

## Cleaning Instructions for Porcelain Tiles Porcelain Stoneware Tiles

Dear Sir / Madam,

We would like to provide you with a few tips for cleaning our tiles.

As our porcelain tiles are fired at 1300 C°, this results in a very dense surface which is impenetrable to contamination.

If contamination occurs, it is only on the surface of the tile and can easily be removed.

The recommendations for cleaning and maintenance listed below are for Porcelain tiles with a natural or textured surface.

Special instructions regarding initial cleaning, regular maintenance cleaning and care of our tiles with a smooth surface will be provided to you on request by our technical support.

Furthermore, special instructions should be observed for the initial cleaning of grouting with epoxy resin and tiles with a metallic appearance. These are also available on request.

### 1. Initial cleaning after installation

After laying and grouting the floor covering with cement sealing compounds and joint sealants, cement residues will often remain on the surface despite careful cleaning with clear water. These are not always immediately recognisable. Various contaminants can later become stuck to the residues. Some cement from the top layer of cement joints will also dissolve during the first maintenance cleanings. This process is normal and will steadily decrease.

Therefore, it may be necessary to repeat the instructions listed below for the initial cleaning, for up to two months after laying the tiles.

A cement remover (eg Lithofin KF cement remover or Fila Deterdek) will clean the cement residue from the surface after laying and grouting. Also, much of the "loose" cement will immediately be removed from the top layer of the cement joints. As described above, subsequent repeated treatment will be necessary after the few first maintenance cleanings.

The cement remover is an acidic aqueous solution or an "acidic cleaner" with a pH-value of approximately 1 (concentrate).

Please soak the joints before use and follow the manufacturer's instructions for the cleaning agent.

When using flexible grouts, additional cleaning

with an intensive stoneware cleaner (e.g. Lithofin KF Intensive Cleaner or Fila PS 87) may be necessary due to plastic components in the grout. The plastic particles may also accumulate on the surface of the porcelain stoneware tiles. This cleaner dissolves the plastic compounds and the plastic can be removed with a microfibre mop. The intensive stoneware cleaner is an alkaline (basic) cleaning agent with a pH-value of approximately 14 (concentrate).

### 2. Regular maintenance cleaning

For routine maintenance, and for cleaning away light dirt, it is enough in most cases to use warm water with a dash of vinegar or vinegar cleaner with a microfibre mop or microfibre washcloth. The vinegar or vinegar cleaner binds to the permanently present lime in the water used for cleaning.

For greasy contaminants, instead of vinegar, use a porcelain stoneware care cleaner (eg Lithofin KF Care Cleaner or Fila Cleaner). This cleaner is a mildly alkaline cleaning agent with a pH-value of approximately 10 (concentrate). Under no circumstance should cleaning agents (e.g. washing-up liquid) with waxy and film-forming ingredients be used.

If this cleaning agent is used, it will result in barely soluble layers of wax forming on the surface of the tiles. The wax forms into a layer of "glue", which in turn promotes the adhesion of dirt and contaminants.

At first, these unwanted wax layers cannot be seen, or can only be seen against a strong light. Layers which have been forming for a longer amount of time result in visible grey deposits on the joint edges. The resulting residue can only be removed through intensive basic cleaning (e.g. using Lithofin KF Intensive Cleaner or Fila PS 87).

Hint:

Porcelain stoneware has a similar surface to glass, therefore cleaning can be done using similar methods.

### 3. Intensive basic cleaning as needed

If the tiles are very dirty, come under heavy use or if there is a formation of dirt layers, basic cleaning with an intensive porcelain stoneware cleaner is necessary. A porcelain stoneware cleaner (e.g. Lithofin KF Intensive Cleaner or Fila PS 87) is an alkaline (basic) cleaning agent with a pH-value of approximately 14 (concentrate). This cleaning agent dissolves dirt and should be rinsed off with clean water and a microfibre mop. Preferably, the dirty water can be sucked up with a wet vacuum cleaner, as this cleaning device sucks up liquid from the deeper grooves efficiently. The information of the various manufacturers must be observed.

### 4. Calcareous (hard) water

Calcareous water can cause deposits of lime to accumulate on the surface of the tiles. The resulting "greyness" appears stronger on darker tiles.

When using natural soap, the lime/salts contained in the water can, together with the soap, combine to produce light/grey hard-to-remove residues of lime soap.

To avoid such deposits, as little water as possible should be allowed to remain and dry out on the tiles after cleaning or showering. In the shower, removal with window rubber has proven to dry the tile covering effectively. Also, a second drying using a dry cloth can effectively inhibit the formation of calcium deposits.

Nevertheless, it may be necessary to periodically clean the tiles with a (slightly acidic) acid-containing cleaning agent for sanitary facilities (Lithofin KF Sanitary Cleaner; 1:15 diluted). This cleaner is particularly suitable for removing limescale.

Hint:

For wiping, it is possible to use a microfibre cloth. A lot of dirt attaches itself to the fibres of microfibre cloth. The dirt particles can then easily be rinsed away under cold or hot water.

For cleaning and maintaining larger areas, a cleaning machine is recommended.

### 5. Outdoor areas

Like all products used outdoors, porcelain stoneware tiles are also subject to constant influences from the environment or surface usage. These influences are not only dependent on the local conditions (e.g. covered areas, shady areas under trees, etc.) but also on the priority use of the surface (e.g. garden path, entrance, driveway, etc.).

Due to the required high slip resistance of porcelain stoneware tiles, there may be rubber marks from tyres or shoes, e.g. at garage entrances, doorways and walkways.

Such traces are unavoidable and do not indicate a defect of the finished products.

They can also be removed by targeted cleaning.

Basically, however, one can say that the more visible contaminants have become, the brighter, smoother and more homogeneous is the surface. For darker, multi-coloured or structured products, dirt is not generally as much of a problem.

Normal contamination of porcelain stoneware surfaces (eg., due to soil, or dust) can usually be cleaned away with a stiff brush or broom and running water. Dirty rubber marks, and also oil/grease contamination can be treated using a porcelain stoneware cleaner (e.g. Lithofin KF

Intensive Cleaner or Fila PS 87). Mix the cleaning agent according to the manufacturer's instructions, apply to the tiles, leave it to act, then scrub with a brush or white scouring pad before rinsing away with lots of clean water.

Spots which arise, for example, due to strong colour-bleeding leaves or petals can be minimized by a fast removal of the cause. Prolonged exposure to contamination must be treated with a porcelain stoneware intensive cleaner.

For coarse contaminants, such as oil, grease or moss, a wide variety of especially suitable cleaning agents are commercially available. These should be applied according to the manufacturer's instructions.

Cleaning and care products of the manufacturer Lithofin have proven to be particularly suitable. For more information regarding the products of Lithofin please visit [www.lithofin.de](http://www.lithofin.de)

If you have any further questions, please do not hesitate to contact us.



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