



PERFECT WALLS & FLOOR

Completely perfect surfaces depend on many things, including correct laying operations, which are essential to assure a perfect end result. This is what to do for the perfect surfaces.





- 1 Installation must be carried out using normal adhesives for porcelain stoneware or specific, high-performance adhesives depending on the size or particular applications.
- 2 In deciding on the most appropriate adhesive and installation method, we recommend that you follow the adhesive manufacturer's instructions or ask the professional laying contractor for advice.
- 3 For large slabs and/or areas with heavy traffic or heavy loads, we recommend laying with a double coat of adhesive.
- 4 Our materials are natural by inspiration, manufacturing technology and raw materials used so any colour variations are natural and desirable. Skilled laying contractors can enhance these features to obtain unique, inimitable results. In order to obtain these results, we recommend following these instructions:
 - Spread some pieces on the floor to check the overall effect. When laying the material, select the pieces from different boxes/palettes.
 - Do not soak the material in water before laying.
 - When cutting, do not mark the top part of the surface with pencil or felt-tip pen, particularly on polished surfaces.
 - Wait 48-72 hours before using the floor.
- 5 If laying with normal-setting adhesives, grout the floor after 24-48 hours; if using quick-setting adhesives, after 4 hours.
- 6 On polished and gloss materials, use cement-based grout in different shades of the same colours (if possible, avoid dark grout such as black, blue or red on bright materials, and vice versa). If you decide to use grouting with contrasting pigments, make sure you scrupulously follow the instructions on the datasheets and in any case, do a spot test of the grouting on the material before you use it.
- 7 **NOTE.**
We strongly advise against using epoxy or flexible, synthetic-based mortar or grout with latex additives on these surfaces, particularly for gloss surfaces of slabs, and especially if it contrasts with the colour of the material. This is because it can be extremely difficult to eliminate the residue with normal cleaning products.
- 8 Use a rubber spatula to spread the grout over the whole surface of the material.
- 9 Grout small areas at a time and remove excess grout with a sponge or damp cloth (make sure the water is clean water), or use special machines to remove excess when it is still damp.
- 10 **Adequate initial cleaning is of fundamental importance**, both to enhance the aesthetics and sheen of the material, and to restore its characteristic cleanability and easy care. Therefore, it is extremely important to clean the surface for the first time immediately after the laying procedure, using acid-based detergents, scrubbing the surface hard then rinsing it with plenty of water. This will get rid of all the residue grout, bonding agent, cement etc. Any detergent available on the market can be used for this, with the exception of products containing hydrofluoric acid (and its compounds and derivatives) in accordance with Annex G of standard EN 14411.
- 11 **We recommend carefully protecting the floor after laying; if the surface is polished/glossed, it is essential to protect the laid flooring.** If other work such as painting, plumbing or any other job needs to be done after installation, we recommend covering the floor with PVC sheets, AIRBALLS or fabric. In any case, wait 48-72 hours before using the floor normally.

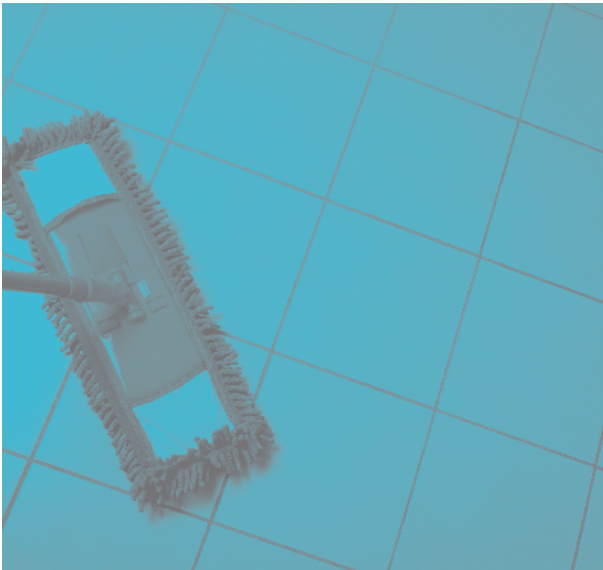
CLEANING



The term “cleanability” describes the ability to remove stains, dirt and dust deposited on a given surface to ensure necessary hygiene. Since this feature is directly linked to the compactness and imperviousness of the surface, as well as to its non-reactivity (to chemical agents), we can unreservedly confirm that our materials have excellent cleanability. In particular:

- 1** Our materials can easily withstand the action of the most commonly used, normal and acid-based household or professional detergents (with the exception of products containing hydrofluoric acid), although we recommend rinsing with plenty of water after using them.
- 2** Heavy-duty cleaning using machines can be performed without damaging the surface, thus maintaining hygiene even in extremely dirty environments.
- 3** For daily cleaning, just wash with normal, preferably neutral detergents that do not leave smears and/or a film and wipe over with a microfiber cloth: do not apply wax or other similar substances.
- 4** Still, surface colour and finish can also affect the practicality and visibility of dirt on unglazed material.
- 5** Polished, textured or bush-hammered surfaces that are very light or very dark need more care than other colours and may require occasional degreasing to remove any film from the surface.

DAILY CLEANING OUR RECOMMENDATIONS

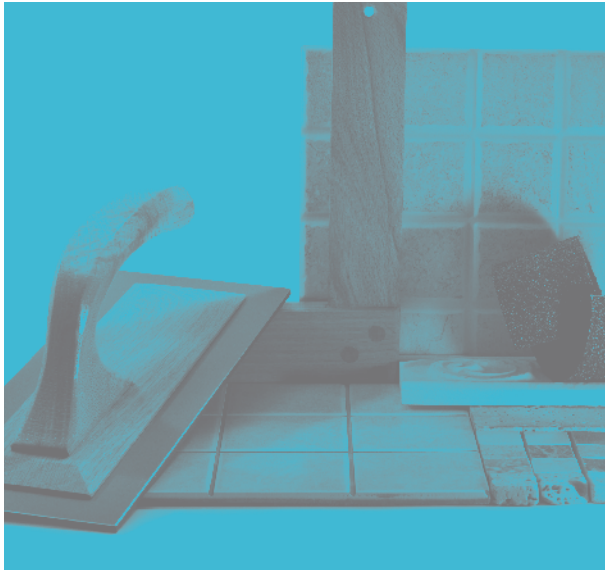


- 1** **Carry out correct initial cleaning** (as described above).
- 2** Make sure the water is always clean, particularly for lighter colours. For large surfaces or heavy-duty areas (very dirty), such as shopping centres, airports etc., it is preferable to use a single-brush floor cleaner or washer to vacuum liquid and detergent residue. Use wet vacuum cleaners to finish.

- 1 PRE-POLISHED OR NATURAL SURFACES**
 This surface is almost completely non-porous, so we do not recommend waterproofing treatment, which is also unnecessary in this case. For everyday cleaning, simply use neutral or alkaline detergents for porcelain stoneware such as FilaCleaner or PS87 by Fila or the like, or simple household detergents like **Mr. Clean, Lysoform, Ajax, etc.**
- 2 TEXTURED OR NON-SLIP SURFACES**
 Cleaning operations and products are the same as those mentioned above, with the addition of a few simple steps:

 - Rub briskly, using large brushes and bristles, if necessary.
 - Follow the movement of the texture where possible.
 - Rinse with plenty of water.
- 3 POLISHED SURFACES**
 For daily cleaning, always use neutral or alkaline detergents for porcelain stoneware such as FilaCleaner or PS87 by Fila or the like, or simple household detergents like **Mastro Lindo, Lysoform Casa, Aiax, etc.**; apply with a carefully wrung out microfiber cloth. Rinse with water and carefully dry to prevent the formation of streaks caused by detergent residue or particularly hard water.
 For very light colours, plan occasional degreasing with alkaline detergents in order to remove any film that may form on the surface.
- 4 COLLECTIONS OF 6 MM THICK SLABS**
 These slabs absorb almost no water at all so they do not require particularly heavy-duty cleaning. For both surfaces, we recommend post-installation cleaning with acid-based detergent diluted in water, rubbing lightly and rinsing with plenty of water afterwards.
 For daily cleaning, use neutral detergents diluted in clean water and carefully wring out microfiber cloths for application, avoid concentrated detergents.
- 5 WARNINGS**
 Please refer to the documentation below for information about the most suitable detergents to use for normal cleaning and for particularly resistant stains. The stain resistance tests performed on the materials with natural, textured and polished surfaces are also available on request.

TYPE OF DIRT	RECOMMENDED DETERGENT for stains resistant to normal cleaning
<p>acid-based detergents: Keranet (Mapei), scale Bonaclean (Bonasystems), mortar Antipolvere (Madras) Deterdek (Fila), rust Service Acido/Service metal stains Solvacid (Geal) wall colourwash Decalc (Sutter) Det. Acido (Technokolla) Kymax Primo (Zep Italia)</p>	
<p>graphite (pencil marks)</p>	<p>Acid-based detergent. Leave on mark for a few minutes then rub with mildly abrasive detergent in cream (e.g. Jif or Detergum) or powder (e.g. Vim Clorex) form. Do not rub polished surfaces too hard or they may lose their sheen</p>
<p>beer wine ice-cream ketchup coca cola coffee animal & vegetable fats</p>	<p>Alkaline-based detergents: PS/87 (Fila) Bonadecon (Bonasystems) Service Alcalé (Geal) bleach Jif Mr. Muscle with bleach (P&G) Jif liquid gel (Lever)</p>
<p>rubber tyre marks resin enamel engine oil</p>	<p>wax removers in general, alkaline-based degreasing detergents (PS87, Bonadecon, Service Alcalé) rubbing with abrasive detergent (Vim Clorex, Jif Cream, Detergum)</p>
<p>Felt-tip pen Ink</p>	<p>Nitro solvent SR 95 (Fila) White Jif Cream + Bleach mixed together and left to dry on the stain</p>



1 HOW DO YOU CLEAN HIGH-TECH MARBLE AND STONE FLOORS?

- For everyday cleaning of our floors, use common household products and keep changing the water to make sure it is clean, particularly for light-coloured products. For large surfaces or heavy-duty areas (very dirty), such as shopping centres, airports, railway and bus stations and public areas, it is advisable to use floor cleaner washers to vacuum liquid and detergent residue.

PRE-POLISHED OR NATURAL SURFACES

This surface is almost completely non-porous, so we do not recommend waterproofing treatment, which is also unnecessary in this case. For everyday cleaning, simply use neutral or alkaline detergents diluted in water. Follow the detergent manufacturer's instructions for proportions.

TEXTURED OR NON-SLIP SURFACES

Cleaning operations and products are the same as those mentioned above, with the addition of a few simple steps:

- rub briskly, using large brushes and bristles, if necessary;
- follow the movement of the texture where possible;
- rinse with plenty of water.

POLISHED SURFACES

For daily cleaning, always use neutral or alkaline detergents, applied with a microfiber cloth, if necessary. Rinse with water and carefully dry to prevent the formation of streaks caused by detergent residue or particularly hard water.

2 WHAT ARE HIGH-TECH MARBLE AND HIGH-TECH STONE?

- These materials are not superficial copies of quarried products, they are the result of a complete re-work of materials that have always been at the heart of architectural design. In actual fact, a modern, complex industrial process reproduces the timeless beauty of marble and stone and adds excellent technical qualities to make them hard-wearing and long-lasting.

So, technology can give us environmentally friendly materials that on the one hand represent the continuity of culture and taste developed over the centuries, and on the other hand adds innovation, through new performance levels that considerably broaden the range of possible applications.

In other words, high-tech marble and high-tech stone provide:

- an opportunity for everyone to appreciate the advantages of high quality, efficient and long-lasting materials;
- an alternative to quarried materials, also in eco-compatible terms.

3 FLOORS: TIPS AND GENERAL WARNINGS

- The success of a floor is not only guaranteed by the technical and aesthetic qualities of the material but also by a combination of elements that make it a real flooring system, such as the adhesive layer, the expansion joints and the screed. Correct laying operations are also required to guarantee the best results.

We recommend always following these floor laying instructions:

- spread a few pieces on the floor (at least 3 m²) to check the overall effect;
- when laying the material, select the pieces from different boxes and palettes;
- do not soak the material in water before laying;
- when laying, use the most appropriate adhesive for the size, thickness and application

Avoid the use of epoxy or synthetic-based mortar, particularly if they are in contrasting colours

- when cutting, do not mark the top side with pencil or felt-tip pen, particularly on polished surfaces.
- Always protect the floor after installation (particularly for polished surfaces) to avoid damage.
- lastly, wait for 48-72 hours before using the floor.

4 DOES THE SURFACE NEED TO BE CLEANED AFTER LAYING?

- The floor should be thoroughly cleaned straight after laying to completely eliminate all cement-based residues deriving from mortar, adhesive and any other grouting residue that may seep from the joints.

It is essential to use specific products appropriate for the surface.

See the technical datasheets for detergent recommendations.

After you have chosen the most appropriate detergent, scrub briskly and after the floor is clean, thoroughly rinse with water to eliminate any remaining traces. The manufacturing process we use makes the surface of our materials practically waterproof. This means that dirt is also unable to penetrate, so it merely needs to be removed from the surface of the material. By cleaning the floor properly, you will enhance the aesthetic features of the material used.

5 WHAT ARE TRACES OF CEMENT-BASED MORTAR?

- Traces of cement-based mortar are the grouting residues that can remain on the slab surface after it is laid. This grout must be properly removed, otherwise it could attract dirt and make major maintenance work necessary in the future.

6 DO THE MATERIALS REQUIRE SPECIAL INSTALLATION?

- Laying operations must be carried out using appropriate adhesives for porcelain stoneware, which must be correctly selected and used to suit the size of the slabs and their application (see correct declared classification for all adhesives). It is important to follow the technical specifications of the adhesive manufacturer when choosing the type of adhesive and the methods of application. For areas with heavy traffic or heavy loads, we recommend laying with a double coat of adhesive.

7 DO YOU PROVIDE A RESEARCH AND DESIGN SERVICE?

- We provide our customers with a whole design team that develops customised installation projects to meet the specific needs. Complex designs are created and/or re-worked so they can then be accomplished with extreme precision using the brand new water-jet cutting technique. Skilled personnel assist designers to explain the technical and functional features of the materials so as to promptly solve any specific problems.

8 DO YOU PROVIDE A LAYING SERVICE?

- We can provide you with the best service possible through a highly professional specialist company that is part of our industrial group (TechnoRiunite).

9 CAN THE PORCELAIN STONWARE SLABS BE POLISHED DURING INSTALLATION? AND AFTER THEY HAVE BEEN LAID?

- We do not recommend this solution; these materials are waterproof and hardwearing which makes it difficult to polish them once they have been laid. Furthermore, if they are polished when they are laid, this could cause defects, breakage or imperfections leading to expensive replacement.

10 DO THE POLISHED MATERIALS NEED TO BE TREATED AFTER THEY HAVE BEEN LAID?

- We do not believe it is necessary to treat the material after laying since it is almost completely non-absorbent and easy to clean.

11 CAN HIGH-TECH MARBLE AND HIGH-TECH STONE BE WORKED LIKE QUARRIED MATERIALS?

- Our high-tech marble and stone use the same raw materials as quarried stones; they are carefully selected in order to obtain products that cannot be found in nature. High-tech marble and stone can be processed just like quarried marble but they have superior characteristics (such as through veining).

12 I HAVE PURCHASED YOUR MATERIALS AND I NOTICED SOME DIFFERENT SHADES OF COLOUR IN THE PIECES.

- The different shades of colour in the slabs are one of their special qualities, which skilled laying contractors can enhance to obtain unique, inimitable results. The raw materials and technologies used are natural and reproduce as faithfully as possible the randomness of nature. We recommend contacting skilled, qualified installers to lay the material in order to enhance and highlight the chromatic features as much as possible.

13 WHAT ARE THE ADVANTAGES OF HIGH-TECH MARBLE AND STONE?

- The quality and technical features of our high-tech stone and marble are superior to quarried stone and marble.

Materials originating from natural geological processes reveal significant variations both in terms of structural imperfections and of variations in shades.

The electronic management of the manufacturing cycle of the Ariostea materials guarantees constant structural quality, and innovative technical solutions make it possible to create random colour shading to avoid repetitiveness. Each high-tech marble or stone slab that leaves our factory is unique, different from all the others.

In the second place, the technical features make the materials far superior to quarried products, which means they are perfect for any use and application (indoor and outdoor floors, floating floors, interior and exterior walls, ventilated walls, decorations, mosaics) and remain unchanged over time.

14 DO HIGH-TECH MARBLE AND HIGH-TECH STONE CONTAIN SOLVENTS OR GLUES?

- High-tech marble and stone do not contain glues or solvents in their structure because they are the product of a patented production cycle that guarantees completely natural raw materials.

15 CAN THE MATERIALS BE USED ON HEATED FLOORS?

- Our materials are highly compact and almost completely non-porous, which makes them particularly efficient and suitable for heated floors.

16 CAN I USE THESE MATERIALS OUTDOORS?

- The excellent technological features of these materials make them weather resistant to such things as frost and rain so they are perfect for exteriors (outdoor floors, exterior coverings, ventilated walls). They are also long-lasting and easy to clean, retaining their sheen over time. There is no limit to the application of these materials because they are hardwearing and resistant to absorption, fire, frost and chemical agents.

17 IS IT TRUE THAT OUR MATERIALS ARE MORE EXPENSIVE THAN QUARRIED MARBLE AND STONE?

- No, not at all! We can provide high-tech marble and stone with excellent aesthetic and technical features at extremely competitive prices. Nowadays, a top quality porcelain product can even be highly competitive with a glazed ceramic tile.

A comparison of the two products shows the advantages of the materials, such as the fact that they are thin, which makes them a lot lighter, plus excellent resistance to scratching, frost, stains and chemical agents.

18 WHAT IS PORCELAIN STONEWARE?

- Porcelain stoneware is a special blend of non-metal, inorganic raw materials that are processed using specific, state-of-the-art technology to manufacture a completely vitrified product with high-tech performance, guaranteeing unlimited resistance to wear and tear over time.

Porcelain stoneware is especially interesting because it is slip resistant, particularly important for applications requiring a high degree of safety. Porcelain stoneware is also particularly compact, a characteristic obtained through firing at high temperatures, making the product resistant to chipping and cracking. High-tech stone and marble combine the supreme technical features of porcelain stoneware with the enduring beauty of quarried stone.