# Natural stone - Maintenance indoors

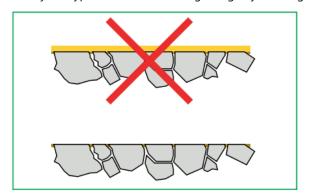
This cleaning instruction applies to high-quality stone types suitable for use as flooring and stair coverings, including many of the Scandinavian stones. There are also stone types on the market that are not suitable for public environments, as they are so delicate that they require special care. Any specific maintenance instructions required for such stones should be obtained from the respective supplier.

# Introduction

High-quality natural stone is a material that is easy to maintain and it remains beautiful for generations. The stone surface itself serves as the wear layer and does not require any additional coatings or costly treatments. Floors and stairs made of natural stone should be maintained with the simplest means possible; soap, gentle cleaners, or all-purpose cleaner are usually sufficient. When properly cared for, the stone only becomes more beautiful, developing the patina that comes with age and use. This can be observed in stone floors that have been used and maintained in this way for centuries. Simple maintenance saves time and cost while keeping the environmental impact low.

#### Stone properties

From a cleaning perspective, natural stone can be divided into three main types: granite, marble/limestone, and slate. These materials differ in their resistance to chemical and mechanical stress, and should therefore be treated and maintained differently. It can be a wise investment to identify the type of stone before beginning any cleaning.



The stone itself resists wear much better than applied chemical coatings, which can also give the stone an unnatural appearance and hinder the natural moisture movement through the stone.

Note: The grout often contains cement and can be damaged by acidic agents!

## Granite (Silicate stone)

Granite is a collective term for several types of stone with similar properties, including granite, gneiss, diabase, syenite, quartzite, and others. These stones are resistant to both chemical and mechanical stress and can withstand acidic substances with a pH below 7. They are composed of hard silicate minerals, and even a polished surface can endure wear in public environments.

Marble/Limestone (Carbonate stone)

Marble and limestone are sensitive to acidic substances, and limestone is also not resistant to salt. Both types of stone are composed of softer minerals (carbonate minerals) than granites. For public environments, a honed surface is recommended, as a polished (reflective) surface cannot withstand wear and will quickly become dull. A planed or diamond-ground surface can also be a suitable choice.

The quality of these stone types varies considerably. Swedish varieties are generally harder and denser than many imported ones. Over time, they develop a beautiful wear patina, whereas some imported stones age less favourably. It is a misconception that granite is "denser" than marble or limestone; granite's greater durability is due to the hardness and chemical properties of its constituent minerals.

#### Slate

Slate is divided into quartzite slate and clay slate. Quartzite slate is nearly comparable to granite in hardness and can withstand acidic substances. Clay slate is softer and may be discoloured by acids.

#### Sandstone

Sandstone may occasionally be encountered. Since it is normally very porous and difficult to keep clean, it is an unfortunate choice for floors and stairs. To be usable at all, such surfaces may need to be impregnated.

# **Surface finish**

Surface finish refers to the texture given to the stone during manufacturing. As the person responsible for cleaning an existing floor or stair covering, you cannot change the stone or its finish, but it is still important to know which stone types are suitable or unsuitable for different applications. In some cases, floors and stairs can be refinished.

The stone's surface finish affects both its appearance and slip risk (surface friction). If the friction between the shoe and the floor is too low, the floor becomes slippery. Friction depends on both the floor and shoe materials, as well as any "lubricants" present on the surface, such as accumulated snow, moisture, or dust.

The cleaning method also affects friction. Recommended friction values exist for floors, and equipment is available to measure friction on an existing floor surface. A shiny floor may also feel slippery even if it is not.

Note: The term "polishing" has different meanings in the stone and cleaning industries. In the stone industry, a polished surface refers to stone that has been polished with grinding pads or felt to achieve a fine finish. The surface becomes shiny and reflective without any chemical additives.

In the cleaning industry, polished surfaces are created by treating them with a floor machine along with chemical additives.

#### Granite

Granite is usually used with a honed surface. The material is so hard that even polished granite can withstand wear in public environments, though it may dull slightly after prolonged heavy use. Flamed surfaces are sometimes used in entrances or when a rustic appearance is desired. Polished or honed surfaces are unsuitable for entrances due to the high risk of slipping when wet from rain or snow. Polished granite can also appear slippery in other contexts.

#### Marble/Limestone

Polished marble and limestone are not hard enough to maintain their shine under heavy wear in public spaces. Therefore, a honed or planed finish (planed applies only to limestone) is recommended. The goal is to find a "balance point" where the finish corresponds to expected wear.

Since walkways naturally develop dull areas over time, polished surfaces should ideally only be used in low-traffic areas, such as residential rooms.

Maintaining a polished surface in public environments often requires regular treatment with polish or crystallization to keep it shiny. This makes maintenance more costly and difficult. It also increases the risk of damage to the stone. These methods also have an environmental impact. It is often better to accept the duller surface that develops through wear, consider it honed, and clean it using standard methods.

A coarse surface finish - for example, coarse-honed, diamond-ground, or planed - gradually wears and polishes over time. Often, the stone surface also darkens, especially along walkways. These changes cannot be counteracted by cleaning methods or detergents and should be seen as the natural wear patina of the stone. Note: Cleaning pads containing abrasives can alter the stone's original character!

#### Slate

Slate usually has a rough split surface, but quartzite slate is also available with honed or polished finishes.

**Table 1**Suitability of stone types and surface finishes for floors and stairs.

Granite			
Flamed	Suitable in certain areas (e.g. entrances).		
Honed	Suitable, except in entrances.		
Polished	Suitable from a cleaning perspective, but may appear slippery – therefor unsuitable in		
	entrances.		
Marble			
Honed	Suitable, except in entrances.		
Polished	Not suitable as flooring or stairs in public areas, suitable in residential rooms.		
Limestone			
Planed	Suitable.		
Honed	Suitable, except in entrances.		
Polished	Not suitable as flooring or stairs in public areas, suitable in residential rooms.		
Quartzite slate			
Rough split	Suitable in certain areas (e.g. entrances).		
Honed	Suitable, except in entrances.		
Polished	Suitable from a cleaning perspective, but may appear slippery – therefor unsuitable in		
	entrances.		

Different types of stone can have various surface finishes, either for aesthetic reasons or to make the stone more suitable for specific applications.

# **Surface impregnation**

Natural stone is a material with a naturally strong wear surface. Protective coatings are generally not necessary. On the contrary, chemicals can be directly unsuitable. A wide range of surface impregnation products is marketed, such as polish, pore fillers, crystallization treatments, and oils. These products should be used with great caution. Many of them form a sealing layer on the stone surface, which reduces the natural moisture movement through the stone and can cause damage, such as thin layers of the stone surface detaching. Some products may also cause colour changes.

# Granite

High-quality granite does not require surface impregnation.

# Marble/Limestone

No additional treatment is recommended beyond the soap or mild detergent method described below.

#### Slat

For quartzite slate with a natural rough split surface, surface impregnation is recommended in certain cases, especially where there is a risk of grease stains. Normally, so-called pore fillers based on acrylic polymer are used.

For clay slate, which scratches easily and becomes grey with wear, impregnation or oil is used to preserve its black colour. Contact the stone manufacturer for advice on selecting a suitable product.

## **Different cleaning environments**

Cleaning method, cleaning agents, and cleaning frequency must be adapted both to the properties of the stone and to the level of soiling and wear. The rules provided are general and should be regarded as basic quidelines.

# **Entrances**

Entrances affect the cleaning of the entire building. Therefore, it is advisable to choose a durable stone with a coarse surface finish for entrance areas and to use scraper mats or drying zones.

# **Environmental/Precautionary principle**

This cleaning instruction has been compiled based on two fundamental principles:

- Caution, to prevent improper maintenance.
- Low environmental impact.

Natural stone products are environmentally friendly, have a very long lifespan, and can be cleaned using agents and methods that minimize environmental impact. Economic considerations should also be kept in mind - avoid using unnecessarily expensive cleaning products. By following this cleaning instruction, an effective cleaning result can be achieved both technically and economically, without damaging the stone and with the greatest possible regard for the environment.

There are alternatives to the products and methods recommended here. If other cleaning agents and/or methods are used, consultation should take place between the cleaning/maintenance responsible, the cleaning agent supplier, and the stone manufacturer. Before deciding to use alternative methods or products, the environmental consequences should be assessed and taken into account. Keep in mind that over the entire lifespan of a stone floor - which can often be 50–100 years - many tons of cleaning chemicals may be used, all of which have significant environmental impact.

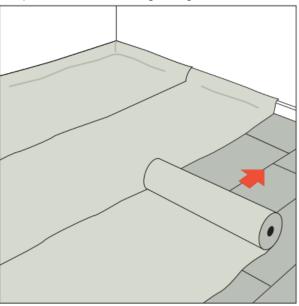
# **Protective covering during construction**

Construction periods pose a high risk of stains, scratches, and other damage. Ensure that responsibility is assigned for covering the surface and keeping it covered throughout the entire construction period. It is very important that the floor surface is completely clean before covering. Mortar or sand grains can act like sandpaper under a protective covering.

#### Protective covering:

- Mortar/adhesive and stone should preferably be allowed time to dry before covering. During this period, the area must be off-limits.
- Keep the floor covered throughout the entire construction period.
- Protect against stains from substances such as oil, paint, and mortar.
- Protect against mechanical damage from, for example, sand grains, scratches, pallet jacks, and other heavy traffic.
- The stone surface must be clean before covering, and no debris should get between the stone and the protective covering.

- If using a sealed covering, it is very important that the stone and mortar/adhesive are allowed to dry first.
- Stairs are particularly sensitive to mechanical damage.
  Cover them carefully.
- Clarify responsibilities in advance, specifying who is responsible for the covering during construction.



Like all other materials used for floors and stairs, natural stone requires proper coverage throughout the entire construction period.

Heavily trafficked surface, dried flooring/substrate

- Plywood or OSB boards, taped at joints and against skirting's/walls. The thickness and quality of the boards should be adapted to the expected mechanical load. Note: Do not use materials that may stain the stone surface.
- In some cases, it may be appropriate to place plasticcoated packaging material under the boards, such as heavy cardboard laminated with plastic film (e.g. Tetra Pak type).
- Special rubber materials.

Moderately trafficked surface, dried flooring/substrate

- Masonite boards, taped at joints and against skirting's/walls. Note: If the board is damp, Masonite can stain light-coloured stones.

Moderately trafficked surface, undried flooring/substrate

- Platon mat, taped at the joints but placed with a gap against the walls.
- For mechanical protection, place plywood or OSB boards on top, thickness and quality adopted to the load.
- Special textile protective coverings.

Lightly trafficked surface, fully dried flooring/substrate

- Plastic-coated packaging material, e.g. heavy cardboard laminated with plastic film (Tetra Pak type). Note: There is a risk of surface damage on limestone, discoloration on light-coloured marble and limestone, and streaks around joints on limestone and slate if moisture is trapped under the covering.

Lightly trafficked surface, dried flooring/substrate, no risk of liquid contamination

- Air-permeable materials, e.g. cardboard. Note: Damp cardboard can stain light-coloured stones.

## **Construction cleaning**

A. Start with Dry cleaning:

Always sweep adjacent walls first, then the protective covering on floors and stairs. Vacuum thoroughly.

Remove the protective covering carefully. Take care not to make the uncovered floor dirty. Sweep and vacuum the stone surface thoroughly.

For surface stains; see *Stain Removal*. Hardened cement mortar should primarily be removed mechanically (by scraping).

# B. Continued cleaning

#### Granite

If there are splashes or other residues of (hardened) cement mortar, remove them with glycolic acid and a stiff brush. Wet the floor surface, especially the joints, before using the acid. Rinse thoroughly with water afterwards. Note: Glycolic acid can damage grout.

Then clean with an all-purpose cleaner using damp mopping or a scrub/combi machine.

Sometimes a thin "cement film" appears on the stone due to inadequate cleaning after grouting. If normal cleaning is insufficient, the surface can be machine-scrubbed with a red floor care pad, water and all-purpose cleaner.

# Marble/Limestone

Splashes or other residues of (hardened) cement mortar can be very difficult to remove from marble and limestone. Remove mechanically in a suitable manner depending on the stone's surface finish and the thickness of the mortar.

If the mortar is only a thin layer on a honed surface, it can usually be scrubbed off with a floor machine and a floor care pad. The pad's coarseness (red, blue, green) should match the stone's finish to maintain the desired surface texture.

After vacuuming and dry mopping, clean the stone surface with a solution of natural soap using damp mopping or a combi machine. Repeat the procedure until the surface is saturated with the soap solution. For polished stone surfaces, which have low absorbency, use the soap solution sparingly.

A surface oversaturated with soap may appear streaky (black) and dull, and can also be slippery. Clean with water and all-purpose cleaner, then dry thoroughly.

Note: Acids or acidic cleaning agents must not be used on marble or limestone. They cause etching that is very difficult to restore. Contact the stone supplier if in doubt.

## Slate

If there are splashes or other residues of (hardened) cement mortar on a slate floor, they can be removed with glycolic acid and a stiff brush. Wet the surface before using the acid, and rinse thoroughly with water afterward. Note: Glycolic acid can damage grout and may bleach clay slate.

After vacuuming and dry mopping, clean the stone surface with a solution of natural soap using damp mopping or a combi machine. Repeat the procedure until the surface is saturated with the soap solution.

Polished surfaces of mica slate have low absorbency. Instead of using a soap solution, use all-purpose cleaner (no saturation of the stone surface is needed).

Soap provides good surface protection. Marble and limestone (carbonate stones) react with soap to form calcium soap. This provides proper pore filling in the stone without sealing its pores, giving the stone excellent surface protection.

Cleaning agents with additives that create a sealing layer on the surface should not be used, as they block the stone's pores, prevent moisture movement through the stone, and can cause damage to the surface (thin layers may flake off).

# Regular cleaning

#### Granite

Use as dry methods as possible, such as dry mopping or vacuuming.

For stubborn dirt, use all-purpose cleaner in combination with damp mopping or a combi machine. Note: On granite, all-purpose cleaner is preferable to a soap solution. Products that build up layers should never be used.

#### Marble/Limestone

Use as dry methods as possible, such as dry mopping or vacuuming.

For stubborn dirt, use a solution of natural soap with damp mopping or a combi machine.

Regular use of a soap solution provides the stone with balanced pore filling necessary for surface protection (see fact box). The soap must be natural and free of additives.

A new, untreated stone surface should first be saturated with soap solution to provide protective impregnation. For the first two cleanings, apply soap at a higher dose than normal (2–5 times the usual amount). Excess soap should be worked in with dry polishing using a white floor care pad or removed with water. (Here, "polishing" refers to cleaning practice, not the technical stone finish.)

Afterwards, clean the floor using the normal soap dosage according to instructions. Continue this as the regular "daily" cleaning routine.

Polished marble and limestone have low absorbency, so only a small amount of soap solution should be used. A surface oversaturated with soap may appear streaky (black) and dull, and can also become slippery. Clean with water and all-purpose cleaner afterward.

#### Slate

Use as dry methods as possible, such as dry mopping or vacuuming.

For stubborn dirt, use a solution of natural soap with damp mopping or a combi machine. Repeat the procedure until the surface is saturated with soap solution.

Polished quartzite slate has low absorbency. Do not saturate the stone; instead, use all-purpose cleaner with damp mopping or a combi machine.

Products that build up layers should not be used.

**Table 2**Potential problems that may occur with Marble and Limestone.

Problem	Possible cause	Action
Slippery surfaces	Moisture.	Wipe up.
	Excess soap, possibly contained with the use of a polishing machine.	Use all-purpose cleaner with coarser pad.
	Wax, polish, oil etc. transferred from adjacent flooring.	Separate cleaning of the stone from other surfaces where different cleaning methods are used.
	Construction dust (on new floors or during renovation).	Isolate the source of dust.
Dull "dry" floors	Too little soap.	Saturate with soap solution.
Stone surface cracking (flaking)	A film (polish, wax etc.) has formed on the stone surface.	Remove the film with a polish remover; if necessary, scrub using a floor care pad appropriate for the stone's finish.
	Acidic cleaning agents have been used, or acid has spilled on the surface.	Do not use acidic agents.
	De-icing salt (NaCl) has been brought in from outside via shoes.	Wash away the salt and protect the surface with an excess of soap. Arrange measures, e.g. mats in the entrance, to prevent salt from being brought in. Avoid cleaning agents containing unsuitable substances (e.g. NaCl).
	Some cleaning agent contain salt (NaCl), or salt may have been transported from below through bedding mortar and/or concrete, crystallizing in the stone surface and causing weathering, moisture migration may be caused by leaks or flooding.	This cannot be remedied by cleaning. Requires a thorough investigation.

Polish or other products that seal the stone's pores must not be used on stone floors! Also avoid products containing wax or oil.

## Alternating method:

For optimal maintenance of marble and limestone, the alternating method is recommended. This involves interspersing the regular soap/detergent cleaning with intensive scrubbing and renewed soap/detergent impregnation as described below.

- Clean the surface with the regular soap/detergent routine.
- After a number of these cleanings, perform an intensive scrubbing, either manually or with a scrubbing machine using brushes and all-purpose cleaner. Do not add wax, polish, or similar products.
- For the first two cleanings after the intensive scrubbing, use a higher concentration of soap/detergent, approximately 2–5 times the normal dose.
- Thereafter, return to the normal soap/detergent solution. Any excess solution can be worked in with dry buffing using a white floor maintenance pad or removed with water.

The frequency of intensive scrubbing depends on how heavily the surface is soiled and the required level of cleanliness. The most heavily trafficked areas may need to be cleaned more often than other parts of the floor.

# Cleaning of fixtures and walls

### Granite/Slate

Dust with a microfiber or dust cloth. Wipe with a damp cloth; use dish soap if necessary. For stains; see *Stain removal*.

#### Marble/Limestone

Dust with a microfiber or dust cloth. Wipe with a damp cloth; use dish soap if necessary.

If a polished surface is etched by acidic substances (e.g. fruit juice, wine, vinegar, or carbonated drinks), restoring the glossy finish can be difficult. The safest method is to machine-grind the entire surface. In some cases, improvements can be made manually by sanding the surface with wet sandpaper or a block with diamond grit. After sanding, finely grated beeswax dissolved in white spirit can be applied to attempt to restore gloss, or turpentine mixed with paraffin oil worked in with a soft cloth. Ready-made products, often labelled as "stone polish," are available on the market. Always test first on a small, inconspicuous area.

# Stain removal

The stone's susceptibility to staining varies. The most important factors are the type of stone - whether it is granite or slate (silicate stones) or marble and limestone (carbonate stones) - and the stone's density.

Colour, texture, surface finish, and the general condition of the stone surface also play a role. This means that no absolute rules apply; stain removal must be adapted to each specific situation.

## General:

Stains should be removed promptly to prevent them from penetrating the stone. If a stain penetrates deeply, it can be very difficult or even impossible to remove. Care must also be taken not to worsen the stain or damage the stone. Simple methods should always be chosen first, before using chemicals. The basic principle is based on the "paste method," where a solvent is combined with an absorbent material.

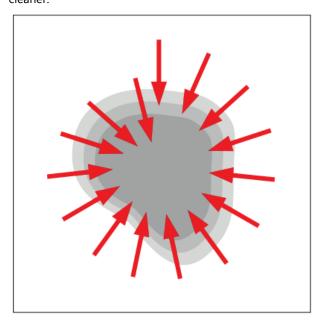
## The Paste Method:

This method involves mixing the chosen solvent with an absorbent powder, such as chalk, bentonite clay, or potato starch, to form a paste. Apply the paste to the stain, which may first be moistened with the solvent. Leave the paste in place until it dries, then brush it off and wash the surface with water. Always test first on a small, inconspicuous area. Repeat the treatment if necessary.

#### Initial Action:

First, try to absorb the stain using paper towels or another absorbent material. Then treat the area with a damp cloth and water.

Next, use a solution of water and dish soap or all-purpose cleaner. Always work from the outside of the stain toward the centre to prevent spreading. If any solvent is used, rinse thoroughly afterward with water and all-purpose cleaner.



Work the stain from the outside toward the centre to prevent it from spreading.

Never use stronger agents than necessary for the stain. When using solvents or cleaning agents, always follow the safety instructions. Contact the stone supplier if in doubt about the appropriate method.

#### Granite/Slate

These stone types are durable both chemically and mechanically, so a variety of agents can be used.

#### Marble/Limestone

These materials are sensitive to acids and salts. Products containing such substances must not be used. These stone types consist of relatively soft minerals and are affected by aggressive mechanical methods. After stain removal, the cleaned area usually has a different colour and lustre compared to the surrounding stone, because the cleaned surface lacks the pore filling obtained through regular maintenance with soap. The cleaned area should be saturated with soap solution to restore the same lustre as the surrounding surface. Some cleaning methods may alter the stone's surface texture relative to the surrounding stone. The area can then, with great care, be sanded with fine wet sandpaper, steel wool, or a nylon pad, depending on the surrounding stone's surface. Always test on a small area first. Afterward, saturate the cleaned surface with soap solution. Polished surfaces are very difficult to restore using this method.

# Clay Slate:

Clay Slate is soft and easily bleached by mechanical and chemical action.

## Types of stains/contaminants

Always follow the safety instructions for the products used.

## Cement mortar:

Stains from hardened cement mortar are very difficult to remove, and priority should be given to removing the mortar before it hardens.

## Granite/Slate

Hardened cement stains can be removed with glycolic acid and a stiff brush. Pre-wet the surface before applying the acid, and rinse thoroughly with water afterward. Note that grout may be damaged by the acid.

# Marble/Limestone

If hardened cement stains occur and the surrounding stone has a polished or coarser finish, carefully scrape off the stain. Then hand-sand the surface with fine wet sandpaper, steel wool, or a nylon pad to match the surrounding stone's finish. Always test on a small area first. Polished surfaces are very difficult to restore using this method. Acids should not be used as they may cause etching and greater damage than the stain itself.

#### Grease and oil:

Stains should be removed as quickly as possible to prevent them from penetrating the stone. Blot the stain with paper and wash with a solvent, then absorb the solvent with paper or another absorbent material. Suitable solvents include white spirit, thinner/cellulose thinner, acetone, or unleaded gasoline (95 octane). For deeper stains, the paste method can be used. Rinse afterward with all-purpose cleaner in working solution.

# Rubber soles:

Black marks from rubber soles can be removed with thinner, white spirit, or turpentine, followed by rinsing with all-purpose cleaner in working solution.

#### Glue:

Glue residues vary in composition and may require different solvents. In general, residues can be removed with thinner, and acetone may also be used with caution.

#### Marker stains:

Can be treated with denatured alcohol on a cloth, and thinner or acetone can be tried carefully. If the stain has penetrated the stone, the paste method should be used, followed by washing with all-purpose cleaner in working solution.

# Oil-based or lacquer paint:

Can be treated using thinner or turpentine in combination with paper and then in paste form if necessary, with a rinse afterward using an ammonia-water solution if needed.

# Plastic paint:

Stains from plastic paint are very difficult to remove once hardened. They should be wiped away before hardening, using water. Any hardened plastic paint stains can be scraped off with a razor blade. If necessary, follow up with a warm solution of caustic soda and rinse thoroughly with water.

#### Rust:

Rust stains are very difficult to remove, especially if they have been present for a long time.

# Granite/Slate

Oxalic acid or cleaners containing this acid can be used, followed by thorough washing with all-purpose cleaner in working solution.

# Marble/Limestone

The importance of the rust stain must be weighed against potential etching damage caused by oxalic acid. Warning: acids can damage marble and limestone (both polished and honed surfaces are etched by the acid). Use the acid with caution and rinse thoroughly with all-purpose cleaner in working solution.

# Candle wax (Stearin):

Remove as much as possible mechanically by carefully scraping with a knife or similar tool. Alternatively, freezing spray can be used. Afterwards, rinse with unleaded gasoline (95 octane), optionally in paste form, and wash with all-purpose cleaner in working solution.

#### Tea:

# Granite/Slate

Tea stains are difficult to remove. Start by trying dish soap or all-purpose cleaner in working solution. If traces remain, they can be bleached using a chlorine-based product.

# Marble/Limestone

Tea can cause discoloration, especially on light-coloured marble or limestone if the stain is not wiped up immediately. Begin with dish soap or all-purpose cleaner. Discoloration can be bleached with chlorine, but note that the stone may be etched or lightened. Rinse afterward with all-purpose cleaner in working solution.

# Tape:

Glue residues can be removed with thinner or cellulose thinner. Acetone may also be tried with caution.

#### Chewing gum:

Scrape off or use freeze spray.

#### Urine

Clean thoroughly with dish soap or all-purpose cleaner in working solution.

#### Stain removal agents

Always follow the safety instructions carefully.

Solvents that do not damage natural stone:

thinner (cellulose thinner)

unleaded gasoline (95 octane)

acetone

white spirit

turpentine

denatured alcohol (methylated spirits)

ethyl acetate

neutral EDTA (found in some detergents)

ammonia

polish remover

Solvents that may damage marble, limestone, and grout: glycolic acid

oxalic acid

vinegar

chlorine (may bleach the stone)

hydrogen peroxide (bleaches)

and caustic soda

After using any of these agents, rinse thoroughly with allpurpose cleaner in working solution.

# Suitable soap/detergent:

For cleaning limestone and marble, both soap (potassium-based) and detergent (sodium-based) can be used. The most important factor is that the soap/detergent must be free from additives. Instead of adding extra surfactants to the soap/detergent, it is better to use the so-called "alternating method," where the soap/detergent is periodically replaced with a surfactant-based product, such as all-purpose cleaner.

Complexing agents, which are intended to prevent lime deposits, should not be present in the soap/detergent unless the water is extremely hard.

# All-purpose cleaner:

Environmentally certified cleaning agent, pH 7–9, designed for regular cleaning and adapted to the intended use.

#### Regrinding

Heavily worn or stained surfaces on floors and stairs can be restored by regrinding. A simpler alternative is scrubbing with a floor maintenance pad.

# **Conclusions/Key recommendations**

- Clean the surface with the regular soap/detergent routine.
- Apply the environmental/precautionary principle.
- Use the driest possible cleaning methods.
- Let the stone surface act as the wear layer do not use polish.
- Granite; use all-purpose cleaner.
- Marble/Limestone: use natural soap, alternating periodically with all-purpose cleaner.
- Do not use acidic cleaning agents.
- Entrance areas influence the cleanliness of the entire building.

Consumer Information, January 2022

**Swedish Stone Industries Federation "Sveriges Stenindustriförbund"** 

www.sten.se

