STONEWORLD TILE & STONE MAINTENANCE MANUAL

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DISCLAIMER

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AUSTRALIAN STANDARD EXTRACT

THE AUSTRALIAN STANDARD

The following information is an extract from Australian Standard - AS 3958.1-2007 Ceramic tiles - Guide to the installation of ceramic tiles (APPENDIX C)

CLEANING AND MAINTENANCE

There are generally three stages of tile cleaning. The installation cleaning should incorporate the removal of excess adhesives and grouts resulting only in a light haze remaining on the finished surfaces. There is usually a need for post-installation cleaning that will remove any building soiling including plaster, paint, etc. Routine maintenance will provide a cleaning regime that should ensure the cleanliness and safety of the floor while maintaining the integrity of the tiling system.

Understanding the nature and requirements for a particular floor are key to its performance and service life. This will vary according to the type of tile and any treatment applied to protect or enhance the tile, e.g., pre-sealing, waxes, grout release agents and physical protection layers. An understanding of the surface characteristics of highly slip-resistant tiles will often dictate which cleaning methods should be used.

Damage can occur to flooring if incorrect chemicals or methods are used.

Personnel responsible for post-installation cleaning and maintenance should be given specific recommendations for cleaning and full information concerning any particular possible risks of misuse.

ROUTINE MAINTENANCE

It is generally accepted that all things require maintenance and ceramic floor finishes are no different. Recent worldwide developments have altered the nature of ceramic floors. Maintenance of these surfaces is usually easy to achieve where appropriate processes are used. Daily sweeping and washing to remove soiling remain the most basic method.

Daily sweeping or vacuuming is very important to remove loose soil, sand, mud, or other forms of debris that collect on a floor. Loose soil provides an abrasive load that can damage glazed surfaces, leaving a hazy or soiled appearance in high-traffic areas. These areas soon start looking different to areas unaffected by abrasion, detracting from the bright polished finish favoured by people. In addition to the worn appearance, the cleaning of this area will become more difficult as the surface alters.

Most loose soil and sand can be collected by creating soil traps at the entrance prior to walking onto the flooring. An entry mat should allow sufficient positive contact of both feet prior to entry to remove most of the soil. If animal entry points are used, the same

precautions should be taken as a great deal of loose soil will be deposited by the family pet.

Washing the flooring should remove visible soiling where the correct amount of cleaning agent is used. Residual streaks, detergent marks and films can result from use of excessive amounts of cleaning agent, detracting from the gloss. Adequate rinsing of the floor or using a no-rinse detergent will correct the issue.

Effective cleaning usually can be achieved by normal washing or scrubbing with warm water and a pH neutral, sulphate-free cleaning agent. Greasy deposits can be removed with a detergent incorporating an organic solvent or a highly alkaline detergent (pH >9), but these should be used for only occasional cleaning. Overuse of acidic cleaning agents may result in grout attack and cause hazing of glazed tiles.

The occasional use of abrasive cleaning agents can be beneficial but should be restricted to unglazed floor finishes. Abrasive cleaning methods should generally be avoided as they can contribute to excessive wear. Appropriate cleaning agents are available including proprietary abrasive cleaning agents that will not wear or scratch. Appropriate abrasive methods can be used to remove stubborn stains on polished and profiled glazed tiles. It should be noted that regular use of scrub and rinse cleaning machines fitted with abrasive pads, other than the finest grades, is likely to damage the surface of some tiles, and may result in gradual loss of thickness in the wear layer.

When a tile has a profiled surface, the process may differ as soil and cleaning agents tend to build up on the surface. When such profiled surfaces require cleaning, adequate dwell time and agitation is required to dislodge the soiling prior to complete removal. Agitation can be achieved using appropriate cleaning pads or brushes. Such methods will dislodge most forms of soiling including build-up of past cleaning agents and soil that collects in recesses. Steam and high-pressure cleaning methods may occasionally be appropriate in some installations.

It is important to ensure that the cleaning agent is completely removed by a final rinsing with clean water.

Household soaps are not recommended as they tend to leave a slippery scum, particularly in hard-water areas.

Apart from normal usage or obvious misuse, surface contamination can arise from the following:

1. Efflorescence.
2. Residual cement film.
3. Surface sealing materials.
4. The reaction of cleaning agents with hard water.
5. Unsuitable cleaning agents.
6. Overuse of high alkaline detergents.

7. Flexible additives left on surface areas.
8. Coloured oxides, deposited through grouting.
9. Moss, algae, leaves stains, bark stains, wood stains, rust marks, pot plant marks and leaching.

1. Efflorescence

Efflorescence usually appears as a white powder on the surface of the tile or joints. It is caused by liquid water carrying soluble salts from below the tile to the surface. When the water evaporates it leaves a powdery residue. If the installation is new, the residue can usually be removed by sweeping or vacuuming the powder away. If soluble salts are cleaned using water or acidic cleaning solutions, some of the salt will dissolve, be reabsorbed, and may reappear as efflorescence. Should the problem be persistent seek professional advice regarding continual moisture problems.

Some deposits may react with carbon dioxide forming insoluble compounds that adhere tenaciously to the tile and adjoining surfaces.

Leaching can be mistaken for efflorescence as a white deposit can develop. Leaching can occur when water enters a tiling system dissolving soluble salts in the bedding or where water contains high mineral contents from other sources. Water access and egress is usually gained through faults or cracks, either in the grout or from differential movement cracks in the tiling system. These soluble deposits leave conspicuous drainage marks and are extremely difficult to remove. Prior to removal, the source of water flow must be located to stop water intrusion. Once the source has been repaired, the leaching can be cleaned often using an appropriate strength of an acidic-based cleaning agent.

2. Residual cement film

After a flooring system has been installed, the tiling professional may have left a light cement film on the surface. This film is generally insoluble in water. This can be removed by treatment with appropriate proprietary acid cleaners. The floor should be wetted to saturate the grout, and free water removed before the application of the cleaning agent. It is important that this treatment is followed immediately by the use of a proprietary neutralizing agent or a slightly alkaline solution, followed by thorough rinsing with clean water.

3. Other residual films

Other films that can be found on the surface of finished tiling include residues from tile protective waxes, epoxy grouting and polymer-modified grouts and adhesives. This film is generally insoluble in water. This problem is best addressed by thorough cleaning immediately after tile installation. These films can be removed by treatment with appropriate proprietary products. Alternatively, specialist guidance should be sought.

TILE CLEANING & MAINTENANCE

1. Care During Tile Installation

Many of the initial issues encountered in cleaning tiles immediately after the laying process has been completed, can be linked to care taken during the laying process itself. It is important to ensure that there is :

- Protection of the tile surface during and after laying.
- Regular sweeping of the floor to remove dirt.
- Care taken by tradespersons that carry out work after the tiles have been laid, so that they do not damage the tiles. A suitable protective layer is required. Items like boots, tools, materials like paint or plaster and heavy objects can damage or mark the surface.
- Surfaces should be checked during the handover of the project.

2. Builders Clean

After installation, a thorough builders clean is often required. This process can help to remove, grout haze, glues, paint and other staining from construction.

For porcelain, ceramic and terracotta surfaces this is a two-stage process. Use a cement residue remover to remove cement residues and grout, followed by an alkaline cleaner to remove paint and other residues that may remain. Products used should be purchased from a reputable supplier with expertise in this tile cleaning.

(a) Mix the cement residue cleaning agent with water as per the recommendations on the cleaning product label. Apply to the surface
(b) Leave to work for 5-10 minutes
(c) Scrub will with a broom or mechanical floor scrubber
(d) Use a wet vacuum to remove chemical residues
(e) Mix Alkaline cleaner as per manufacturer's recommendations
(f) Leave to work for 5-10 minutes
(g) Scrub with a broom or mechanical floor scrubber
(h) Rinse with water and wet vac again
(i) Dry off any wet areas
(j) If some staining remains, repeat these steps.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Grout Haze

Grout Haze occurs when the tile grouting process is completed without washing residual grout from the tile surface. When grouting Tile Layers should :

(a) Use a clean sponge and clean water (change frequently)
(b) Grout a small area and wait a suitable time for the grout to dry (usually 15 mins, less on warn days)
(c) Remove excess grout without dragging grout out of joint gaps.

Failure to remove grout effectively can result in a grout haze that makes the tiles look unclean. This residue can attract dirt which can make the problem visually worse.

Some grouts contain latex glue which leaves a dull or patchy look. This can be removed by a solvent or acid cleaner. Products recommended by a reputable supplier with expertise in this tile cleaning process, should be mixed with water in line with the instructions on the packaging.

(a) Thoroughly clean the tiles with water to soak the joint and protect it against corrosive action
(b) Apply to the surface.
(c) Leave to work for the specified time, making sure to not let the product dry in this time.
(d) Scrub well with firm broom or mechanical scrubber.
(e) Use wet vacuum to remove residues.
(f) Rinse well with water and wet vacuum again
(g) If some staining remains repeat these steps until haze is completely removed.
(h) If the tile was sealed before this process, sealer will have to be re-applied.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Epoxy Grout Haze

Epoxy grout contains epoxy resin and silica fibers. This means that epoxy grout haze is one of the more difficult issues to remove from tiled surfaces.

Products recommended by a reputable supplier with expertise in this tile cleaning process should be mixed with water in line with the instructions on the packaging :

(i) Apply to the surface.
(j) Leave to work for the specified time, making sure to not let the product dry in this time.
(k) Scrub well with firm broom or mechanical scrubber.
(l) Use wet vacuum to remove residues.

(m) Rinse well with water and wet vacuum again
(n) If some staining remains repeat these steps until haze is completely removed.
(o) If the tile was sealed before this process, the sealer will have to be re-applied.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

3. Glazed Tiles

Modern glazed tile products, both ceramic and porcelain, are designed and manufactured to be a resilient, low maintenance product. The maintenance required will depend on the tile location. Consideration needs to be made of the cleaning area, domestic or commercial circumstance, variety of foot traffic and wear and tear.

Regular Cleaning and Maintenance

(a) Vacuum or wipe the tiles to remove loose dust and grit from the surface.
(b) Clean using a macrofibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). If you have a smooth floor, use a flat microfibre mop. If your floor tiles are textured, use a microfibre string mop which can more easily enter the texture of the tile. The mop or cloth will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive.
(c) Spot clean any spills, marks or stains using a neutral pH chemical, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have other neutral ceramic cleaning or porcelain cleaning chemicals that are suitable. If using a chemical, rinse the surface lightly with clean water.
(d) DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop. *Note:* continued use of this ceramic cleaning regime will improve heavily contaminated tiles over time, but faster recovery can be achieved using intensive cleaning (details below).

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Intensive Cleaning

(a) Vacuum or wipe tiles to remove loose grit from the surface.
(b) Scrub a small area (about 3-4 m2) using a light solution of ph-neutral tile cleaner suitable for your tiles, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable for tile cleaning home use. Use a soft brush or broom to work the solution into the pores of the tiles and grout. Continue to complete small areas until the entire surface has been scrubbed.

(c) Soak - Leave the solution to work for several minutes, then scrub again.
(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop or for best results a wet vacuum.
(e) Rinse - Pour clean water over the surface to rinse.
(f) DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Slip Resistant glazed tiles are designed and manufactured to prevent the occupants from slipping in areas of building design that require such a feature. These tiles often have a rougher surface, by their very nature and can be cleaned with the same procedures as normal glazed tiles. Cleaning these tiles may require more agitation, using a brush, rubber stubble, microfibre broom or commercial cleaning device.

4. Unglazed Tiles & Polished Porcelain

Most modern tiles are glazed with a protective layer against staining. Unglazed products like highly vitrified and polished porcelains are still supplied by some manufacturers. While these products are resistant to staining it is recommended that unglazed products are sealed by an experienced applicator using products supplied by a reputable chemical company with expertise in the application. Any spills on an unsealed tile should be cleaned as soon as possible.

Once the tile is professionally sealed, it can be cleaned by the same methods as a glazed tile, detailed above.

5. Grout cleaning

As most grout is porous, it will absorb water and contaminants and discolour – sometimes more than the tiles around it. When cleaning grout it is important to make sure any cleaning solutions used are compatible with the stone or tile surface itself. Do NOT use acid-based cleaners.

This grout cleaning regime is designed to keep good-condition grout maintained. If grout is flaking or pulling away from the joints, it will need to be replaced. If staining or discolouration can't be removed, a Commercial Cleaning specialist can professionally clean the grout and even change the colour of the grout if so desired.

(a) Vacuum - Vacuum, sweep or wipe to remove loose grit from the grout lines.
(b) Scrub - Scrub grout lines using a special grout cleaning microfibre sponge, wetted with a little water. Rub the sponge back and forth along the grout lines firmly.

(c) Allow to dry - Allow the grout lines to dry before evaluating the results. The microfibre grout sponge will clean up most dirty grout, but for very stained grout it may be necessary to use chemicals – in which case continue as follows:
(d) Scrub with chemical - For very stained grout, you can also use a light solution of ph-neutral tile cleaner suitable for your tiles, supplied by a reputable chemical company, with expertise in the application. Match the cleaner to your tiles – for example, if you have marble tiles, it's important to use a non-abrasive neutral chemical so you don't damage the marble. Complete a manageable area at a time (say 3 or 4 m2). Use a grout sponge or a soft brush / broom to work the solution into the pores of the grout.
(e) Soak - Leave the solution to work for a time (several minutes) and then scrub again.
(f) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(g) Rinse - Rinse using clean water.
(h) Dry - DO NOT leave the grout to dry naturally. Make sure all the surrounding tiles are wiped dry too.
(i) Repeat if necessary.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

6. Glass Mosaic tiles

Mosaic glass tiles are amongst the most resilient tile surfaces. They are non-porous (so they don't soak up water or stains) and hard (so they don't scratch or etch). Mosaic glass tiles are commonly installed as wall tiles in bathrooms and showers, or as a feature tile.

Glass tiles may also have a special 'crazed' effect on the surface which can gather dirt, and intensive cleaning is required to remove or reduce any build-up.

If the surface is smooth often the dirtiest part of the surface will be the grout lines, which are cleaned as detailed in the grout cleaning section. However, if the tile is textured or 'crazed', the dirt will embed in the tile's texture, and you can clean them using the following guidelines.

Mosaic Glass Ceramic wall tiles – Regular cleaning

(a) Damp Clean- Clean using a microfibre sponge or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). The sponge or cloth will 'grab' the surface and lift out most daily grime.
(b) Spot clean (if necessary) - Spot clean any spills, marks or stains using a neutral pH chemical, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have other neutral ceramic cleaning or

porcelain cleaning chemicals that are suitable for use. If using a chemical, rinse the surface lightly with clean water.

Mosaic glass ceramic wall tiles – Intensive cleaning

(a) Scrub - Scrub using a light solution of neutral pH chemical, supplied by a reputable chemical company, with expertise in the application. Your local tile shop will have something suitable. Use a soft brush to work the solution into the tiles and grout. Continue to complete small areas until the entire surface has been scrubbed.
(b) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(c) Rinse with clean water.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

7. Outdoor Tiles and Stone

Outdoor tiles will get dirty – there is no way to prevent leaves accumulating, birds flying overhead, or rain falling. Even if your outdoor stone or tiles have been sealed, they will still get dirty. The solution is to clean your outdoor tiles and to re-seal the surface regularly.

(a) Sweep - Remove loose grit, leaves and dirt from the surface using a soft broom. If necessary, use a stiff broom to remove larger debris, followed by a soft broom for smaller grit such as sand and dirt.
(b) Scrub - Start by scrubbing plain warm water into the surface. If this is not removing light loose surface grime, add a light dilution of neutral cleaner supplied by a reputable chemical company with expertise in the application, or a small amount of dishwashing liquid to the warm water. Scrub into the surface using a soft broom.
(c) Extract - Remove contaminated water using a wet vacuum or clean, dry mop.

Cleaning Tiles/Cleaning Stone Outdoors – For heavy staining

Heavy grime (like oil stains, bird poo, grease) will need an alkaline cleaner, supplied by a reputable chemical company with expertise in the application. If you are planning on re-sealing then an outdoor cleaner supplied by a reputable chemical company with expertise in the application, can be used providing it is not allowed to dry and is rinsed thoroughly with water. The same process can be used, but a wet vacuum is recommended to assist removal of heavy stains and can be hired from most local equipment hire shops.

8. Oil Stain Removal

Oil can often penetrate deep into the tile surface if it is not cleaned up relatively quickly. As a result, it often requires a deep extraction technique to remove the staining. For the most effective results use oil stain remover, supplied by a reputable chemical company with expertise in the application. These products work like a poultice where they are applied to the surface and left as a paste for an extended period. The products slowly draw out the deep staining.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

9. Slip-Rating

All tiles for commercial environments, common areas, wet areas and external areas require specific slip ratings in line with Australian Standards. Purchasing tiles that are compliant tiles is essential. An independent slip rating can be conducted after installation. There are NATA accredited companies that can conduct a slip test.

Over time tiles wear, can build up surface dirt and contaminants and chemical residues which may alter the slip resistance of the tiles.We recommend regular slip testing to ensure all tiles comply to required standards.

10. The Golden Rules of Tile Maintenance

Under most circumstances, clean water and/or a mild neutral pH cleaner will clean most tile surfaces. Acid or alkaline or abrasive cleaners can damage tiles and should not be as part of a regular cleaning and maintenance program. The Golden Rules are :

(a) Don't Use too much water
(b) Always rinse off chemicals
(c) Always read the label

Flooding or heavy wet mopping a stone or tiles surface when cleaning is the biggest source of tile and grout contamination. The surface dirt is collected into the detergent / water solution and can be absorbed into the grout lines or pores of the tiles if not extracted from the floor. Excess water is the 'enemy' of domestic tile cleaning !

Overuse of chemicals (not following dilution instructions) can leave chemical residues on the floor which become sticky and collect dirt. Rinsing off with clean water after cleaning removes any chemical residue and is strongly advised. Most daily-use tile cleaning can be done without chemicals.

Abrasive and/or acid-based cleaning products are NOT suitable for use on most stone surfaces and should be used with caution. Chemical labels can be unclear about this and warnings may be in the small print. Damage caused by use of incorrect cleaning products may not be recovered by daily cleaning.

STONE CLEANING & MAINTENANCE

1. Granite

Granite in particular is usually harder and less porous than most other stones, so it can be easier to care for. However, there are various qualities of granite – some are impervious, while some are not. Some are acid-sensitive, while some are not. These characteristics also extend across basalt and bluestone. Therefore, each granite surface should be treated carefully until its true characteristics are determined.

This granite cleaning regime is designed to maintain good-condition granite surfaces. However, there are treatments that are enable you to professionally clean your granite, using chemicals supplied by a reputable chemical company with expertise in the application, that can remove scratches and foot traffic marks, reverse fading, and protect the surface from future damage.

Cleaning Granite or Basalt (Bluestone) – Regular cleaning

(a) Vacuum the floor to remove loose dust and grit from the surface.
(b) Clean using a microfibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre, as the fabric is 99.9% antibacterial which is a much better result than can be achieved with most cleaning chemicals available).

    If you have smooth granite, use a flat microfibre mop or smooth-surface cloth. If your granite is textured, use a microfibre string mop or a rougher microfibre cloth which can more easily enter the texture of the tile. The microfibre will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive!

(c) Spot clean any spills, marks or stains using a neutral pH chemical such supplied by a reputable chemical company with expertise in the application. After spot cleaning, rinse the surface lightly with clean water.
(d) Use a benchtop cleaning spray every few weeks to bring your benchtop up to a great shine – for benchtops that haven't been sealed, use a cleaner supplied by a reputable chemical company with expertise in the application, or if the granite has been sealed a Benchtop Cleaner and Sealer product will also maintain the sealer.
(e) DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop. Lighter coloured granite in particular will discolour when it soaks up water. To avoid this, make sure to dry the granite thoroughly with a clean cloth. The colour will return to normal once the surface is completely dry.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Intensive cleaning

(a) Vacuum or wipe tiles to remove loose grit from the surface.
(b) Scrub a small area (about 3-4 m2) using a light solution of a cleaner safe for use on natural stone supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable. Use a soft brush or broom to work the solution into the pores of the granite. Continue to complete small areas until the entire surface has been scrubbed. Leave the solution to work for several minutes, then scrub again.
(c) When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(d) Pour clean water over the surface to rinse.
(e) DO NOT leave the surface to dry naturally. Lighter coloured granite will discolour when it soaks up water. To avoid this, make sure to dry the granite thoroughly with a clean cloth. The colour will return to normal once the surface is completely dry.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Preventing damage to granite vanities and benchtops

- When preparing food, cut on chopping boards, NOT directly on the stone. Do not let juice or liquids from the chopping board drip into the stone.
- Don't put hot items from the oven or hobs directly onto the benchtop, as intense heat can cause cracking or discolouration. Items from the oven will be hotter than those off the stove top or hobs.
- When cooking on hobs, use a tea towel to protect the surrounding stone from spitting oil and food splashes.
- Immediately wipe up any spills from cosmetics, mouthwash, toothpaste, soaps and shampoos. Store all containers in a tray (glass or stainless steel) that will capture spills or drips.
- Do not leave cleaning agents stored on the vanity.
- Do not leave toilet or shower cleaners stored in the bathroom within reach of guests or cleaners who may not be aware of the potential for damage. The presence of cleaning agents suggests they can be used to clean the benchtop!

2. Sandstone

Sandstone can vary greatly in porosity and hardness. Generally, sandstone is soft and porous – meaning it can absorb large quantities of water – which often results in staining. For this reason, it is recommended to seal sandstone with a Stain-Guarding treatment.

This sandstone cleaning regime will not recover sandstone that is very stained, mouldy, or has a heavy build-up.

Cleaning Sandstone – Regular cleaning

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Damp clean - Clean using a microfibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). As most sandstone is honed or textured, use a microfibre string mop which can more easily enter the texture of the sandstone. The mop or cloth will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive!
(c) Spot clean (if necessary) Spot clean any spills, marks, or stains using a neutral pH chemical, supplied by a reputable chemical company with expertise in the application. After spot cleaning, rinse the surface lightly with clean water.
(d) DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Note: continued use of this sandstone cleaning regime will improve heavily contaminated sandstone over time, but faster recovery can be achieved using intensive cleaning.

Sandstone - Intensive Cleaning

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Scrub - Scrub a small area (about 3-4 square metres) using a light solution of stone cleaner suitable for your sandstone, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable for sandstone cleaning. Use a soft brush or broom to work the solution into the pores of the stone and grout. Continue to complete small areas until the entire surface has been scrubbed.
(c) Soak - Leave the solution to work for several minutes, then scrub again.
(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.

(e) Rinse - Pour clean water over the surface to rinse.
(f) DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water. When cleaning sandstone you may even want to hire a wet vacuum to extract all moisture, or run a dehumidifier in the area, until the sandstone is dry.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

3. Slate

Different types of slate vary greatly in colour and texture. Most slate has had a protective coating applied, but slate can sometimes be left natural. If left natural, it is recommended to use a Stain-Guarding treatment to reduce the porosity of the slate.

This slate cleaning regime is designed to keep a good-condition surface maintained. It will not restore damaged slate or coatings.

Cleaning Slate - Regular cleaning

If your slate has had a protective barrier coating applied, you should clean it according to the coating manufacturer's instructions. The coating isolates the slate, so you need to maintain the coating rather than the slate itself by using pH neutral cleaners, supplied by a reputable chemical company with expertise in the application.

If your slate has been left natural, or sealed, use the following regular cleaning process:

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Damp Cleaning - Clean using a microfibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). As most slate is textured, use a microfibre string mop which can more easily enter the texture and grooves of the slate. The mop or cloth will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive!
(c) Spot clean (If necessary) - Spot clean any spills, marks or stains using a neutral pH chemical, supplied by a reputable chemical company with expertise in the application. After spot cleaning, rinse the surface lightly with clean water.
(d) Dry - DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop.

Always follow the manufacturer's instructions and test in a small inconspicuous area to test for colour change, staining or other damage to the surface before applying to the whole floor.

Cleaning Slate – Intensive cleaning

Intensive slate cleaning should only be undertaken on a coated or sealed slate surface – if the slate has not had a coating or a sealer applied, this intensive cleaning process can soak too much water into the surface and cause it to discolour.

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Scrub - Scrub a small area (about 3-4 m2) using a light solution of stone cleaner suitable for slate, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable for slate cleaning. Use a soft brush or broom to work the solution into the pores of the stone and grout. Continue to complete small areas until the entire surface has been scrubbed.
(c) Soak - Leave the solution to work for several minutes, then scrub again.
(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(e) Rinse - Pour clean water over the surface to rinse.
(f) Dry - DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

4. Terracotta

Terracotta tiles vary hugely in colour range, density and porosity. Terracotta is often softer and more porous than many other tiles. Terracotta can be laid natural and sealed or can be treated with a coating sealer (topical polish or barrier coating).

This terracotta cleaning regime is designed to keep a good-condition surface maintained. It will not restore damaged terracotta, any coatings, or remove heavy build-up or stains.

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Damp clean - Clean using a microfibre flat mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). The mop or cloth will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive!
(c) Spot Clean - Spot clean any spills, marks or stains using a neutral pH chemical supplied by a reputable chemical company with expertise in the application. After spot cleaning, rinse the surface lightly with clean water.
(d) Dry - DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop.

Always follow the manufacturer's instructions and test in a small inconspicuous area to test for colour change, staining or other damage to the surface before applying to the whole floor.

Cleaning Terracotta – Intensive Cleaning

Intensive terracotta cleaning should only be undertaken on a coated or sealed terracotta surface – if the terracotta has not had a coating or a sealer applied, this intensive cleaning process can soak too much water into the surface and cause it to discolour.

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Scrub - a small area (about 3-4 m2) using a light solution of tile cleaner suitable for terracotta, such as 30 Seconds outdoor cleaner, supplied by a reputable chemical company with expertise in the application. Avoid the use of Alkaline cleaners on coated terracotta as this may remove some of the coating. Your local tile shop will have something suitable for terracotta cleaning. Use a soft brush or broom to work the solution into the pores of the tile and grout. Continue to complete small areas until the entire surface has been scrubbed.
(c) Soak - Leave the solution to work for several minutes, then scrub again.
(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(e) Rinse - Pour clean water over the surface to rinse.
(f) Dry - DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

5. Travertine

Travertine can be either filled or unfilled. Unfilled travertine is harder to keep clean as the unfilled pock marks gather dirt. This travertine cleaning regime will not recover travertine that is dull or marked.

Cleaning Travertine – Regular Cleaning

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Damp clean - Clean using a microfibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre). The mop or cloth will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly over the surface will not be so productive.

(c) Spot Clean (If necessary) - If your travertine is unfilled, use a soft brush (such as a toothbrush) and a small amount of warm water to scrub inside the pockmarks. Once the water has liquidized the dirt, use a towel to soak the water out of the pockmark.
If your travertine is filled, the grout-based fill is likely to be more porous than the stone. Refer to our Cleaning Grout guidelines to clean any pieces of fill that need attention.
(d) Dry - DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop.

Always follow the manufacturer's instructions and test in a small inconspicuous area to test for colour change, staining or other damage to the surface before applying to the whole floor.

Cleaning Travertine – Intensive Cleaning

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Scrub - Scrub a small area (about 3-4 m2) using a light solution of stone cleaner suitable for your travertine, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable for travertine cleaning. Use a soft brush or broom to work the solution into the pores of the stone and grout, paying particular attention to pock marks if your travertine is unfilled. Continue to complete small areas until the entire surface has been scrubbed.
(c) Soak - Leave the solution to work for several minutes, then scrub again.
(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop. Make sure the liquid is completely removed from any unfilled pock marks – if it's left to dry in there, it will discolour quickly.
(e) Rinse - Pour clean water over the surface to rinse.
(f) Dry - DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water. With unfilled travertine you may even want to hire a wet vacuum to extract all moisture from the pockmarks.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

6. Marble and Limestone

Marble and limestone are both relatively soft calcium-based stones. This makes both marble and limestone susceptible to scratching, and at risk of etching by acidic or alkaline spills or chemicals.

Top Tips for cleaning Marble and Limestone

With marble and limestone, it is important to only use cleaning products that clearly state that they are safe for use on marble. If it doesn't say "can be used on marble", don't use it. Also avoid abrasive chemicals and cloths, which will scratch.

It is recommended that all marble and limestone surfaces are protected: sealing marble or limestone with a Stain-Guarding treatment will limit stains; while polishing with a Barrier-Coat polish can isolate marble or limestone from damage.

Cleaning Limestone or Marble – Regular maintenance

(a) Vacuum - Vacuum or wipe the marble to remove loose dust and grit from the surface. Check your vacuum head edges and wheels to make sure there are no sharp pieces that could scratch the marble or limestone.
(b) Damp clean - Clean using a microfibre mop or cloth dampened with warm water (no chemicals are necessary when using good quality microfibre, as the fabric is 99.9% antibacterial which is a much better result than can be achieved with most cleaning chemicals available). The microfibre will 'grab' the surface and lift off most daily grime. Use some pressure to work the microfibre – floating it lightly on the surface will not be so productive!
(c) Spot cleaning (if necessary) - Spot clean any spills, marks or stains using a neutral pH chemical, supplied by a reputable chemical company with expertise in the application. Do not use any chemical unless it clearly states, "safe for use on marble and limestone". Avoid highly acidic, highly alkaline, or abrasive chemicals. Read the label carefully and test a small area first to make sure it is safe to use. DO NOT USE Ajax, Bam, Spray'n'Wipe, or scourer pads. After spot cleaning, rinse the surface lightly with clean water.
(d) Dry - DO NOT leave to dry naturally – dry using an old towel or a clean, dry mop.

Always follow the manufacturer's instructions and conduct a trial in a small inconspicuous area, to test for colour change, staining or other damage to the surface before applying to the whole floor.

Cleaning Marble or Limestone – Intensive cleaning

(a) Vacuum -Vacuum or wipe the surface to remove loose dust and grit from the surface.
(b) Scrub - Scrub a small area (about 3-4 m2) using a light solution of a cleaner, safe for use on marble or limestone, supplied by a reputable chemical company with expertise in the application. Your local tile shop will have something suitable for use. Use a soft brush or broom to work the solution into the pores of the marble or limestone. Continue to complete small areas until the entire surface has been scrubbed.
(c) Soak - Leave the solution to work for several minutes, then scrub again.

(d) Extract - When the solution has lifted out the dirt, remove the liquid and dirt using an old towel or clean, dry mop.
(e) Rinse - Pour clean water over the surface to rinse.
(f) Dry - DO NOT leave the surface to dry naturally. Use a clean cloth or mop to soak up any water.

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Cleaning Marble and limestone benchtops

- Immediately wipe up any spills from fruit juice, alcohol or food. These can etch the surface and leave unsightly marks.
- Wipe clean excess water on the surface. Dry the surface using a tea towel or cloth.
- When preparing food, protect the stone from all food and drink. Cut on chopping boards, NOT directly on the stone. Do not let juice or liquids from the chopping board drip into the stone.
- Avoid drips from dishwasher detergents and powders. Dishwashing liquid safe for use by hand to wash dishes are generally safe for marble and limestone, but dishwasher powders are not.

Cleaning Marble and Limestone Vanities

- Immediately wipe up any spills from cosmetics, mouthwash, toothpaste, soaps and shampoos. These can etch the surface and leave unsightly marks. Store all containers in a tray (glass or stainless steel) that will capture and spills or drips.
- Do not leave cleaning agents stored on the vanity.
- Do not leave toilet or shower cleaners stored in the bathroom within reach of guests or cleaners who may not be aware of the potential for damage. The presence of cleaning agents suggests they can be used to clean the benchtop!

Taking Care of your Marble or Limestone shower

- If possible, use non-acidic shampoos, soaps and body washes.
- Every day after your shower, use the shower to rinse off any soap residues and then squeegee the marble dry.
- Immediately wipe up any spills from soaps and shampoos. These can etch the surface and leave unsightly marks.
- Store all containers in a tray (glass or stainless steel) that will capture and spills or drips.

7. Grout Haze Removal On Natural Stone:

For grout haze on acid-sensitive natural stone surfaces, acid-based cleaners MUST NOT BE USED. Alkaline cleaning agents, supplied by a reputable chemical company with expertise in the application should be used for best results :

1. Mix the cleaning agent with water as per the recommendations on the cleaning product label. Apply to the surface
2. Leave to work for 5-10 minutes
3. Scrub will with a broom or mechanical floor scrubber
4. Use a wet vacuum to remove chemical residues
5. Rinse with water and wet vac again
6. Dry off any wet areas

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8. Stone Sealing

We recommend all natural stone surfaces be sealed with natural-look penetrating sealers, supplied by a reputable chemical company, with expertise in the application. An application of sealer will help to prevent deep staining; however, this process will not prevent acid-sensitive natural stone such as limestone, marble and travertine from becoming etched from acids in cleaning agents, wine and fruit juices and acidic foods.

Stone should be re-sealed at regular intervals. Dense stone varieties are more durable and therefore require sealing less frequently than soft and porous natural stone varieties. If you notice that water is no longer beading on the surface, then the surface should be re-sealed.

Wet areas including showers with porous natural stone should be sealed every 12-18 months to ensure lasting protection from staining.

Always follow the manufacturer's instructions and test in a small inconspicuous area to test for colour change, staining or other damage to the surface before applying to the whole floor.

APPENDIX I - CLEANING & STAIN REMOVAL GUIDE

	CLEANING CATEGORY	CLEANING CHEMICAL
1.	Regular Cleaning and Maintenance – Main Areas	Warm Water
2.	Regular Cleaning and Maintenance – Spot Clean	pH Neutral Cleaner
3.	Intensive Cleaning – Main Areas	pH Neutral Cleaner
4.	Mineral Deposits, Grout Haze, Efflorescence, Soil, Rust, Oxides	Acid Based Cleaner
5.	Kitchen Cleaning - Cooking Fats and Oils, Dairy Products, Ketchup, Sauce, Wax, Outdoor Cleaning - Algae, Fungi, Mildew, Animal Droppings, Urine, Blood, Chalk	Alkaline Based Cleaner
6.	Paint, Wine, Ink, Coffee, Tea, Rubber	Solvent Based Cleaner

PLEASE NOTE : The information in the table above is general in nature. Products used should be purchased on the recommendation of a reputable supplier with expertise in the tile cleaning process.

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