched 1/2" Hand Trowel
- Grout Float - Rubber
- Tile Adhesive - Regular Thinset Mortar
- Grout - Unsanded
- Several Buckets & Sponges
- Rubber Gloves
- Safety Glasses

## ■ Precautions and Hints

- Examine the tiles when they arrive. Please note any damage on the delivery driver's paperwork.
- Examine each tile for damage. Set aside any damaged tiles for later use. Damaged tiles may be used on other parts of the floor where tiles may need to be trimmed.
- Do not make any unnecessary pencil marks on cement tiles.
- Cement tiles are very absorbent and can be easily be stained. Until they are appropriately sealed, avoid walking on the raw Tiles or handling with dirty hands.
- Cutting the tiles – Be sure to use a wet saw with a diamond blade.
- Adhesive mortar – regular or modified thinset may be used. Mix as directed. We do not recommend mastic.
- For outdoor installations or in wet areas please contact us.

## ■ Surface Preparation

- All surfaces must be solid and clean.
  - Floors – cement slab or subfloor covered with cementitious board (i.e. Hardie, Durock).
  - Walls – covered with cementitious board (i.e. Hardie, Durock). No regular drywall (Gypsum).

## ■ Layout

- Check layout plan by laying out at least one row of your tiles dry (without adhesive) in each direction of your intended tile orientation. You may need to shift the layout to balance the border tiles from the walls. If using pattern tiles, make careful note of the tile's orientation.
- **Be sure to pull tiles from different boxes. This creates a more consistent floor look with out light or dark areas.**

## ■ Setting the Tile

- Wet the back of each tile by quickly dipping them into a bucket of water for 1-2 seconds or wetting the back only with a sponge. Drip or wipe off any excess prior to placing in thinset.
- Working in 2-3 square foot areas, spread the thinset mortar on the tiling surface using the 1/2" hand trowel.
- Press the tile down firmly with your hands, **DO NOT USE A HAMMER OR RUBBER Mallet**. This can break the tiles.
- Grout joints should be no larger than 1/8".
- Avoid getting the thinset on the surface of the tile. The thinset can stain the unsealed tile.
- Be sure to check for alignment, and lippage on every tile.

## ■ Before Grouting

- Once the tiles are set, let stand/cure 24 hours until dry. Look for any surface dirt or dried thinset and remove carefully with a razor blade without scratching the surface. **DO NOT USE ACIDS, VINEGAR, ON CEMENT TILE.** A razor blade for scraping or med. sandpaper 150 grit is ok. Very fine sandpaper may polish instead of remove debris.
- During drying, protect the tile at all times from workmen, foot traffic, ect.
- **NOTE: A coat or two of a high quality sealant MUST be applied at this point to help prevent grout residue haze.**

## ■ Grouting

- Be sure the floor is completely dry before grouting. Mix the grout as directed.
- Unsanded grout is recommended for grout joints 1/8" or less.
- Black grout may create a dark residue on the tiles that may be difficult to remove. A medium to light color is recommended – Regular or modified thinset may be used. Do not use epoxy grout.
- Working in 2-3 square foot areas, spread the grout on the tile surface; then, using the grout float, move the grout at 45 degree angles to the grout lines. This ensures a smooth even grout joint.
- Quickly clean up excess off the face of the tile using a soft sponge and clean water. Avoid pulling the grout from the grout line by wiping at an angle to all grout lines. Be sure to get the tile surface as clean as possible.
- Let dry/cure for minimum of 24 hours.

## ■ Sealant

- Always test sealants or cleaning products on a single tile before applying to the entire floor.
- Use a high quality penetrating/impregnating sealant. Apply as directed. Two to three coats may be required.
- **NOTE:** a coat of paste wax may be applied on top of the sealant. The paste wax can help prevent staining and provide a renewable waterproof protective layer.
- **CAUTION:** Penetrating sealants cannot be used with top coat acrylic or urethane sealants



# Maintenance & Cleaning

Villa Lagoon Tile - Cement Tile Care

To increase the service life and maintain an attractive appearance, a proper maintenance and cleaning schedule is recommended for all cement tiles. As with all natural stone, cement tile will patina beautifully with time.

## Routine Cleaning

### DO NOT USE

- Acids of any kind (i.e. Vinegar, Lemon Juice, Muratic)
- Abrasive agents or pads. (i.e. 3M Scotch Brite pads, powdered cleansers)

- In entrances, consider using walk-off mats or small rugs to prevent dirt and grit being tracked in.
- Spills should be cleaned up immediately as a safety precaution, as well as to prevent staining of the floor.
- Frequent or daily sweeping and wet mopping is recommended to remove all dirt and debris on floors. Buildup of dirt and debris can cause friction between the tile surface and shoes. This can result in scratching and dirt being embedded into the face of the tile.

- When wet mopping, we recommend a **pH neutral cleaning product** (i.e. Dawn dish detergent).
  - Be sure to test the cleaning product in an isolated area before applying to the entire floor.
  - Rinse with clean water; do not flood floor, - damp mop only or commercial machine.
  - Adding too much detergent to water could result in a thin layer of cleaner residue on the floor which can cause the floor to look hazy and/or become more slippery when wet.
- Areas that are subject to oil, grease or harsh contaminants should be de-greased and scrubbed on a regular basis.
- Reapplication of a quality penetrating/impregnating sealant may be required periodically as needed.
- Be sure to clean the floor thoroughly before applying the sealant. Apply as directed.
- **NOTE:** A coat of paste wax may be applied on top of the sealant (Indoors Only).
  - Paste wax can help prevent staining and provide a renewable waterproof protective layer.
  - The paste wax will need to be reapplied periodically as needed.
- **Additional Notes for Outdoors:**
  - Areas with freeze/thaw conditions should be completely waterproofed with sealant. If properly sealed water will bead up on the surface. Yearly application may be necessary in harsh or high traffic environments. Monitor sealants performance to determine when a new application is needed.
  - Sweep or blow off floor regularly to keep debris from breaking down and staining tile.

## Stain Removing Tips

Accidents happen and the tiles even after sealing may get stained. Stains should be treated as soon as possible. Soda, wine, salad dressings, food spills, etc. should not be left to sit on the tile as they can eventually penetrate through the sealer and stain the tile.

### TYPES OF STAINS

ORGANIC: Coffee, Tea, Tobacco, Food, Cosmetics, Leaves, Plants, Blood, Wine, Urine

INORGANIC: Rust, Ink, Paraffin, Dye, Iron, Paint, Minerals, Medicine

BIOLOGICAL: Mildew, Mold, Fungus, Algae

OIL-BASED: Kitchen Grease, Oils, Butter, Bacon, Ointments, Tar, Body Oil, Suntan Lotion

### ORGANIC STAINS

#### Clean with Hydrogen Peroxide

Saturate a clean cloth/gauze pad. Place on stain. Place 1-2 inches of dry cloth/pad and small weight. Let set 20 minutes, check, reapply if needed.

### OIL-BASED STAINS

#### Treat with Undiluted PH Neutral Detergent

Apply a PH neutral detergent, such as Dawn, directly to stain. Let set 20 minutes, check and reapply if needed.

### INORGANIC STAINS

#### Create a Paste of Oxi-Clean

Apply to stain. Let set 20 minutes, check, reapply if needed.

### BIOLOGICAL STAINS

#### Use a Solution of Water & Dawn

Wipe off any residue. Clean with soft bristled brush and cleaning solution of Dawn Detergent or Oxi-Clean in water. If stain remains follow above directions for Organic Stains.