



1 - TECHNICAL RECOMMENDATIONS

In order to solve any question regarding maintenance and/or Cleaning of the goods and as a strongly recommended guidelines, from the Quality Department of VENIS we thought it was necessary to issue a guide like this one, so it may serve as reference to our commercial labour and also our customers would be satisfied.

It will be controlled by the customer that the usage of goods will be the right one. Before any doubt, the installation will be stopped and the relative questions or claims must be placed, it is always better learn about first.

A simple advice may prevent from making mistakes and will help to choose better.

2 - TECHNICAL RECOMMENDATIONS

After the installation of the ceramic tiles, it will be easy to find cement rests in the shape of a tiny film or small accumulations that will cover up the beauty of the item. In case they are not cleaned, they can seriously affect the finished product look.

Before the last cleaning once the works are finished, it is necessary to respect the waiting time of 24 to 48 hour approx., thus the joints get correctly harden.

During and after the installation, and for the works taking place after the installation, the floor tiles must be covered with any available mean (carton, sawdust, etc.).

There are products called cement-removers or descaling products that are acid dissolutions and are mainly used to remove cementitious rests. We'll bear in mind:

- The floor tile characteristics and the manufacturer's recommendations.

- Putty knives or metallic brushes must not be used.

Descaling products are used are diluted in water for their application and the usage guidelines indicated by their manufacturer must be followed and the cautions for a safe usage must be taken in consideration (for instance, to wear gloves when manipulating them, to have appropriate ventilation...)

Before using them, it is advisable to test the product in a low visible area or over a non-installed piece. It must be left there for a reasonable time so whether it damages the surface of the piece or not can be checked.

Abrasive particles containing products must be avoided (such as hydrochloric acid) because in their composition there may be small proportions of hydrofluoric acid, which is able to react with any ceramic material and to alter its surface considerably.

***The steams produced by the hydrochloric acid may attack metals close to the point of their application. ***

3.- DAILY CLEANING

BIG SURFACES CLEANING

For big surfaces it is advisable to use industrial cleaning machines with hot water. Never use oil soaps or coloured soaps; it may cause a losing of the anti-slip characteristics or it will dull the polished tiles. The guidelines of the machines must be followed in order to know what kind of detergent must be used.

DUST CLEANING AND GENERAL DIRT

To remove the dust or water dirt rests from the washing that may be over the surface of the ceramic tile, it is advisable to use a dry mop without any wax additives.

Regarding the general dirt, it is advisable to Hoover or sweep the surface and wash it after that with a neuter product in the quantity recommended by the manufacturer.

Porcelanosa Group offers cleaning products (neuters, basics...) available to check in www.butech.es.

In the areas where the floor could be dirtier (kitchens, etc...), bleach or ammonia containing products can be added to the water (in these cases, we always recommend to clean again after that but with water only).

OILS AND GREASES CLEANING

Nowadays, different especial grease and oils cleaning products are sold, such as alkaline detergents or grease removers. If a dilution of ammoniac cannot easily remove the rests, then the appropriate cleaning products must be used. There is a wide range of floor cleaning products with a concrete formula intended to remove this kind of dirt. Normal grease removers can be used too, because they show better results.

SPECIFIC STAINS CLEANING

From time to time, different kinds of rests can be found over the surface of the tiles, either when they spill or they get in contact with some substances (coffee, paints,...)

Some products cannot be removed by means of the usual cleaning process and specific cleaning must be done according to their nature.

It is very important the time that the substance stays over the surface of the tile, being highly advisable to clean the area as soon as possible; thus we can prevent it from drying and it will be removed more easily.

KINDS OF POSSIBLE STAINS AND THE BETTER CLEANING PRODUCTS TO BE USED IN EACH CASE:

KIND OF STAIN	CLEANING PRODUCT	KIND OF STAIN	CLEANING PRODUCT
Oil	- Ethyl alcohol. - Anionic surfactants like "Fairy/Coral"	Rubber	- Organic solvents
Tarmac or shoe polish	- Organic solvents	Oxides	- Phosphoric acid - Sulphuric acid (H ₂ SO ₄)
Coffee, tea, wine, refreshments	- Bleach for floors	Ink	- Organic solvents. - Dilute sodium hypochlorite - Sulphuric acid (H ₂ SO ₄) or nitric acid.
Cement, gypsum, lime	- Sulfamic acid (H ₂ NSO ₃ H) - Acid (Cement-remover) - Vinegar - Hydrochloric acid HCL 10%	Paint	- Specific solvent. (Acetone, turpentine) - Pickling paste
Beer or wine	- Alkaline detergents. - Hydrochloric acid HCL 10%	Blood	- Aqua regia+ Nitro diluents - Trichloride - ethylene. Acetone
Nicotine	- Citric acid	Resin and enamel lacquer	- Aqua regia+ Nitro diluents - Trichloride - ethylene. Acetone
Greases	- Bicarbonate and water. - Anionic surfactants "Coral/Fairy/Kh7"	Ice cream	- Basic detergent
Iodine	- Hydrogen peroxide - Anionic surfactant dishwashing liquid as "Coral/Fairy"	Daily Cleaning	- Usual detergent (Neuter PH)
Candle wax	- Organic solvents	Tomato, fruits, chocolate and sauces	- Ammonia. Hydrochloric acid. CLH 10%
Pencil	- Eraser + Hydrochloric acid CLH 10% - Trichloride-ethylene. Acetone.	Permanent marker ink	- Alcohol
Cementitious rests Calcareous efflorescence	-Sulfamic acid (H ₂ NSO ₃ H) -Hydrochloric acid HCL -Sulphuric acid (H ₂ SO ₄)	Mould	- Bleach



4 - MAINTENANCE

The target usage and the maintenance are two key factors determining the durability of a surface. Floor tiles are not usually the last element to be installed in a job, so they must be protected from possible aggressive external agents by covering them with cartons, plastics, etc.

Once the work is finished, the rests have to be removed as soon as possible. When some product spills over the floor, it is advisable to clean them before they dry, so they don't get difficult to remove. For the daily cleaning, we recommend the usual detergent dilute in clean water. Ceramic tiles are produced to warranty a long durability, so, some cautions and cares must be taken for their preservation:

- To clean frequently*
- To keep the environment free from abrasive particles, using a carpet or a rug.*
- Protect the elements that can be dragged over the tiles.*
- Prevent the overloads and the falling of sharp or pointed objects*
- Waxes, oils, etc... must not be applied, since the porcelanic tile has a minimum of porosity that hinders a correct application, making the surface to be fogged when looking at it against the light.*

5 - GENERAL CONDITIONS

Colours and textures of the pieces in the showrooms are only illustrative items.

These guidelines have been made with the only aim of offering concrete and clear information.

This same information is not worth as any kind of warranty or services before or after selling any VENIS product.

This information can be changed or modified partially or totally without prior notice.

No claims about installed materials will be admitted when the problems found come from the omission of these recommendation guidelines.

VENIS, S.A. has available a team of professional and qualified people at service for the customers. Any suggestion, doubt or query can be transmitted and we'll be pleased to assist.

Never use products containing hydrofluoric acid.

In VENIS website, www.porcelanagrup.com, you can find a wide range of information together with other services that may be of interest.