

Stone Installation and Maintenance Guide

These are general notes provided as a service to clients and specifiers.

Please use experienced tradesmen and follow specific product specifications with care.

Sorting

Several important steps need to be taken before installing the stone. Divide the area of installation into separate flat areas and allocate enough material for each area including some waste. If the material to be installed is tiles, all the boxes/crates should be open, and tiles from all the supply randomly. In this way the installation will be uniform, and the material will appear homogenous.

The direction of the vein should be considered before starting installation. The quarries don't pack in aesthetically pleasing sequence. An experienced stone mason should always inspect each lot and select a proper mix and arrangement of stone to afford the most attractive and natural result. If you have purchased travertine they may seem darker than an original sample, this is due to the tiles being packed while wet. They may retain moisture for many days until they have fully aired- this can take even longer in cold or humid climates, sometimes up to a month.

Types of installation

Stone tiles can be installed using adhesive (mortar or thin set installations) or they can be mechanically anchored depending on the size of the pieces and the application. Different methods and adhesives are used if the tiles are going to be installed indoors versus outdoors. The installation of slabs on fireplaces is recommended using mechanical anchors with adhesive for the vertical pieces.

Grouts and Joints

RMS is able to recommend matching grouts, pre sealers and sealers for your purchase.

Different Stones will be cut to difference tolerances and this should be considered in the stone layout, reviewing a selection of the tiles prior to installation is important, allowing enough grout width for the stone

Where stone tiles are not cut to minimal tolerances, we recommend a 10 mm joint as the minimum space between each tile. This is the minimum joint that should be used when installing cobblestones.

Precautions before grouting

It is always a good idea to pre-seal all sides of softer stones with a recommended pre-sealer which will reduce (but may not completely eliminate) colour intrusion from the grout into the body of the stone. With the more absorbent stones, the grouting compound must be as light as the colour of the material. One should pick a coloured grout matching the general colour of the stone itself. Consider the use of resin or epoxy grouts especially in wet areas – as these grouts will keep clean and not attract dirt or bacteria.

Pre Sealers & Sealers

It is recommended all stone be presealed prior installation. Especially swimming pool copings and wet areas. Please be aware sealing works as a protector and is not fully stain proof. It allows you time to get to the problem and clean it. To help protect a stone surface from staining it is necessary to use a good sealer. A good sealer allows vapor to escape through the pores of the stone, allowing it to “breathe”. The Sealer becomes part of the stone in that it creates a barrier that helps prohibit liquids, oils, grease and dirt from penetrating into the stone. Most sealant manufacturers will tell you how long to allow for adequate curing of the stone. Most sealant manufacturers carry suitable cleaner also.

Avoid using bleaching agents or abrasive cleaners on natural stone surfaces even rough textured stones, additionally, a penetrating sealer will inhibit the formation of mould, mildew, and efflorescence, as well as aiding the surface to be less slippery.

Repeated applications over time are required in areas with heavy traffic. Daily stone surfaces should be mopped to remove dust and grime.

Cleaning and Care of stone

Polished stone surfaces, particularly floors, present certain maintenance problems. Repeated traffic over a polished stone floor will remove the polish finish. Additionally, acids such as citric juices, perfumes, liquor and a host of other liquids, dull the lustre of marble surface. This dulling process is called "etching" and there are some basic techniques for re-polishing etched areas: polishing powders and compounds such as Oxalic Acid, Aluminium Oxide, Tin Oxide, Zinc Oxide, Ferric Oxide and other acid abrasives.

Stone is a natural product and simple care and maintenance will keep it looking beautiful.

Many common foods and drinks contain acids that will etch or dull the stone surface. Use trivets or mats under hot dishes and placemats under china, ceramics, silver or other objects that can scratch the surfaces.

Sand dirt and grit do the most damage to natural stone surfaces (especially polished surfaces) due to their abrasiveness. Mats or area rugs inside and outside an entrance will help minimize the sand dirt and grit that will scratch the stone floor. Be sure that the underside of the mat or rug is a nonslip surface. Normally, it will take a person about eight steps on a floor surface to remove sand or dirt from the bottom of their shoes.

Do not use vacuum cleaners that are worn. The metal or plastic attachments or the wheels may scratch the surface. Clean stone surfaces with a few drops of neutral stone cleaner and warm water. Use a clean mop on floors and a soft cloth for other surfaces. For best results, use microfibre mops and cloths. Too much cleaner or soap may leave a film and cause streaks

Do not use products that contain lemon, vinegar or other acids on marble or limestone.. Do not use scouring powders or creams; these products contain abrasives that may scratch the surface. Baths, wet areas in the bath or other wet areas, soap scum can be minimized by using a squeegee after each use.

To remove soap scum, use a non-acidic scum remover or a weak solution of ammonia and water, Frequent or overuse of an ammonia solution may eventually dull the surface of the stone.

Vanity tops should have a penetrating sealer applied. Check with your installer for recommendations.

In outdoor pool, patio or hot tub areas, flush with clean water and use a mild bleach solution to remove algae or moss. Specialised products for stone are available to remove mould and prevent its return or to remove staining from leaf litter.

Do's and Don'ts

Do clean surfaces with stone cleaners regularly. - Do use CLEAN microfiber mops, cloths etc. - Do thoroughly rinse and dry the surface after washing. - Do blot up spills immediately - Do protect floor surfaces with non-slip mats or area rugs and countertop surfaces with coasters, trivets or placemats. Do clean mops and cleaning clothes after use

Don't use vinegar, lemon juice or other cleaners containing acids on marble, limestone or travertine. Don't use cleaners that contain acid such as bathroom cleaners, grout cleaners or tub and tile cleaners. Don't use abrasive cleaners such as Gumption or Jiff. Don't use mops or clothes that are not clean