

09 3000 TILING

WALKER ZANGER

Studio Moderne

- Maintenance

Continuing Care and Cleaning Recommendations for Natural Stone, Ceramic, Glass, Metal and Terra Cotta Tile

NATURAL STONE

Stone is a natural product, and care should be taken to protect it from harsh abrasive cleaners and abrasive cleaning tools. While the right product for cleaning specific stones varies, we generally recommend Miraseal products such as *Mira Clean 1* for polished stones and honed marbles and *Mira Soap* for limestones, tumbled stones and slates. Other manufacturers also make products formulated specifically for stone care. A word of caution: Take care to avoid "over the counter" stone care sprays that contain phosphoric and glycolic acids, that could etch some polished stone surfaces. Feel free to ask a Walker Zanger sales representative to assist you in selecting the appropriate product to care for your stone tiles. As with other flooring products, stone tile floors may require occasional professional cleaning to maintain or restore their natural appearance.

CERAMIC TILE

Ceramic tile is a relatively maintenance-free product that requires little continuing care beyond regular cleaning. Most cleaning can be done with a damp cloth and a gentle non-acidic soap. More resistant staining such as calcium spotting and soap scum can be handled using specially designed cleaning products such as *Miracle Sealants Mira Clean 1* product. Other manufacturers also offer products specially formulated for ceramic tile care. Take care to avoid "over the counter" ceramic tile cleaners that contain phosphoric and glycolic acids that could etch some ceramic tile surfaces.

Please note: Walker Zanger Ceramic Tiles that require special care or cleaning will have special instructions noted in the Ceramic Tile usage guide under "additional comments".

09 3000 TILING

AMERICAN OLEAN

Bright & Matte

- Maintenance

CARE AND MAINTENANCE

With thousands of design possibilities, ceramic tile boasts a variety of looks that endure. And with little more than dusting and damp mopping, it will maintain its original quality for years to come.

Routine Ceramic Tile Care

Wipe glazed wall tiles periodically using a cloth or sponge dampened with a non oil-based household cleaner. Vacuum glazed floor tiles regularly to remove dirt and other gritty particles, then damp mop or sponge with an all-purpose, non oil-based cleaner. Remember not to use ammonia, as it will discolor grout. Clean unglazed wall and floor tiles in a similar manner using a solution of water and soapless detergent instead of an all-purpose cleaner.

Grout Care

Once the tile has been cleaned and dried (shortly after installation), grout joints should be treated with a silicone sealer. Grout, the material used to fill the spaces between tiles, is porous, and sealing it at this time will simplify maintenance in the future (Epoxy grouts do not require a sealer). We recommend you apply a sealer at least twice a year for maximum stain protection.

Heavy Duty Cleaning

Neglected or heavily trafficked tile may require more intensive cleaning. Clean glazed wall tiles with a scouring powder or all-purpose cleaner applied to a non-metallic pad. Rinse and wipe dry. For glazed

floor tiles, use a commercial tile cleaner, or apply a strong solution of an all-purpose, non oil-based cleaner or scouring powder paste. Let stand for five minutes, brush and scrub. Then rinse with clean water and wipe dry.

For heavy-duty cleaning of unglazed wall tiles, make a paste of scouring powder. Apply to surface and let stand for five minutes. Scour with brush, rinse and wipe dry. Unglazed floor tiles can be cleaned in the same manner. Though a small brush is suitable for most floors, you may want to use a scrubbing machine for large areas.

To clean badly soiled countertops, apply a solution of scouring powder and very hot water. Let stand for five minutes, scrub with a stiff brush and rinse. Soap scum, mildew stains and hard-water deposits may be removed from ceramic tile using cleaning products that are commonly available at your local supermarket or home improvement store. With soft water, use an all-purpose, non oil-based cleaner. Allow to stand for five minutes before lightly scrubbing with a sponge. Rinse well.

Purchasing Maintenance Products

Ceramic tile and Natural Stone cleaning products and sealants may be purchased at your local home center or floor covering store. Consult the manufacturer of the cleaner, sealant or wax for usage instructions and more detailed information about how its specific cleaning solution or sealant may impact the safety, maintenance or appearance of your ceramic tile product.

DO'S & DON'TS

DO...

- Test scouring powders on a small area first (not recommended for natural stone).
- Use a sealer on grout joints.
- Have any damaged or broken tiles removed and replaced only by a qualified contractor.

DO NOT..

- Use cleansers containing acid or bleach for routine maintenance.
- Use wax cleaners, oil-based detergents or sealants to maintain your tile (sealants may be used on grout joints and natural stone).
- Use ammonia (it will discolor grout).
- Use harsh cleaning aids like steel wool pads or scouring pads containing metal.
- Use a cleaning agent that contains color on unglazed

09 3000 TILING

CROSSVILLE

Color Blox Mosaics

- Maintenance

HOW TO CARE
FOR PORCELAIN STONE® TILE



CROSSVILLE



CLEANING & MAINTENANCE FOR CROSSVILLE'S PORCELAIN STONE® TILE PRODUCTS

CROSSVILLE QUALITY

Our Porcelain Stone® tile is produced utilizing the most advanced equipment under very extensive and exacting process controls. Quality begins with the finest raw materials available in the United States. The ball clays, feldspar and kaolin combined with our innovative research and development program assures every Crossville user of the finest porcelain tile available.

Crossville is focused on maintaining its commitment to quality so our products meet and exceed your expectations. As with every interior surfacing material, our products require nominal care in order to maintain a satisfactory appearance and acceptable sanitation. These guidelines have been prepared so your particular Crossville installation will look beautiful for years.

INITIAL CLEANING AND MAINTENANCE

The single-most important step for future daily maintenance involves the complete removal of grout and construction dirt after Crossville products have been installed. Grout manufacturers print instructions for proper mixing, curing, and cleaning of grout on each container. These directions must be followed. In most cases, Crossville Porcelain Stone can be cleaned successfully by scrubbing the installation with hot water and a neutral detergent, followed by a thorough rinsing, then removing the rinse water with a wet vacuum or dry toweling. If grout residue still remains, further cleaning of the tile should be accomplished in consultation with the grout manufacturer and Crossville.

Some grout manufacturers distribute proprietary products which they recommend for the removal of their particular grout from the surface of tile. These products can be diluted for removal of light deposits of grouting materials with the possibility of using stronger concentrations when more aggressive cleaning is required.

Equipment recommended for more aggressive cleaning are floor scrubbers or floor buffing machines equipped with a nylon pad or brush. A wet vacuum should be used to pick up suspended grout residue and construction dirt completely.

Acid washing is rarely recommended, and is not usually necessary to successfully clean a new installation if the cleaning is done in a timely fashion. Caution should be exercised when using acid, or acid-based cleaners as they can adversely affect the grout.

If a customer insists on use of an acid for cleaning the installation, he or she should be cautioned to use sulfamic acid or phosphoric acid mixed in a solution according to manufacturers' instructions. It is important that before the acid solution is placed on the floor, the grout joints be thoroughly saturated with water first. Grouts which contain latex can actually bond more strongly to the tile surfaces if cleaned with acid. Latex or polymer modified grouts should be cleaned with a solution recommended by the grout manufacturer. Contractors or installers should also wait until the grout joint has fully cured, usually 7 to 10 days before using acidic cleaners.

Once the initial cleaning has been thoroughly completed, our daily maintenance procedures can be followed for continuous and long-lasting beauty.

SPECIAL GROUTING SITUATIONS

Before grouting any Crossville products, regardless of whatever grout color is chosen, Crossville strongly recommends that a test patch be done by the contrac-

tor to determine if the grout pigment will contaminate the surface of the tile. Special care and testing should be done when light-colored tiles are to be grouted with a contrasting dark-colored grout or vice-versa. If the grout pigment discolors the surface of the tile, Crossville recommends that the tile be treated with a grout release agent similar to Aqua Mix Floor Shine and Hardener or Custom CBP Pre-Grouting Sealer before grouting. If no grout discoloration occurs, the contractor can proceed with grouting, taking care to follow the recommended procedures of the manufacturer.

With the introduction of CROSS-SHEEN®, a process which closes the pores in the tile and makes it more stain resistant, the need to use a pre-treatment is virtually eliminated on all Crossville products except the polished surface.

Due to the surface texture of CROSS-SLATE®, CROSS-TREAD®, and other highly textured Crossville Porcelain tile, it is advisable to use a grout release, if only to improve the cleanability of the grout from the surface of the tile.

When contamination of the surface is a possibility, the procedures outlined below should be followed:

1. Prior to grouting, apply the grout release in accordance with the manufacturer's recommendations. This can be done in one or two coats. If more than one coat is applied, allow sufficient dry time between coats and before installing the grout.
2. Grout and clean excess grout from the surface of the tile as normal.
3. After the grout achieves its set, clean the floor with a solution similar to Aqua Mix Heavy Duty Tile and Grout Cleaner or TileLab Heavy Duty Cleaner & Stripper or a product recommended by the grout release manufacturer.

Of course, these are general recommendations. Any specific recommendations suggested by the individual manufacturers should be followed.

PENETRATING SEALERS

If polished tiles are used in areas which are prone to excessive spills or are light in color and are installed with a dark-colored grout or vice versa; use of a penetrating-type sealer is required prior to grouting. A penetrating sealer is one that does not leave a coating on top of the tile. Rather, these sealers assist in filling the microscopic surface pores.

The grinding involved in the polishing process produces microscopic surface pores on all polished tile products. Penetrating sealers can fill these pores, making the tile even more impervious to surface staining, resulting in easier maintenance. Penetrating sealers do not alter the appearance of our Crossville products since they are designed only to fill the microscopic pores and not to coat the tile. Slip resistance also should not be affected.

Proper application of penetrating sealers is important. Follow the manufacturer's application guidelines. If you have questions prior to application, contact the manufacturer directly. The following is a suggested application procedure for a penetrating sealer:

1. Surface must be thoroughly clean and free of any foreign matter that may prevent the sealer from penetrating.
2. Apply in a circular motion using a clean rag, an applicator or a dense sponge, working sealer tightly into tile surface.
3. One thin application should be sufficient.

4. Completely remove excess sealer from the surface within 3 to 4 minutes using a clean cotton cloth, rag or absorbent paper towels. Penetrating-type sealers must not be allowed to dry on tile surface.

Penetrating sealers are applied only once, and generally do not require constant maintenance through reapplication.

TOP FINISHES AND WAXES

Crossville's dense, low-absorptive, porcelain body inhibits the penetration of contaminants and, therefore, is a tile that is easy to maintain. The low-absorptive nature of our porcelain tile not only inhibits dirt and stains, but also prevents top-finishes and most chemicals from penetrating the surface.

Top finishes, those that become a coating over the tile and grout joints, are not recommended by Crossville for its Porcelain Stone tile. They will change the appearance of the tile by coating the surface and giving matte-finished tiles a shiny finish. When a particular type of tile is selected for the coefficient of friction values, the values can be changed by the application of the finish. Rather than improving the ability to maintain the surface, top finishes will increase the maintenance requirement. Top-coating finishes also will show traffic patterns as the finish becomes scratched or wears away. Some finishes may even peel off in spots.

Problems most frequently encountered with the use of top-coating finishes are:

1. Wear patterns are easily developed over time.
2. Finish applied to a floor which has not been properly cleaned will cause the floor to look hazy.
3. Finishes applied to textured surfaces will wear unevenly on the raised areas as compared to the low areas.
4. Improperly applied finishes can turn a milky-white color.
5. Multiple coats of top finish can cause discoloration of the tile surface.

When problems such as these occur, the finish must be stripped off of the tile and a new coat of finish re-applied. This is a costly and unnecessarily repetitive procedure.

PROPER CARE DURING CONSTRUCTION

Since Crossville products are considered to be a finish material, they should not be installed until all heavy construction is completed.

Between the installation and putting the floor into service, it is imperative to properly protect the tile and grout in order to avoid construction-related cleaning problems. Generally, there is a build-up of dirt and debris on every construction site. This dirt and debris may cause the grout, and sometimes the tile, to be adversely affected.

Crossville recommends that a protective cover be put over the tile surface to safeguard the appearance. The cover could include uncolored Kraft paper, cardboard, plywood, or any other clean covering that will not damage the integrity of the installation. Do not use plastic as it may not allow the grout and thin-set to properly cure, and it also may become extremely slippery as construction dust settles. Proper and diligent care must be used to maintain the protective cover during construction. This will insure a quality appearance when the floor is opened for continuous use.

CHEMICAL RESISTANCE

Crossville Porcelain Stone® tiles are chemical resistant to both strongly acidic or strongly alkaline chemical products, with the exception of hydrofluoric acids or compounds containing fluoride salts and derivatives. Hydrofluoric acid is the only acid which will attack our tiles, due to their molecular structure.

DAILY MAINTENANCE

General maintenance and cleaning of Crossville Porcelain Stone tile will vary depending on the surface texture and soil load. General cleaning should be performed first by sweeping or vacuuming to remove loose soil or other surface contaminants, then lightly damp mopping with clean water.

Depending on the soil load, a more aggressive cleaning process may be required. This could include the use of a neutral cleaner or a general household cleaner, followed by a thorough rinsing. Please refer to the Cleaning Chart for suggested cleaners.

There are five steps that are critical and should always be remembered for the successful maintenance of porcelain tiles:

1. All spills should be cleaned as quickly as possible.
2. Use only the recommended dilution of detergent. More is not always better; higher concentrations of detergent in the cleaning solution will only make it more difficult to rinse.
3. Allow the proper dwell (remain on the floor) time. The detergent solution must be given time to act on the soil load. Generally 5-10 minutes is sufficient.
4. Scrub with a nylon pad or bristle brush.
5. Rinse thoroughly with clean, clear water to remove the dirty detergent solution and emulsified soil. Rinsing is a critical step in the maintenance procedure. Remove the rinse water with a wet vacuum, dry mop or toweling. If dirty detergent solution is not removed and is allowed to dry on the surface, a coating will form which is very difficult to remove.

In addition to the above steps, slightly different cleaning techniques should be administered for each of the surface textures offered by Crossville: Unpolished Matte Finish, Polished, CROSS-PLUS®, CROSS-SLATE®, CROSS-TREAD®, CROSS-SHEEN®, CROSS-DOT®, CROSS-GRIP®, and CROSS-COLORS® MOSAICS.

The use of auto-scrubbers and/or wet extraction machinery can make routine cleaning easier and more efficient.

CROSS-SHEEN® AND UNPOLISHED MATTE FINISH TILE

Crossville's CROSS-SHEEN® finish is not a glaze, but rather a special surface preparation sprayed on the tile before firing. CROSS-SHEEN® closes the pores, resulting in a permanent surface finish that has a high degree of stain resistance.

The following represents a simple procedure for maintaining CROSS-SHEEN® and unpolished matte finish tile floors with a moderate soil load. For best results:

1. Sweep or vacuum the floor of all loose dirt and other foreign materials.
2. Saturate the floor with a mild cleaning solution and hot water, agitate, and allow it to dwell (remain on the floor) 5-10 minutes. Do not allow cleaning solutions to dry. It may be best to complete small areas at a time.
3. Remove the dirty cleaning solution and rinse the surface with clean, clear water.

4. Buff with a dry mop or towel.

If the Crossville CROSS-SHEEN® or unpolished finish product is extremely dirty, a more aggressive cleaning method may be necessary:

1. Sweep or vacuum the floor of dirt and other foreign material.
2. If there are difficult-to-remove contaminants on the surface of the tile, first attempt to identify the specific spill or contaminant. Different surface contaminants require different cleaning methods and chemicals (see chart).
3. Saturate the floor with cleaning solution and hot water, agitate, and allow it to dwell (remain on the floor) 5-10 minutes. After the dwell time, scrub the cleaning solution with a floor machine equipped with a nylon pad or bristle brush. For residential applications and small areas, use a hand brush or nylon pad.
4. Remove the dirty cleaning solution and rinse the surface with clean, clear water. This can be accomplished with a mop or a wet vacuum. It may be necessary to rinse the tile several times to thoroughly remove the cleaning agent from the surface.

POLISHED TILE

For Crossville polished porcelain tiles, please follow these instructions for general cleaning:

1. Sweep or vacuum the floor of loose dirt. An untreated, dry dust mop may be more effective than a soft-bristle broom.
2. Mop with a mild cleaning solution. Use 50% less detergent concentrate than one would use on an unpolished floor.
3. Rinse the floor thoroughly with clean, clear water.
4. Dry thoroughly with a soft cloth or buffing pad to increase the shine and prevent water spots.

WEATHERSTONE XT, CROSS-TREAD® AND CROSS-DOT®

When public safety and insurance factors are a concern, Crossville offers its WEATHERSTONE XT, CROSS-TREAD® and CROSS-DOT® tile for improved slip resistance. While these tiles are adeptly suited for their requirements, it is necessary to pay additional attention and take adequate care when cleaning these textures. The undulation of the surface makes it necessary to clean the entire surface, including the low points, which necessitates some additional, practical dirt removal procedures. Standard damp-mopping may not effectively clean these finishes. Also, it is necessary to thoroughly rinse the tile to completely remove all dirty cleaning solution.

For cleaning of WEATHERSTONE XT, CROSS-TREAD® and CROSS-DOT® surfaces, please follow these instructions:

1. Sweep or vacuum floor debris. If sweeping, use a soft-bristle broom. Sweep in two directions. First, follow the direction of the tile, then sweep diagonally to the tile to ensure complete removal of all foreign material.
2. Saturate the surface with a neutral detergent cleaning solution and hot water and agitate. Looped-end, tail-banded mops, such as the Super Stitch Blend Mop from Rubbermaid (800-347-9800), are the most durable for textured-surface tile. Allow the cleaning solution to remain on the floor for 5-10 minutes. Scrub the floor with a brush in a circular motion.

Dual-surface floor scrub brushes with side bristles by Carlisle SMP (800-654-8210, carlisleSMP.com) are ideal for cleaning textured floor tile and cove base.

3. Rinse the floor with clean, clear water to suspend contaminants and completely remove any soiled cleaning solution.
4. Remove rinse water with a wet vacuum or dry toweling.

In high-traffic areas, or areas where the surface is exposed to a heavy-soil load, it may be necessary to scrub the floor once a day and damp-mop at intervals during the business day.

CROSS-GRIP®

CROSS-GRIP® is another special-purpose, high coefficient of friction tile designed to maximize safety in food service and similar installations.

The cleaning regimen for CROSS-GRIP® is the same as for WEATHERSTONE XT, CROSS-TREAD® and CROSS-DOT®.

CROSS-PLUS®

Crossville's CROSS-PLUS® finish incorporates fused alumina within the glaze which gives it a fine, lightly rough texture. The semi-matte glaze is very easy to maintain and has a high degree of stain resistance.

For cleaning CROSS-PLUS tile, please follow these instructions:

1. Sweep or vacuum the floor of all loose dirt and other foreign materials. If sweeping, use a soft bristle broom.
2. Damp mop with clean, warm water.

If the CROSS-PLUS finish is extremely dirty, it may be necessary to use a mild detergent in the mop water.

1. Saturate the floor with cleaning solution.
2. Allow the solution to remain on the surface for several minutes.
3. Scrub with a bristle brush.
4. Rinse with clean water and vacuum or wipe with a dry mop or absorbent toweling.

STONE LOOK TILE & CROSS SLATE®

Crossville's natural stone-look and Cross-Slate tile has a subtle textured surface. The cleaning and maintenance procedures for stone-look tile are the same as for CROSS-SHEEN® and unpolished matte finished tile.

As outlined above, the use of cleaning machines and wet-extraction equipment can be used on our various tiles and textures.

CROSS-COLORS® MOSAICS

Crossville's small unit tile is furnished in two finishes, CROSS-SHEEN® and GLOSS. The GLOSS finish can be maintained simply by wiping with a damp cloth and clean water and the CROSS-SHEEN® finish is maintained the same as our large unit CROSS-SHEEN® tile.

SUGGESTED CLEANERS FOR CROSSVILLE PORCELAIN STONE® TILES

General household cleaners suggested for cleaning Crossville Porcelain tile include: Mr. Clean, Windex, Lysol, Spic 'n Span, Comet, Bon Ami, 409, Fantastic, Soft Scrub and Soft Scrub with bleach. For specific problem stains, please use the following stain removal chart.

Crossville recommends the use of professional cleaning and maintenance products. If additional information or assistance is required on a contaminant not listed, or if you need to find out where the products are sold, please call us, or contact one of the following:

Custom Building Products
800/272-8786
Seaf Beach, CA 90740
www.custombuildingproducts.com

TEC Specialty Products, Inc.
800/832-9023
315 South Hicks Road
Palatine, IL 60067
www.tecspecialty.com

Aqua Mix, Inc.
800/366-6877
250 Benjamin Drive
Corona, CA 92879
www.aquamix.com

Miracle Sealants Co.
800/350-1901 ext. 3013
12318 Lower Azusa Rd.
Arcadia, CA 91006-5872
www.miraclesealants.com

These products are used by tile and maintenance professionals and may not be readily available in all areas. Most household cleaners are sufficient to clean common stains as long as they conform to the standards set forth in the Daily Maintenance Section. In the case where stain removal becomes a problem, contact a cleaning and maintenance product supplier or your local tile distributor for professional suggestions.

In keeping with its commitment to quality, Crossville will offer its Technical Service Department for individualized assistance. This department can assist you in the proper installation and maintenance of all Crossville porcelain tiles. Contact Crossville Technical Services at (931) 484-2110.

STAIN	TEC	CUSTOM	AQUA MIX	MIRACLE SEALANTS	COMMON	
Food Groups	Mustard Ketchup Mayonnaise Tea Bags Ice Cream Beer/Wine Orange Juice Grape Juice Coffee Coke Soy Sauce	Everyday or Superclean STG	TileLab Stain Remover or TileLab Heavy Duty Cleaner & Stripper or TileLab Grout & Tile Cleaner	Concentrated Tile Cleaner or Tile Plus More or Grout Deep Clean	Porcelain and Ceramic Tile Cleaner	Mr. Clean 409 Spic 'n Span Fantastic Comet Windex Lysol Soft Scrub Mr. Clean Magic Eraser
Oil & Grease	Vegetable Mineral Petroleum Wax Sealer Meat Grease Hydraulic Oil Trans. Fluid Linseed Oil Lipstick Rubber Shoe Polish Paint (Oil Based)	Superclean STG or Stain Be Gone	TileLab Heavy Duty Cleaner & Stripper	Heavy-Duty Tile & Grout Cleaner*	Porcelain and Ceramic Tile Cleaner	Mr. Clean 409 Spic 'n Span Fantastic Comet Windex Lysol Soft Scrub Mr. Clean Magic Eraser
Markers/Graffiti	Felt Tip Ink Water Mrkr Permanent Fluorescent Crayon	Superclean STG or Like New	TileLab Stain Remover	Sealer & Adhesive Remover	Porcelain and Ceramic Tile Cleaner	Comet Soft Scrub Mr. Clean ZUD Mr. Clean Magic Eraser
Water-Based Agents	Water Base Paint or Stain	Superclean STG	TileLab Stain Remover	Sealer & Adhesive Remover	Porcelain and Ceramic Tile Cleaner	Mr. Clean Comet Mr. Clean Magic Eraser
Tile Grout	Cement Latex or Polymer Epoxy	Banish or Like New Banish Banish EX	TileLab Sulfamic Acid Cleaner or Grout Haze Remover	Sulfamic Acid Crystals or Phosphoric Acid Cleaner or Grout Haze Clean-Up* or Phosphoric Acid Cleaner or Grout Haze Clean-Up* or Sealer & Adhesive Remover	GCFR GCFR Epoxy Grout Film Remover	White Vinegar Lime-A-Way Mr. Clean Magic Eraser

For problem stains, it may be necessary to use an abrasive powder compound in conjunction with the above cleaners; With Heavy-Duty Tile & Grout Cleaner or Grout Haze Clean-Up, use Aqua Mix Poultice. Please be careful to follow manufacturers' recommended procedures when using any cleaning product. To download a copy of "How to Care for Porcelain Stone tile," be sure to visit our web site at www.crossvilleinc.com.



CROSSVILLE

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09 3000 TILING

CERAMIC TECHNICS

Burnaby Glass

- Maintenance



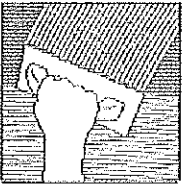
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FAX: 770-740-1199

BURNABY

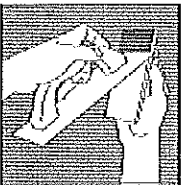
General - Burnaby manufactures Glasstyle by fusing clear glass with ceramic glazes. Glasstyle may be installed on interior or exterior wall areas, in wet or dry locations (even in hot or cold environments). Glasstyle is manufactured in 4 and 6 mm thicknesses for wall use. Glass differs from ceramic products, so extra caution and attention to installation instructions is recommended. Glasstyle should not be exposed to high abrasion, high impact and thermal shock or installed over flexible surfaces.



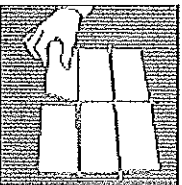
Important - Since any crack in a glass tile is very visible, the use of a crack isolation membrane (ANSI A118.12-2005) over the entire surface is strongly recommended. Many substrates may continue to cure and shrink over a period of months, and a crack isolation membrane prevents shrinkage or movement of the substrate to mirror through the tile. If a crack isolation membrane is not used, neither the distributor nor the manufacturer will accept any responsibility should any cracking occur. Install only over well-cured, stable substrates. Allow for an expansion joint whenever substrates change.



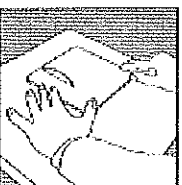
Installation - Use a white thin-set mortar (2-component, flexible, rapid cure, acrylic thin-set mortar system, such as Grani/Rapid by Mapei) formulated for interior and exterior wall installations. Spread the adhesive with a notched trowel following the manufacturer's recommendations (in many cases a 3/16" V-notch trowel works well). Use the flat side of the trowel to smooth the ridges without removing thin-set. Use only the thin-set manufacturer's minimum recommended thickness of thin-set. Do not overbuild the adhesive, as it will shrink and add stress or crack the glass. Spread only as much adhesive as will be covered with the tile within 15 minutes.



Sheet mounted mosaics can be applied directly to the thin-set. 4" and larger tiles should be "back buttered" with the flat edge of the trowel to provide a void-free installation and good contact with the mortar bed. Firmly press the glass against the surface to prevent voids in the adhesive from showing through the glass.



Install Burnaby Glasstyle on the wall leaving even spacing between tiles of at least 1/16" (1.5mm). Use plastic spacers whenever possible. Install control joints where the tile abuts restraining surfaces and around the perimeter of the tile work. Allow the adhesive to cure according to the manufacturer's instructions (at least 24 hours). Grout with an unsanded grout to prevent scratching of the surface. Grout joints should be filled to approximately 2/3 of the thickness of the tile to allow light to reflect on the internal surfaces of the tile.



Cutting - Select a method for cutting Burnaby glass tile according to the shape of the cut that you want to make. *Note: Straight cuts generally do not result in additional stress on the glass tile, but notched cuts may add stress and cause cracking of the glass. Keep in mind that in many cases it may be easier and less expensive to mark your cuts and take the tile to a professional glass shop for cutting or drilling.*

Glass tile should be cut on a wet saw using a diamond blade designed for cutting glass. A blade for cutting glass is thin, has smaller diamonds than a tile blade, has a continuous rim and generally runs at a slower speed. Glass tile is cut with the glazed side up, the rotation of the saw blade should enter the glass from the glazed side. Ensure adequate water or coolant is provided. Whenever possible cut edges should be placed in corners where they can be covered or hidden. Keep in mind that in many cases it may be easier and less expensive to mark your cuts and take the tile to a professional glass shop for cutting or drilling.

Blades for cutting glass tiles are made to fit most tile saws and are available from many tile distributors. A lapidary blade will also cut glass tiles cleanly. Burnaby has developed an inexpensive 4" and 7" electroplated diamond blade for use with a wet saw. Contact your dealer to purchase these blades.

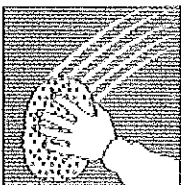
Plasplugs makes a small tile saw (DWW105US - contact [Plasplugs at \(800\) 966-6400](tel:8009666400) that can be fitted with our exclusive diamond blade to make excellent cuts on Burnaby glass tile. Your Burnaby glass tile dealer will be able to supply you with our diamond blade and Plasplugs saw. Avoid delays by ordering a blade with the tile shipment.

Hint: When cutting glass on the Plasplugs saw, place the glass with the smooth surface down. Avoid stress to the last portion of the cut by cutting slowly and by pushing the glass with a scrap piece of wood placed across the entire rear surface of the glass. Other manufacturers offer solutions for cutting glass: Makita manufactures a battery operated saw (model 4190DW equipped with 724-950-8V glass blade), contact [Makita at \(800\) 462-5482](tel:8004625482). MK also makes special glass blades for their tile saws (model MK215GL, available from 7" to 12" diameter). Contact [MK Diamond at 800 421-8830](tel:8004218830). A lapidary blade also makes a very clean cut on glass tiles.

Cutting Curves. A ring or band saw designed for cutting glass makes cutting curves easy. For more information, contact [Gemini Saw at \(310\) 891-0288](tel:3108910288) or Diamond Tech at (800) 937-9593.



Drilling - Drilling a hole requires the use of a drill bit or coring drill that is designed for glass - if the drill and glass tile are not securely clamped in place, drill a small pilot hole through the glass to act as a guide. Always use a proper glass-drilling bit, keep the drill bit and hole lubricated with turpentine or water and drill at very slow speed. Start drilling from the back of the tile, then complete the hole by drilling from the face of the tile. Attempting to drill all the way through the tile from one side will cause the glass to chip off on the exit side of the hole. *Important - Drill a hole 1/8" (3mm) larger than any anchors you plan to use. This will prevent the stress transfer from the fixture to the glass tile. Ensure anchors are well secured to the structure and do not allow the fixture to rest on the substrate or the glass.*



Cleaning - for routine cleaning, any non-abrasive cleaning compound that is recommended for either glass or tile (such as Windex, ammonia mixed with water, vinegar mixed with water, etc.) can be used. Follow rinsing instructions carefully. When etched glass tile (such as [Jaspers](#) and [Glassblends](#)) are used on countertops and backsplashes where they could be splashed with cooking oils, the surface of the tile and the grout should be sealed with a tile sealer to facilitate clean-up (contact [Aquamix at \(562\) 946-6877](tel:5629466877) or [Miracle Sealants](#)

09 3000 TILING

CERAMIC TECHNICS

Firenze Progetto

- Maintenance



1298 Old Alpharetta Rd
Alpharetta, GA 30005
Phone: (770) 740-0050
Fax: (770) 740-1199
www.ceramictechnics.com

Date: March 29, 2013

Spectra Contract Flooring

Re: Warranty – Music City Center

- ***Burnaby Glasstyle***
- ***Progetto L14***
- ***Salerno Quartz***
- ***Sassuolo Stone Evo/Rocce***
- ***Studio Cord Sandstone***
- ***Studio Padana Metallic Linear***

To Whom It May Concern:

We, hereby, warrant that all materials delivered to your company were first choice materials and free from defects. We warrant that our products will meet or exceed the performance specification outlined in ANSI 137.1 - 1998 and in our performance data.

Because specific design installation details, structural design and environmental conditions are beyond our control, we cannot accept responsibility for our products after they are installed.

However, in the event of latent defects caused by improper manufacture, the company will replace any defective units F.O.B. our warehouse provided we are notified within one year of installation.

Best regards,
Gerald R. King

GK/ctr

cleaning and maintenance information

Make sure to do the following before cleaning any tiled surface :

1. Check the **resistance to chemical agents** of the laid tiles on the general catalogue;
2. Make a preliminary test directly on the laid tiles by putting a detergent, to be used in contact with the tiles for a period that is equal to the period that will be used later on the site;
3. Make sure that the detergents that are going to be used, **do not contain** hydrofluoric acid and/or any of its derivatives; these substances are distinctively known for damaging all ceramic products.

Some indications for cleaning after the installation (after laying the tiles), on a daily basis, extra cleaning and to remove waxes and polish glazes or for any extra maintenance that may be required, are listed here below.

cleaning "after the installation"

1. Cleaning "after the installation" helps remove residues of grout-joints, cement and lime. This is **obligatory** at the end of the installation, for glazed tiles and unglazed tiles.
2. If the cleaning "after the installation" is not carried out properly or if is not carried out at all, is often a cause of marks that prevent the floor from being clean even if a good daily cleaning is performed.
3. Whenever is possible, especially for medium to large surfaces, it is advisable to use a single-brush machine with soft disks (white or beige).
4. **cleaning cement-based grouts mixed with water.**

It is carried out with specific detergents based with buffered and diluted acids. The table below shows some of these detergents, which are easily available in the market.

for removing the following residues	type of detergent	detergent's name	manufacturer
cement-based grouts grout cement lime	buffered acid based	keranet	mapei
		cement remover	faberchimica
		deterdek	fila
		trek	kiter
		zementschleierentferner	iithofin
		hmk r63	hmk
		solvacid	geal

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

Instructions on how to clean "after the installation":

1. Clean 4-5 days after the grouting (the grout must be hardened); do not wait over 10 days. In addition to this period, the cleaning can become very laborious.
2. Moisten the floor with water before cleaning. This way the groutings are soaked with water and the contact with detergents is reduced.
3. Let the detergents operate for limited periods, hence rinse out with water as soon as possible.
4. It must not be carried out if the tiled surfaces are very hot (i.e. exposed to the sun during very warm days); this must be avoided as the action of aggressive chemicals become very harsh. On the summer, proceed with the operation during the coolest period of the day.
5. Make sure to always perform a precautionary test before using the product (on a tile that is not laid), especially for Lapped or Polished products.

5. cleaning epoxy grouts or cement-based grouts with additives (with Lattice, Resins, etc..)

Removing this type of grout residues must be done immediately and thoroughly because these grouts hardened very quickly, even after just a few minutes. Please follow the manufacturer's instructions very carefully.

6. antislip tiles

"Antislip" tiles that are made with rough and/or textured surfaces must be cleaned very laboriously. Therefore, it is advisable to clean "after the installation", quickly and thoroughly, using a single-brush machine with soft disks (white).

Extraordinary cleaning

This procedure is carried out to remove stains or residues that are particularly old or tough. Make sure to always perform a precautionary test before using the product (on a tile that is not laid), especially for Lapped or Polished products.

The table shown below indicates the detergents that are effective according to the type of stains.

for removing the following residues	type of detergent	detergent's name	manufacturer
grease dust footmarks base cleaning scratchproof wax	multipurpose, alkaline-based (1)	ps87	fila
		intensivreiniger	lithofin
		hmk r55	hmk
		taski r20-strip	johnsondiversey
coffee coke fruit juice coloured vegetable stains	multipurpose, alkaline-based (1)	coloured stain remover	faberchimica
		ps87	fila
wine	oxidizing agent	oxidant	faberchimica
calcareous deposits	acid-based	viakal	procter & gamble
rust	acid-based	deterdek	fila
inks felt-tipped pen	solvent-based	n-butylacetone, dichloroethylene, turpentine	different manufacturers
		coloured stain remover	faberchimica
	multipurpose, alkaline-based (1)	ps87	fila
		taski r20-strip	johnsondiversey
pneumatic stains from rubber suckers metals or pencils	paste or rubber for mechanical removal	vim clorex	guaber
		polishing cream (2)	faberchimica
		strong remover (3)	faberchimica
		detergum (3)	zep italia
tile joint stains	specific	fuganet	fila
		fugenreiniger	lithofin

(1) Make precautionary test on Lapped or Polished materials

(2) Suitable for Lapped or Polished materials

(3) Do not use it on Lapped; use it with the utmost caution on Polished products

Unless otherwise indicated by LEA CERAMICHE, follow the usage instructions indicated on the manufacturer's package very carefully.

cleaning and maintenance information

Daily / standard cleaning

Use neutral detergents that are diluted in hot water and make sure they do not contain wax and make sure they do not leave any glossy glaze. Rinse with plenty of water. It is advisable to use the following products, which are available in the market.

type of operation	type of detergent	detergent's name	manufacturer
clean on a daily basis	neutral	floor cleaner	faberchimica
		fila cleaner	fila
		pflegereiniger	lithofin
		hmk p15	hmk

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

Cleaning decorations

- Use NEUTRAL, diluted, alcohol-based detergents
- NEVER USE**
- Acid or alkaline detergents
- Abrasive pastes (Detergum, StrngRemover, Polishing Cream, Vim Clorox, etc.)
- Abrasive brushes or sponges.

Removing glossy glaze

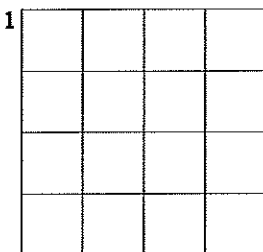
Standard detergents that are available in the market sometimes contain waxes or polish additives that, wash after wash, deposit glossy glaze on the floor and causes annoying marks. These types of glazes can also settle on some joint grouts.

When simple types of foods such as Coke, Wine, water, etc., fall on the floor, they remove this type of glossy glaze and restore the original appearance of the tiles (a more opaque look). In the middle of the shinier floor, the areas without wax appear as opaque marks, but they are actually the only clean parts of the floor. In these cases, the following must be done:

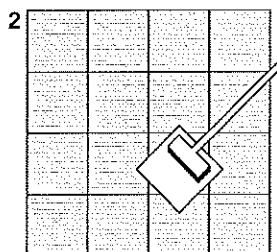
1. First of all, remove the glossy glaze from the entire floor (see table below);
2. Then, for daily cleaning, use neutral detergents that do not contain wax or polishing glaze (see the previous paragraph: "daily/standard cleaning").

residues to be removed	type of detergent	detergent's name	manufacturer
glossy glaze	weak acidulous	tile cleaner pure (*)	faberchimica
glossy glaze + common dirt (grease, oil, organic substances, etc.)	multipurpose, alkaline-based	ps87	fila
		taski r20-strip	johnsondiversey

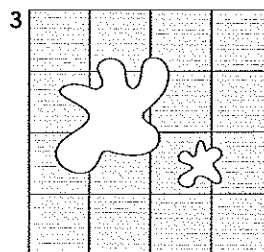
(*) Do not follow the instructions on the package, just apply the pure detergent, leave it on for 5-10 minutes, rub it with soft pads (white, yellow) and rinse it thoroughly with water. Do not use wax on LEA CERAMICHE porcelain stoneware.



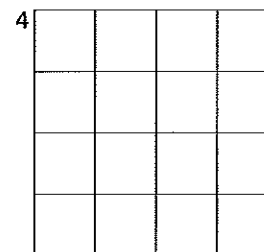
Original floor.



After cleaning detergents containing waxes.



Simple foodstuffs (Coca-Cola, wine, water etc) can remove the bright patina. The original surface is more matt.



Remove the patina with detergent (Faber tile cleaner, used neat), and use detergent without waxes for everyday cleaning.

Special maintenance

stain-resistant products for polished porcelain stoneware

To make the cleaning of LEA CERAMICHE Polished Porcelain Stoneware easier, the following products may be used.

product name	manufacturer
mp 90	fila
gres lux 90	faber chimica

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

Make sure to always carry out a precautionary test to check the drying time and the time required before it is possible to walk on the treated floor.

stain-resistant products for lapped porcelain stoneware

To make the cleaning of LEA CERAMICHE lapped Porcelain Stoneware easier, the following products may be used

product name	manufacturer
keraseal	federchemicals

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

Make sure to always make a precautionary test to check the drying time and the time required before it is possible to walk on the treated floor.

stain-resistant products for joints

product name	manufacturer
fugaproof	fila
kf fugenschutz	lithofin

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

Recommended exclusively for wall tile laying kitchens.

antislip treatments

The slip resistance of floors laid with glazed tiles or non-glazed tiles can be increased by using specific products (see table).

Before applying the product make a precautionary test on a tile that is not laid in order to find the most suitable contact time. If, on the one hand, the longest period increases the griping grade, on the other, it will tend to whiten the colours of the tiles a little and make it a little easier to stain.

type of operation	product name	manufacturer
antislip treatment	safe floor	faberchimica
	safe floor/30	faberchimica

Unless otherwise indicated by LEA CERAMICHE, follow the instructions indicated on the manufacturer's package very carefully.

caution:

1. Do not use these treatments on lapped or Polished surfaces;
2. before the doing the treatment contact Lea's Customer Service;
3. it is advisable to carry out the treatments through specialized companies.

POLISHED products can reach a grade of **R9** (test DIN51130) with special laser treatments that may be carried out only on materials that have **not been laid**: for this reason the request for **R9** on Polished products must be specified at the time of the order in the sales department. Such laser treatments can be also be carried out on **LAPPED** surfaces (after making a verification with LEA CERAMICHE Customer Service).

Useful contacts pag. 510

09 3000 TILING

CERAMIC TECNICS

Sassuolo Stone EVO

- Maintenance

Porcelain Maintenance of Porcelain Tile

Porcelain Quality

All products manufactured under the Porcelain brand are produced using the highest quality standards and the finest available raw materials; they are fully vitrified, resulting in extreme durability, hardness, and low water absorption. The Porcelain commercial products are highly stain and wear resistant and are sold with unsurpassed guarantees such as lifetime wear guarantee. However, as with every surface material, a basic cleaning and maintenance program should be followed in order to maintain a satisfactory appearance and an acceptable level of performance.

Care During Construction

Porcelain products are classified as a finish material. As such they should not be installed until after any heavy construction work has been completed.

In instances where the Porcelain products are installed prior to the completion of construction, special care must be taken to protect the tile until it is put into normal service. The general build up of dirt and debris present on any construction site may negatively affect the performance of the tile if it is left unprotected. The best way to protect the tile surface is to cover it with a protective layer of Kraft paper, carpeting, cardboard, plywood, or any other material that will not adversely affect the tile surface.

Initial Cleaning and Maintenance

The most important cleaning operation is performed immediately after the tile has been set. This involves the complete removal of grout residue and construction dirt from the newly installed Porcelain products. Grout manufacturers provide directions for the clean up of their products after installation has been completed. These directions should be followed. In many cases, Porcelain products can be successfully cleaned by scrubbing with a mild detergent, combined with a thorough rinsing. It is critical that all rinse water be removed through wet vacuuming or dry toweling. Should any grout residue remain this process can be repeated several times as necessary.

For highly textured products, or when using a dark colored grout with a light colored tile, a grout release may be used prior to grouting to assist in the removal of the grout from the surface of the tile. Please follow the specific manufacturers instructions for the use of these products.

Surface Coatings

The inherent density and low water absorption of all Porcelain porcelain products ensure a product that is easy to maintain. Porcelain products do not require the use of sealers or waxes. These surface coatings may actually negatively affect the performance of the tile.

In some instances where an unglazed, polished porcelain product is used in an area subject to excessive exposure to dirt, a penetrating type sealer may be used. A penetrating sealer is designed to fill the microscopic pores created during the polishing process. It is not designed to coat the surface of the tile. Please ensure you follow the manufacturers instructions when using a penetrating sealer and do not allow the sealer to dry on the surface of the tile.

Regular Maintenance

The inherent technical characteristics of Porcelain products ensure that they will be relatively easy to maintain and should provide years of enjoyment. Many general-purpose cleaners that are readily available are acceptable for use on Porcelain products. It is important that the cleaner has a non-oil, non-animal fat, non-soap base. These components can leave behind an invisible residue which can trap dirt. It is also important that the tile receive a thorough rinsing with clean water after the cleaning process has been completed.

The general cleaning steps for Porcelain products can be summarized as follows:

1. Remove all loose debris from the tile by sweeping with a soft bristle broom or vacuuming.
2. Any spills should be wiped up as quickly as possible.
3. Apply the recommended amount and dilution of the appropriate cleaner to the tile. Allow the cleaner to remain on the tile for short period of time (at least 5 minutes).
4. For unpolished tile, scrub with a nylon pad or soft bristle brush. For more heavily soiled floors a floor machine equipped with a nylon pad or bristle brush may be used. For polished tile, wipe or mop with a nonabrasive mop or cloth.
5. Remove the dirty cleaning solution and water with a wet vacuum or mop. Thoroughly rinse the tile with clean water and remove with a wet vacuum, mop, or towel. It is absolutely essential for all detergent residues to be completely removed from the tile. Any remaining detergent residue can dry on the tile and form a coating which can trap dirt and be very difficult to remove. The tile should be rinsed several times if necessary to remove all detergent residue.

The frequency and timing of any maintenance program is dependent on the specific characteristics of each tile application. Factors such as foot traffic, environmental conditions and product color should be considered when planning your maintenance schedule

A Word About Cleaners

There are many excellent cleaners on the market today which should provide you with satisfactory results. All-purpose household cleaners such as Soft Scrub, Top Job, Mr. Clean, Ajax Liquid, Dow Bathroom Cleaner, Liquid Comet, and Fantastik are all suitable for general purpose cleaning of Porcelain products. Soapless detergents such as Spic & Span and 409 may also be used.

For the removal of stains on unpolished tile, scouring powders such as Comet, Bon Ami, or Ajax may be used. These may be used in conjunction with a nylon pad or soft bristle brush. Steel wool is not recommended.

For heavier cleaning requirements or commercial applications, products manufactured by Aqua Mix, Hillyard Industries, Walter G. Legge Co., or CeramaSeal may be used. These products are available through your local ceramic tile dealer.

In all cases please ensure you follow the manufacturers instructions. We also strongly recommend that all cleaners be tested first in a small, inconspicuous area before general use on the floor.

For additional information please contact the offices of Ceramic Technics, Ltd. at (770) 740-0050 or fax at (770) 740-1199.

09 3000 TILING

CERAMIC TECHNICS

Salerno Quartz

- Maintenance

Porcelain Maintenance of Porcelain Tile

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Care During Construction

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09 3000 TILING

CERAMIC TECHNICS

Studio Cord Sandstone

- Maintenance

7. Maintenance.

7A. FINAL CLEANING.

The care taken over this operation, the first to be performed after laying, will influence the ease with which the floor can be cleaned throughout its life. If residues are left, they will act as catalysts for dirt. This is the leading cause of complaints.

7A-1. WHAT ARE THE AIMS AND HOW SHOULD IT BE PERFORMED.

- Final cleaning is performed to remove all residues of cement, grout or other material which could cause marks or irreversible scratches on the surface of the tiles.
- At the end of the grout curing time (at least 10 days), clean with acid detergent applied by hand (sponge or cloth) or machine (single brush floor cleaner), scrupulously following the advice given below.

7A-2. RECOMMENDED PRODUCTS.

You are recommended to use a mild acid wash (according to recommended dilution) such as **FILA DETERDEK**.

The use of diluted acids from hardware stores should be absolutely avoided as they give off harmful fumes and have a "burning" action on the joints.

QUANTITY AND DILUTION OF PRODUCTS ACCORDING TO TYPE OF SURFACE

SMOOTH SURFACES	TEXTURED SURFACES	PRESENCE OF NATURAL MARBLE OR METAL INSERTS
3 litres acid solution per 100m ² in 1:10 dilution (1/2 litre in 5 litres hot water)	6 litres acid solution per 100m ² in 1:5 dilution (1 litre in 5 litres hot water)	1,5 litres acid solution per 100m ² in 1:25 dilution (200cc litre in 5 litres hot water)

7A-3. PROCEDURE.

1. Wet the floor to protect the cementitious grout from the possible, corrosive action of the diluted acid solution.
2. Distribute the acid solution evenly using a normal mop or rough cloth for residential floors or rubbing with a rotating single brush floor cleaner with green felt disks for large surfaces.
3. Leave to act for a few minutes depending on the intensity of the dirt.
4. Rub vigorously with a commercial Scotch-Brite pad or brush.
5. Collect the residues with a cloth or wet vacuum cleaner.
6. In both cases, rinse with abundant clean hot water and repeat a number of times to remove all marks or residues in the joints (in particular in the case of tiles with a textured surface).

If some zones are still slightly dirty, repeat the wash with more concentrated solution, with the exception of the case where are the presence of natural marble or metal inserts.

Iron or steel pads must be avoided at all costs as they would scratch the surface of the tiles.

When this cleaning must be performed when the floor is already in use, before treatment with an acid product, remove possible grease or similar using alkaline based detergents such as **FILA PS/87**.

7B. ROUTINE MAINTENANCE.

For daily cleaning, just:

- Remove dust with a dry cloth.
- Wash with normal neutral detergent with the same characteristics as **FILACLEANER-FILA** (low residue detergent) diluted 1:200 (one cup to one 5 litre bucket of water);
- Using a damp cloth which will be rinsed in the solution often. For dirtier floors, use an alkaline detergent such as **FILA PS/87** and rinse afterwards.

DILUTION OF FILA PS/87

SMOOTH SURFACES

1/2 glass in 5 litres hot water.

TEXTURED SURFACES

1 glass in 5 litres hot water.

If after washing, there are cloth marks on the floor, wash well with clean water, rinsing and wringing out the cloth frequently.

To avoid the residues making the floor dull, remove the dust thoroughly before washing, preferably with a vacuum cleaner, brush or wool cloth.

For large surfaces, use a floor washer machine and neutral detergent such as **FILACLEANER** diluted 1:100 to 1:200, as required.

7C. EXTRAORDINARY MAINTENANCE.

Extraordinary maintenance is necessary only when there are various types of stain or mark which cannot be eliminated by normal cleaning.

They can be removed by means of the chemical reaction between the staining agent and a cleaning product appropriate for the solubility of the staining agent.

This type of cleaning should be performed using a damp sponge or cloth depending on the size of the mark and the floor should then be abundantly rinsed and dried.

Even in these cases, iron or steel pads must be avoided at all costs as they would scratch the surface of the tiles.

Acids or other concentrated chemicals should be used with great care following the instructions provided by the manufacturer scrupulously.

The following table briefly describes the most suitable products to clean various types of stain and mark.

CLEANING PRODUCT TABLE.

INORGANIC MARKS

TYPE OF DIRT	SOLUTION	CLEANING PRODUCT	CLEANING PRODUCT MANUFACTURER
COAL/CARBON LIME EFFLORESCENCE CHALK METAL MARKS RUST PENCIL (GRAPHITE) EMULSION PAINT	ACID	DETERDEK	FILA INDUSTRIA CHIMICA S.p.A.

ORGANIC MARKS

TYPE OF DIRT	SOLUTION	CLEANING PRODUCT	CLEANING PRODUCT MANUFACTURER
RUBBER MARKS (SOLES, TYRES,...)	NEUTRAL	FILACLEANER	FILA INDUSTRIA CHIMICA S.p.A.
COCA COLA, COFFEE, WINE, BEER, ICE CREAM, ANIMAL AND VEGETABLE FATS, MUSTARD, MAYONNAISE, KETCHUP, JAM, VOMIT, URINE, BLOOD, HAIR DYE, SHAMPOO, LIPSTICK, CHEWING GUM, INK, INDELIBLE PEN	ALKALINE	FILA PS/87	FILA INDUSTRIA CHIMICA S.p.A.

SYNTHETIC MARKS

TYPE OF DIRT	SOLUTION	CLEANING PRODUCT	CLEANING PRODUCT MANUFACTURER
SILICON AND MECHANICAL OILS RESINS, VARNISHES BITUMEN, CANDLE WAX, PAINT TAR, RUBBER STICKY TAPE RESIDUES	SOLVENT	FILASOLV	FILA INDUSTRIA CHIMICA S.p.A.

PARTICULAR CASES

TYPE OF DIRT	SOLUTION	CLEANING PRODUCT	CLEANING PRODUCT MANUFACTURER
NON-SLIP PROTECTIVE WAX OR SUCKER MARKS	ACID + SOLVENT	ACID WASH THE FLOOR AS DESCRIBED ABOVE, COMPLETELY ELIMINATING ALL SOLID MATERIAL IN THE CASE OF PROTECTIVE WAX. IF SILICON MARKS CAN STILL BE SEEN IN CERTAIN LIGHTING CONDITIONS, DISTRIBUTE A SOLVENT AND LEAVE TO ACT UNTIL IT EVAPORATES COMPLETELY. AT THE END, RINSE WITH ABUNDANT CLEAN HOT WATER	

7. Maintenance.

Dirt builds up easily in the joint, making it unattractively **BLACK** and critical for the hygiene of the floor. **FILA FUGANET** is a cleaning spray to clean joints. Just spray it on, wait a few seconds then wipe with an abrasive sponge. An alternative method is to use an alkaline product, not aggressive to the grout, such as **FILA PS/87**. Leave to work for a few minutes then rub with an abrasive sponge. At the end, rinse thoroughly. Where **cementitious joints** need to be protected from water or oil based dirt, you are recommended to use **FUGAPROOF**, a specific product which creates an invisible protection, preventing dirt from penetrating deep down, making it impossible to clean.

NOTES

1. Hydraulic binder for rapid drying screeds.

MAPECEM-MAPEI	TOPCEM-MAPEI	TOPCEM PRONTO-MAPEI
Special rapid hydraulic binder for screeds, rapid setting, rapid drying, controlled shrinkage.	Special rapid hydraulic binder for screeds, normal setting, rapid drying, controlled shrinkage.	Premixed ready-to-use mortar for screeds, rapid drying, controlled shrinkage
Time required before laying: 3 hours.	Time required before laying: 24 hours.	Time required before laying: 24 hours.
Smoothing is required when the surface of the screed is uneven.		

2. Time required before gluing.

ULTRAPLAN-MAPEI	ULTRAPLAN MAXI-MAPEI
About 12 hours	

3. Rapid setting thixotropic levelling mortars:

NIVORAPID-MAPEI (for thickness of up to 20 mm) or **PLANIPATCH-MAPEI** (for thicknesses of up to 10mm). About 4-6 hours are required before laying in normal temperatures.

4. For expansion joints, use of a silicon sealer such as **MAPESIL AC-MAPEI** is recommended. For large interior floors (commercial use) with both edge joints and fraction joints, you are recommended to use **special joints either prefabricated** or made from a two-component polyurethane sealer such as **MAPEFLEX PU20** (expansion in situ up to 10%) or **MAPEFLEX PU21** (expansion in situ up to 5%). To eliminate possible traces of this last type of sealer left on the tiled surface, common solvents such as ethyl acetate, toluene and benzene can be used.

After hardening, any residues left can also be removed mechanically (with serious risks for the surface of the tiles) or with **PULICOL-MAPEI**.