

CERAMIC TILE CARE & MAINTENANCE

Introduction

Ceramic tile is one of the most durable and easiest to maintain surfaces you can choose for walls, floors, countertops, etc. With proper care and minimum maintenance, it will retain its original beauty and luster for many years. Generally, all that's necessary to keep the tile looking good as new is a quick wipe with a damp cloth or mop. Heavier cleaning may be required periodically to refresh the tile, or to clean tile that has been neglected. No special or unusual treatment should be required, and does not require waxing or polishing.

Post Installation Cleaning

- For cement based grouts – use an acid based cleaner (sulfamic, phosphoric, hydrochloric).
- For epoxy, urethane, pre-mixed acrylic grouts – consult with cleaning products manufacturer for appropriate cleaner.

NOTE: Acidic cleaners do not work on these grout residues.

- To facilitate ease of cleaning, a tiled surface must be free from all setting and grouting materials. Note that haze may exist and not be readily apparent.
- For tile that are able to accept the treatment, an organic or sulfamic acid applied after installation will improve the overall performance of the product. Note: Organic or sulfamic acid used only when grout haze occurs; not a standard for all tile jobs.
- Wet the grout prior to applying an acid solution which is sufficiently strong to do the job but not burn the grout or surrounding fixtures. Always test an area first.
- Apply the solution to a small area, agitate and pick up the acid or move it to another area if not spent.
- Rinse the area well with clean water and remove excess water with a wet vac.
- Rinse a second time and pick up all traces of water.

NOTE: Do not let acid solution dry on tile as it will be very difficult to remove and could damage the product. Do not use acids stronger than those recommended. Acids are very dangerous to both those cleaning the tile and the environment. Once clean, protect the tiling from further construction dirt.

Routine Ceramic Tile Care

- Use only non-oil-based neutral cleaner, non-acidic, neutral PH cleaners.
- 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.
- Do not use ammonia, as it will discolor grout.
- Clean unglazed wall and floor tiles in a similar manner using a solution of water and a PH neutral detergent or a tile cleaner following manufacturers recommendations.

Grout Care

- Once the tile has been cleaned and dried (shortly after installation), grout joints should be treated with a penetrating sealer if required. Consult grout manufacturers recommendations.
- Epoxy grouts do not require a sealer.

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 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 5 minutes.
- Scour with brush, rinse and wipe dry.
- Unglazed floor tiles may be cleaned in the same way.
- 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 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 the tile using appropriate cleaning products. Follow manufactures recommendations.
- Use all-purpose, non-oil- based cleaner.
- Allow to stand for 5 minutes before lightly scrubbing with a sponge.
- Rinse well.

Sourcing Maintenance Products

- Ceramic tile and natural stone cleaning products and sealers may be purchased at your tile/stone distributor, TTMAC member companies, home centres or floor covering stores.
- Consult the manufacturer of the cleaner, sealer 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

1. DO use a sealer on grout joints.
2. DO have any damaged or broken tiles removed and replaced only by a qualified contractor.
3. DO test scouring powders and other cleaners on a small area first.

Don'ts

1. DO NOT use cleansers containing acid or bleach for routine maintenance.
2. DO NOT use wax cleaners, oil-based detergents or sealants to maintain your tile.
3. DO NOT use ammonia (it will discolor grout).
4. DO NOT use harsh cleaning aids such as steel wool pads or scouring pads containing metal.
5. DO NOT use a cleaning agent that contains color on unglazed ceramic tile or natural stone.
6. DO NOT use an acidic based cleaner on marble, travertine, limestone or a cement tile.

Type of Tile/Usage	Routine Cleaning	Heavy-Duty Cleaning
Glazed tile walls, counter tops	Wipe with damp cloth or sponge using all-purpose cleaner. Use a light neutral cleaner for glossy surfaces. Wipe dry with cloth.	Clean with scouring powder, commercial tile cleaner or all-purpose cleaner using a non-metallic scouring pad. Rinse and wipe dry.
Glazed tile floor	Vacuum regularly to remove gritty particles.	Use a commercial tile cleaner or a strong solution of water and "soap-less detergent." If stained, use scouring powder paste. Let stand five minutes, brush and scrub. Rinse and dry. For large areas and for areas that are difficult to clean, a power scrubber is recommended.
Glazed tile showers	Use all-purpose or bathroom cleaner. Allow to stand for five minutes, rinse and dry with towels. May also use neutral PH cleaners. No Acids.	Use chlorine bleach or hydrogen peroxide. For stubborn stains, use scouring powder containing a bleach agent. Let stand four to six hours, then scrub and rinse thoroughly. To remove mildew, use a commercial tile cleaner or chlorine bleach or ammonia. Do not mix chlorine bleach and ammonia.
Unglazed tile walls	Sponge with a diluted solution of water and "soap-less detergent."	Use scouring powder paste. Let stand five minutes, and then scour with brush. Rinse and wipe dry.
Unglazed tile floors	Vacuum regularly to remove gritty particles. Damp mop or sponge with water and/or a diluted solution of water and "soap-less detergent."	Use scouring powder paste. Let stand five minutes, and then scour with brush. Rinse and wipe dry. A small brush is suitable for small floors; consider a scrubbing machine for larger areas.

PORCELAIN TILE CARE & MAINTENANCE

Introduction

Porcelain stoneware is a technologically advanced material; porcelain tiles are composed of ultra-purified, highly ground clays with silica and feldspar additives. Porcelain tile is heated to extremely high temperatures, during which vitrification occurs, resulting in a surface of greater hardness than marble or granite. Porcelain stoneware's deep abrasion resistance, shock resistance, frost proof characteristics and exhibits the lowest water absorption rates and the greatest resistance to staining of any hard surface material.

Allow new installations of setting material to cure in accordance with manufacturer's instructions prior to treating the tile. Always test a small area to ensure desired results.

Post Installation Cleaning

- Post installation cleaning is the responsibility of the installer.
- Remove all construction debris from the area.
- Excess grout residues and factory applied protections must be removed from the surface of the tile immediately after the completion of the installation.
- Clean water and a cheese cloth are normally sufficient.
- If a light film of grout is still apparent, other acid solutions may be used. However, if not used correctly these solutions may weaken and deteriorate the grout joints.
- It is recommended to wait until the grout is fully cured before performing the acid wash.
- Surface should be cleaned with a sulfamic or mild organic based detergent and rinsed with clean water.

Note: Do not assume that because you cannot see the grout, it isn't there; a thin nearly invisible film may remain.

Regular Maintenance

- Sweep or vacuum the floor free of debris. If sweeping, use a soft natural bristle broom.
- Use the recommended amount of general purpose neutralizing cleaner to clean the surface.
- Rinse with clean water or a mild solution of neutral cleaner, suspend and remove all soft residues.
- Remove excess water.

Maintenance for Extremely Dirty Areas

- Sweep or vacuum the floor free of debris
- Scrub with a high PH or alkaline cleaning compound and floor machine equipment with an abrasive pad or natural bristle brush.
- Pick up soiled cleaning solution with a wet vacuum.
- Rinse floor area twice with clean water.
- Remove excess with a wet vacuum.
- If the dirt is not organic, it's better to use a bit of PH 3 cleaner, after that rinse and neutralize it with PH 12.

Maintenance for Textured Surfaces

NOTE: Textured surfaces, although it offers excellent safety features (e.g.: increased coefficient of friction) require additional maintenance. Due to the crevices on the tile surface, it will be necessary to reach the soil that rests in the low points. Standard wet mopping will not be completely effective in maintaining these surfaces.

- Sweep and vacuum floor debris ensuring that all soil is removed completely.
- Use a scrubbing machine or mop with a mild cleaning solution, using cross action to ensure that all dirt is removed.
- Rinse several times with clean water.
- Proper cleaning enhances the aesthetic characteristics of any floor.

Sealing Maintenance

To be executed only after consultation with the porcelain tile supplier. Many porcelain tiles do not require application of any sealer. Surface treatments will depend on the porosity, density, hardness, foot traffic and the elements the area is exposed to. The user must determine the suitability of the finishing product for the intended use.

CAST METAL TILE MAINTENANCE

Routine Care

- The surface can be cleaned with any neutral pH cleaner.
- For best results, use a liquid non-abrasive cleaner.
- Powdered or abrasive cleaners should be tested in a small inconspicuous area to ensure damage will not result.
- Do not clean with scouring pads, steel wool, sandpaper or other abrasive implements.

DO's

- Always clean tile with a damp sponge mop, using a small amount of soap-less detergent in warm water.
- Ensure cleaner is a PH neutral - non-acidic and non-alkaline.
- Where soil is more concentrated, use a cleaner made specifically for tile.

DON'Ts

- DO NOT use soap on tile. Soap leaves a film that dulls the surface and promotes mildew.
- DO NOT use an acid or ammonia-based cleaner, as it could affect the colour of the grout. Acid-based cleaners will cause polished marble tiles to dull. You should NOT use bleach or vinegar and water - vinegar is an acid.
- DO NOT use steel wool pads or any abrasive on tile. These materials can scratch or dull the surface. Also, any loose particles of steel left on the grout will cause rust stains.

NOTE: For complete details on protecting, cleaning and solving problems with these surfaces please contact the supplier of the material.

GLASS TILE CLEANING & MAINTENANCE

Post Installation

- Do not attempt to clean new installations for a minimum of 24 hours after completing the grouting process. After 24 hours remove loose dirt by vacuuming or sweeping.
- Follow directions and prepare a cleaning solution using warm water and a neutral pH cleaner. These types of cleaners are available from tile suppliers.
- Thoroughly clean the glass tile, including the grout joints, using a nylon scrub brush or nylon scrub pad following manufacturer's directions.
- Rinse thoroughly with clean, warm water and allow to dry. A second rinsing may be required to completely remove all traces of the cleaning solution.
- Cleaning glass tile is easier with microfiber cloth. Microfiber will collect the dirt and will release it only when you squeeze it with water.

Regular Maintenance

- Prepare a cleaning solution using warm water and a neutral pH cleaner specifically designed for cleaning glass tile. These types of cleaners are available from tile suppliers.
- Thoroughly clean the glass tile, including the grout joints, using a nylon scrub brush or nylon scrub pad following the manufacturer's directions.
- Rinse thoroughly with clean, warm water and allow glass tiles to dry.
- A second rinsing may be needed to completely remove the cleaning solution.
- Cleaning glass tile is easier with microfiber cloth. Microfiber will collect the dirt and will release it only when you squeeze it with water.

Heavy Duty Maintenance

- Grout must be cured for a minimum of 14 days.
- The following method of maintenance should be used for installations with cement based grout or setting material haze that requires a stronger cleaning solution.
- Wait 14 days after the grout has been installed then use a sulfamic acid or organic based cleaner.
- Follow the manufacturer's directions using a nylon scrub brush or nylon scrub pad.
- Apply the solution allowing it to penetrate for 3-5 minutes followed by re-applying and scrubbing.
- Rinse thoroughly with clean, warm water and allow to dry. A second rinsing may be needed to completely remove the cleaning solution.

Additional Cleaning Instructions for Glass Tile with Latex Based Smears

- Use of stone and tile strippers may be required.
- The stripper will work to clean latex smears not removed by using acid based cleaners.
- Allow a minimum of 14 days' cure time and always follow the manufacturer's directions.
- Rinse thoroughly with clean, warm water and allow to dry. A second rinsing may be needed to completely remove the cleaning solution.

Sealing

- Sealers can be beneficial for grouts if recommended. Grout will not penetrate the tile due to the impervious nature of glass.

NOTE: Crackle glaze tile can be protected with a solvent based penetrating sealer.

- Consult grout manufacturers for their recommendations.
- To reduce the possibility of sealer smears, buff sealer off glass tile with dry, clean towels before it dries.
- Always test a product in an inconspicuous area before treating the entire tile installation.
- When using recommended products for tiled areas, protect surrounding non-tiled surfaces.
- Tile cleaning and maintenance products can adversely affect metals and wood.
- When using acid cleaning products always follow proper procedures and use personal protection equipment.

TERRAZZO MAINTENANCE

Introduction

All terrazzo flooring requires regular maintenance to ensure good looks and long service. It is normal for floor coatings to become worn out and defaced by abrasion. Dust is an abrasive to floor coatings and it is imperative to remove it to reduce abrasion. Regular washing and wax lubricates the floor against abrasion. Waxing is recommended but not a requirement.

Types of Terrazzo Systems

There are three type of binders used to anchor aggregate chips to a terrazzo floor.

1. Portland cement product.
2. Polyacrylic modified Portland cement which includes an acrylic additive.
3. Epoxy or polyester system, often referred to as a resinous thin-set terrazzo floor system.

The treatment and maintenance of these different systems do vary. Terrazzo floors are very easy to maintain; however, this does not mean that CARE IS NOT REQUIRED. Understanding the care requirements of a new terrazzo floor from the beginning, will prevent possible problems, and recognize the economy of care and the aesthetic values of Terrazzo.

Portland cement System

- The surface of this terrazzo floor has a minimum 70% density aggregate chip surface exposure.
- Most aggregates have a low porosity of absorption.
- The Portland cement binder which has 30% or less surface exposure needs protection.
- Requires a penetrating type sealer applied to the surface following the final polishing. To help inhibit the penetration of spilled materials into the terrazzo floor.
- Spills must be cleaned up immediately in order to prevent staining from long term exposure.
- Penetrating sealers do not produce high gloss sheen to the floor surface.
- The owner should apply finish coats to achieve the desired surface finish.

Resinous Types of Terrazzo Systems (Epoxy and Polyester)

No penetrating type sealer is required for this type of terrazzo floor since the binder or matrix is a non-porous material. Only surface sealers should be used as mentioned in the contents of these instructions.

Normal Maintenance of Terrazzo

- Harsh cleaners and sealers may damage terrazzo; therefore, only use approved materials that are neutral with a pH Factor between 7 and 10 when scrubbing or mopping terrazzo floors.
- Cleaners or soaps containing water soluble, inorganic or crystallizing salts or acids should not be used.
- Sweeping compounds containing oil which may also be a fire hazard may penetrate the terrazzo and could permanently discolor and stain the surface.

- Many of these compounds contain sand or a coarse substance which is hard to sweep and can abrade the surface if not completely removed.
- Most owners prefer a high sheen on their floors.
- Since safety is always a concern, use water based sealers in the acrylic family especially designed for Terrazzo which should provide a coefficient of friction rating of minimum of 0.5.
- Solvent based sealers have a tendency to discolour with age and are difficult to remove especially when wear patterns develop or discoloration requires stripping of the surface.
- Acrylic water based sealers/finishes are recommended to be applied in one or more coats, in accordance with the manufacturer's instructions.
- This can also be followed by an acrylic water-based finish for daily or weekly buffing if a high sheen is desired.

General Cleaning Procedures

- Neutral cleaners are designed to react only in a solution with clean water and mixed in accordance to the manufacturer's instructions.
- This mixed solution must be allowed to remain on the floor surface for several minutes.
- Allow sufficient time for the dirt and grime dissolving action to properly work.
- Rinse the dirt-laden solution from the surface with a squeegee, wet vacuum or by mopping.
- Rinse the area with plenty of clean warm water.
- It is very important to keep the surface of the terrazzo floor wet during this entire cleaning process so the dirt does not reabsorb into the floor.
- The amount of traffic will determine how often you must sweep or scrub your terrazzo floor daily.
- It is normal that daily dust mopping is required in most public buildings.
- Grit will act as an abrasive on the terrazzo surface.

Routine Maintenance

Maintenance frequency will be determined by the volume and type of traffic. The following recommendation should be used as a guide to establish a suitable maintenance program and are minimum maintenance suggestions to keep a terrazzo floor clean and long lasting.

CAUTION: Before deviation from any terrazzo maintenance instructions, contact your terrazzo contractor for advice. ALWAYS KEEP RINSE WATER, MOPS AND PAILS CLEAN.

Daily Maintenance

- Sweep and dust mop daily.
- Hand work stubborn stains and scuff marks with a neutral cleaner diluted in warm clean water.

Weekly Maintenance

- Damp mop lightly soiled floors with clean warm water and a neutral cleaner.
- Heavily soiled floors must be scrubbed with a mechanical buffing machine and a neutral

cleaner.

- Rinse and mop up residue with clean warm water before it dries.
- Allow to completely dry before machine buffing using proper buffing pads or brushes.

NOTE: Once you apply the neutral cleaning solution to the terrazzo floor, allow sufficient time to react. This type of cleaner is designed to loosen foreign matters from the surface of the terrazzo floor. Do NOT allow this solution to dry on the surface.

WARNING: ANY SEALER OR SURFACE DRESSING MUST BE TESTED AND APPROVED FOR SLIP RESISTANCE.

Some Additional Options to the Above Include the Following:

- Apply high luster finishes over sealer to the desired sheen. Normally, surface finishes require the added expense of spray buffing to maintain the high sheen. Terrazzo, unlike other flooring products, does NOT require surface finishes for wear protection.
- Some owners have been testing new technologies from the marble and granite industry to produce super high gloss finishes without day to day recoating.
- These include a series of diamond pads on mechanical devices which produce a polishing as well as crystallization/vitrification effect. At this time, the TTMAC does not endorse this system.

NOTE: In the event the terrazzo floor becomes heavily soiled, consult with your local terrazzo contractor or the TTMAC for direction before using any cleaners or strippers. Ignoring this warning could prove harmful to your terrazzo surface.

References:

<https://www.ttmac.com/en/component/k2/item/128-hard-surface-maintenance-guide-2017-2019-english>