

Tile Maintenance & Cleaning Guide

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1.0 Immediate Post Installation Cleaning

Post Installation cleaning is a critical step for long-term maintenance of your newly tiled area. During this process, any residue from the installation, such as adhesives, mortar, or paint needs to be thoroughly removed from the surface. The area should be cleaned with a solution of water and a buffered acid to prevent residues from drying and then becoming a challenge to remove later. Often when this process is overlooked, the first clean after grouting can be more difficult and adhesives may become much harder to remove. Please note that acid-based cleaners must not be used on natural stone surfaces.

Grouting should not commence until this initial clean has been performed.

Step-By-Step Procedure

1. Thoroughly sweep the floor to remove any dust or debris.
2. Dilute the acid solution in water and apply it to the floor using a mop or cloth.
3. Allow the solution to sit for a few minutes.
4. Use an abrasive sponge to remove stubborn stains.
5. Wipe away the remaining dirt with a clean cloth.
6. Rinse the floor thoroughly with hot water.
7. Repeat the process a second time to eliminate any remaining stains or streaks.

Important Reminders

1. Acid-based cleaners may be aggressive towards adjacent materials, such as window or door frames and natural stone surfaces. So it is important to protect these areas adequately.
2. Ensure thorough rinsing until the wash water is completely clear.
3. If possible, use a professional wet vacuum to remove the dirty water, preventing it from spreading across the surface.

Choosing a Product for Initial Cleaning

The most suitable product for deep and effective cleaning is an acid-based cleaner, specifically designed to:

1. Remove construction residues and dirt.
2. Eliminate efflorescence.
3. Get rid of any remaining limescale.
4. Provide a thorough cleaning action due to its high surfactant content.

An acid-based cleaner also offers several advantages:

1. It does not alter the appearance or color of the tiles.
 2. It provides a deep clean without being overly aggressive.
 3. High-quality products do not emit harmful fumes into the environment.
 4. It respects the color of the grout without altering it.
 5. It is a multifunctional product that cleans, degreases, and removes deposits from the surface.
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2.0 Initial Cleaning / Grout Haze Removal

Once the grout has sufficiently cured, typically after 3-4 days, the first cleaning can be performed using a ph neutral cleaning solution, following the instructions on the label. You should always test a small area first before applying to the entire area.

Step-By-Step Procedure

1. Thoroughly sweep the floor to remove any dust or debris.
2. Saturate the grout joints with water prior to applying the solution
3. Dilute the ph neutral cleaning solution with warm water according to the instructions and apply it to the floor using a mop or cloth.
4. Allow the solution to sit for a few minutes to break down the excess grout, however do not allow the area to dry, add more cleaner to keep it wet and only clean in sections that you can handle.
5. Use an abrasive sponge to remove stubborn stains or use a scrubbing machine (with suction turned off) on larger areas. Always test a small area prior to ensure that there is no damage to the surface.
6. Wipe away the remaining dirt with a clean cloth / mop or for large areas remove dirt with a wet vacuum cleaner or scrubbing machine (with suction turned on).
7. Repeat process with cleaning solution if there is still grout residue or marks remaining.
8. Finally, rinse the floor thoroughly with hot water and repeat this process a second time to eliminate any remaining stains or streaks.

Tile Finish Type Specifics

Finish Type	Special Considerations
Polished & Glazed	• Mop the floor with a mild cleaning solution and water, using 50% less detergent, then using a damp mop, use clean water to remove the cleaning solution from the surface. • Dry the floor thoroughly with a soft cloth to increase shine and prevent water spots.
Unpolished, Matt & Honed	• For difficult contaminants, scrub the cleaning solution with a scrubbing machine with a nylon pad or bristle brush. • For residential and small areas, a hand brush or nylon pad can be used. • Powder cleaners should not be used on this type of surface as undissolved particles might retain and develop a haze on the surface.
Natural Stone	• Natural Stone products should not be cleaned with acid or acid based cleaners. Always seek professional written advise from the chemical manufacturer as to the suitability, application and frequency of use of their product on Natural Stone. • It is recommended that all Natural Stone products are sealed immediately after the first clean following installation.

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3.0 General Routine Cleaning

Always begin your cleaning routine by sweeping or vacuuming the tiled floor to remove dust, dirt and any other debris. Then use a damp mop or microfiber cloth to clean the tiles further, it is recommended to use a mild ph neutral detergent in warm water. Avoid using excessive water, as it can seep into the grout lines which can potentially lead to staining or damage.

- Points to Remember**
- Don't use powder based cleaners as they may scratch the surface on glazed and polished tiles, and powder based cleaners may also leave a haze on the surface of unglazed, matt and honed tiles.
 - It is important to ensure that the cleaning solution is thoroughly removed from the tiles, by mopping with clean water after the main clean.
 - Accidental spills should be cleaned as soon as possible so that any potential staining can be avoided.

Cleaning Recommendation According to Stain Type

Finish Type	Stain Type	Recommendation
Food	Soy Sauce, Coke, Coffee, Tea, Juice, Beer, Wine, Ice Cream, Tomato Sauce	Alkaline based detergent
Oil and Grease	Vegetable, Mineral, Petroleum	Alkaline based detergent
	Wax, Rubber	Scrape off then use solvent Turpentine followed by alkaline based detergent
	Lipstick, Shoe Polish	Alkaline based detergent
	Oil-Based Paint, Ink	Solvent such as Turpentine or Thinner
Marker	Felt Pen	Thinner
	Methylene Blue	Alkaline based detergent
	Crayon	Scrape off then use solvent Turpentine followed by alkaline based detergent
	Rust Stains	Diluted Hydrochloric acid or acidic based detergent
Adhesives / Grouts	Cement	Diluted Hydrochloric acid
	Latex or Polymer	Solvent such as Turpentine or Thinner
	Epoxy	Scraper to scrape it off
	Mortar	Acidic based detergent

Please note that further professional advice should be sought before taking any action based on the information provided. Bettertiles accepts no responsibility for the performance of cleaning products, nor for any damages arising from their use, as quality control and application fall outside our direct control.

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4.0 Routine Maintenance Schedule

The following schedule provides a listing of items that will require both preventative and regular maintenance and the recommended frequency. Where tiles have been installed in commercial or public areas, this maintenance regime should be carefully adhered to.

Activity	Monthly	Quarterly	Biannually	Annually	Quarterly
Expansion joints to tiled areas			✓		
Perimeter joints to tiled areas			✓		
Slip test to tile surface in public areas				✓	Recommend that an on-site slip test is carried out every 12 months
Visual inspection of grout		✓			Inspect grout for signs of damage
Visual inspection for efflorescence	✓				Inspect areas where tiles are exposed to vertical edge for leaching
Visual inspection of the tile surface		✓			Inspect the surface of the tile for damage

Expansion Joints & Perimeter Joints to Tiled Areas

Throughout the tiling system, generally where walls meet floors or internal corners or at 4.5m centres externally within the floor. There will be a soft silicon joint. This joint is installed to allow the building to move without cracking the tiles. This silicon joint must be inspected half yearly for any tear or opening within the silicon.

Where the silicon has been identified as torn, lifting, or damaged in any way. This silicon (just the damaged section) must be removed and replaced immediately.

If the damaged silicon is left open and the tiling system exposed this could allow moisture below the surface of the tile. By allowing moisture below the tiled surface damage to the tiling system will occur, this could include:

- Efflorescence
- The grout to appear dark and light
- Mould to appear on the surface of the grout if in poorly ventilated and minimal sunlight areas
- Where large volumes of water are trapped below the tiling system this can void the waterproofing warranty

Slip Test Tile Surfaces

Where the supplied tiles have been provided with a slip test report. Tiles over a period of time the tile surface will ware and as such the surface glaze which has the anti-slip properties will be removed. This will take a number of years to occur (estimated 10 – 15 years) and there are surface treatments that can be applied post installation that can aid to the anti-slip, but this should be explored closer to that time.

Recommendations:

The body corporate or building managers, should commission an independent slip testing (NATA certified) to conduct a slip test and certificate every 12 months.

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5.0 Regular Visual Inspections

Item	Inspection Purpose	General Frequency
Grout	Grout is an important part of the tiling system as it supports the tile from vibration and movement. Regular inspections of the grout on both walls and flooring are essential to identify any cracks or areas of missing grout. If the tile has been subjected to heavy loads, point impacts, or blunt force, the resulting vibrations can loosen or crack the grout. Where there is cracked, loose or missing grout, the grout in this area should be removed and replaced.	Quarterly
Drummy or Loose Tiles	It is not uncommon for building managers and maintenance staff to lightly tap floor tiles with a hammer, screwdriver, or similar tools to check for a hollow sound. However, please note that tapping tiles in this way will VOID your warranty. Under no circumstances should tiles be tapped with metal objects, as this can cause the tiles to become 'drummy' or loose. The correct method for checking for drummy or loose tiles is to attach 3 or 4 keys to a key ring and secure them to a lanyard. Gently drag the keys across the surface of the tiles while listening for any hollow sounds or changes in tone.	Quarterly
Efflorescence	Efflorescence forms when water, carrying dissolved salts, moves to the surface of masonry or tiled areas. As the water evaporates, the salts remain on the surface. The degree of efflorescence can be influenced by external moisture sources such as rain and snow, as well as internal factors like condensation, groundwater seepage, and activities that generate moisture. Any visible efflorescence should be removed using a pressure cleaner, scrubbing, or an approved cleaning solution. Efflorescence is sensitive to acids, and mineral deposits such as lime and salts typically dissolve when exposed to acidic solutions. For effective removal, a strong yet safe acidic cleaner is often ideal for dissolving and eliminating efflorescence in most cases. Special care must be taken with natural stone and other surfaces that may react negatively to acidic products. Always seek professional advice before using acidic cleaners on these materials.	Monthly

It is recommended that high traffic areas are checked on a more frequent basis to ensure that any repeats or rectification work can be done prior to more significant issues occurring.

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6.0 Daily Cleaning Schedule

Small Areas	Small public areas, such as lobbies and corridors, can be effectively cleaned with a daily mopping using warm water and an all-purpose liquid cleaner that is neutral or mildly alkaline (pH 7-9).
Large Areas	Large public areas, such as shopping centers, malls, and auditoriums, can be cleaned using self-propelled scrubbing machines with appropriate detergents, as outlined below: 1. For daily cleaning, a detergent with a pH range of 7-9 should be used. 2. For heavy cleaning, an organic acid cleaner with a pH around 2 (but free from mineral acids) or an alkaline cleaner with a pH up to 11 may be used, provided its sodium or potassium hydroxide content is below 0.01% when diluted. Both cleaners should be diluted with water as per the manufacturer's instructions. Apply the cleaner generously and remove it promptly from the floor using a squeegee and suction, following the manufacturer's guidelines. 3. For heavy-duty scrubbing of small areas, high-alkaline cleaners with a pH up to 13.5 may be used, provided the sodium or potassium hydroxide content in the concentrate is less than 2%, and the solution is diluted to at least 100:1 with water. These cleaners must be thoroughly rinsed off the surface with ample water. They should not be used as part of routine daily maintenance, as any residual cleaner can damage the tile surface and cause the grout to blacken. <i>Note: Before using these products (1, 2, & 3), obtain written professional advice from the chemical manufacturer regarding their suitability, application, and recommended frequency of use on the surface being cleaned.</i>

7.0 Weekly Cleaning

Due to the constant use of shower areas, these areas require a specialised cleaning procedure to effectively remove hard water deposits, soap scum, and body oils that accumulate on tile surfaces.

To prevent the need for heavy cleaning, it is recommended to clean shower areas weekly to maintain hygiene and remove dirt before it hardens into deposits. Routine buildup can typically be cleaned with most all-purpose cleaners, while hard water deposits can be removed using a mixture of white vinegar and water. A plastic scouring pad is ideal for this type of cleaning.

Due to the damp environment in shower recesses, bacteria and mould can develop in areas with poor ventilation. These can be effectively removed by spraying or wiping the surfaces with chlorine bleach. Allow the bleach to sit for 5 minutes, then rinse thoroughly with clear water. Caution is necessary when using bleach; it should never be mixed with ammonia. Always ensure that the area is ventilated when using bleach products.

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8.0 Cleaning Products

Type	Key Features	Usage
pH Neutral Cleaner pH approx 7-9 (neutral)	• Ideal for everyday use • Neutral pH formula • Available in Biodegradable formula's • Perfect for maintaining sealed stone and tile surfaces	All polished & unpolished natural stone (such as granite, limestone, marble, slate, and travertine), ceramic, porcelain, grout, terracotta, cement pavers, masonry surfaces, and other water-safe surfaces. Sealed & unsealed surfaces.
Heavy Duty Cleaner pH approx 11-12 (alkaline)	• For heavily soiled and neglected areas • Cleans ground-in dirt, grease, soap scum, and other organic materials • Ideal for removal of acrylic waxes and coatings • May adversely affect grout joints that have been coated with colorant or grout stain • Regular use of high-alkaline cleaners will reduce sealer life	Polished & unpolished porcelain tiles, grout, ceramic, natural stone (such as granite, limestone, slate and travertine), ceramic, quarry, saltillo, terracotta, cement pavers, masonry surfaces, linoleum or resilient flooring.
Phosphoric Acid Cleaner	• Phosphoric acid cleaners are commonly used to remove mineral deposits, scale, and stains from hard surfaces. • Removes grout smear, rust stains and hard water deposits. • Reduced or no harmful fumes, so it is much safer than Hydrochloric Acid. • Phosphoric acid can be corrosive to certain materials, so ensure it is suitable for the surface you're cleaning and avoid prolonged contact with sensitive surfaces.	Some natural stone surfaces such as granite, basalt & sandstone, terracotta, tessellated tiles, ceramic tiles, porcelain & grout joints, clay bricks & pavers. Effective for descaling and eliminating rust or grout haze, but they should be used with caution. Always follow the manufacturer's guidelines for dilution, application, and safety precautions.
Sodium Bicarbonate	• Sodium bicarbonate solution is effective in neutralising acid cleaners.	A 5-10% solution may be used to neutralise the acids used in grout removal. After reacting, the materials should be washed off with copious amount of water.

Importance of Water When Cleaning

Clean water is the key to effective cleaning. It should be used to thoroughly rinse away all detergents and acids applied during the cleaning process.

- 1. Manual Cleaning**
Using a mop and bucket, nylon or natural bristle scrubber.
- 2. Mechanical Cleaning**
Large areas of plain or textured surface tiles are best cleaned using rotary cylindrical or reversing mechanical scrubbing machines. The ideal machine speed should be between 150 to 250 rpm. Brushes should be chosen to effectively clean the tiles without causing any damage to the surface. Additionally, scrubbing machines should be equipped with a suction drying feature to ensure efficient moisture removal.
- 3. High Velocity Water Jet**
High-velocity water jets are sometimes used for general cleaning or to remove stubborn dirt. While these jets typically won't damage the tiles, regular use may erode the grout in the joints. Always consult the equipment manufacturer before use. If oil or grease is present, use the water jet with warm or hot water along with a neutral detergent for best results.

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9.0 Recommendations & Reminders

Regular Cleaning	Clean surfaces frequently to prevent the buildup of dirt, soap scum, and stains. Routine maintenance can help avoid the need for heavy cleaning later.
Spills & Stains	The sooner the cleaning is carried out, the easier the stain can be removed.
Use Appropriate Cleaners	Always use cleaners that are suited to the surface type. For tiles, neutral or mildly alkaline cleaners (pH 7-9) are generally ideal.
Avoid Harsh Chemicals	Steer clear of abrasive or highly acidic cleaners, especially on sensitive surfaces like natural stone. Always check compatibility with the manufacturer's guidelines.
Rinse Thoroughly	After applying any cleaner or acid-based solution, rinse the surface thoroughly with clean water to remove any residues.
Use Non-Abrasive Tools	When scrubbing, opt for non-abrasive pads or brushes to avoid scratching the tile surface.
Steel Wool	Steel wool pads should be avoided, as they can leave behind steel particles that may rust over time, causing brown stains on the surface.
Prevention of Water Damage	Address moisture issues promptly, particularly in damp areas like showers, to prevent mold and mildew growth. Ensure proper ventilation.
Check for Grout Integrity	Inspect grout regularly for cracks or wear. Damaged grout should be repaired to prevent further water damage or staining.
Test New Products	Before using a new cleaner or method, always test it on a small, inconspicuous area to ensure it won't damage the surface.
Professional Advice	For specialised or heavy-duty cleaning, consult with a professional or the manufacturer of cleaning products to ensure the correct procedures are followed.
Use With Caution	The regular use of detergents and other cleaning agents with are excessively acidic or alkaline with excess sodium or potassium hydroxide can cause irreversible damage to the tile surface. Acidity being less damaging than alkalinity.
Public Areas	Signage must be adequately displayed when cleaning tiles to warn the public or other users of the area that the tiles are wet and care should be taken.

Disclaimer

This 'Tile Maintenance and Cleaning Guide' is based on various sources and was believed to be accurate at the time of publication. The information provided is advisory, offered in good faith and without prejudice, but does not claim to be an exhaustive treatment of the subject. Professional advice should be sought before taking any action based on the information provided. Bettertiles accepts no responsibility for the performance of cleaning products or for any consequential damages resulting from their use, as the quality control and application are outside of Bettertiles' control.

