

Care and maintenance

Laminam slabs are easy to clean. It is recommended, however, to take the following steps in order to obtain optimal results.

It is important to preventively test the cleaning product that will be used on a small piece of the slabs to make sure that it will not damage the surface.

Marks or stains found on the surfaces are usually the result of an incorrect and not thorough cleaning.

For the Filo collection's products (Argento and Ghisa) it is necessary to use neutral detergent.

Under no circumstances acid-based products, in the first case, or alkaline products, in the second case, can be used. Please note that, in general, the removal of stains is much easier if cleaning is performed immediately.

Residues of epoxy adhesives must be removed from the surface of the slab before they dry. Removal and cleaning can be carried out with a sponge and abundant clean water.

Afterwards, perform a thorough cleaning using alkaline cleaners being careful to follow the instructions on the labels of the products you are using.

Care and Maintenance for Laminam 3+ and Laminam 5

The information of this paragraph are not valid for Filo (Argento and Ghisa)

For these texture please see point n. 12.3 and 12.4

After having completed the material application and the joint filling the ceramic surface must be cleaned to remove all possible contaminating agents (cement or grout residues, etc.). It is basic to carry out this operation correctly as, if badly or non-carefully carried out, it could result in halos jeopardizing the daily cleaning.

For correct cleaning, always follow the specific indications by the manufacturers of grouts and adhesives used in the application as for waiting times, products to be used and use procedures.

It is not recommended to clean after the application if the slab temperature is high, preferring the fresher hours in the day.

Residue of concrete, slurry, lime and cementitious grouts can be removed using buffered acid-based detergents, according to the times and methods indicated by their relevant manufacturers.

Such products must be used according to the methods specified on the label or in the relevant technical data sheets. However, remember that this operation can be more or less aggressive depending on the type of detergent used and also depending on:

- temperature (high temperatures can make a detergent more aggressive);
- contact time (as the contact time increases so does the risk of etching).

After cleaning with acid-based detergents thorough rinsing with clean water is required. It is however vital to remove residues of cementitious grouts with additives (resins, latexes,...) immediately.

Avoid using abrasive substances or means;

Products for cleaning cementitious grout residues from surfaces:

- MAPEI / Keranet
- FILA / Deterdek
- LITOKOL / Litoclean Plus
- ADESITAL / Adesit Clean
- KERAKOLL / Delta plus Eco
- TECHNOKOLLA / Det – Acido
- FABERCHIMICA / Cement Remover

/ Laminam 3+ and Laminam 5

Epoxy products

To clean epoxy residues on the Filo collection's products (Argento and Ghisa) please see section 12.3. and 12.4 It is necessary to eliminate epoxy grout residue immediately after installation, using a mildly abrasive sponge and plenty of water.

It is essential to always use clean products and water and replace them frequently. Then, clean more thoroughly with detergents recommended by the grout manufacturers, taking care to eliminate all ring marks.

To make cleaning more efficient you are advised to dry the floor with absorbent paper towels to collect resin residues that, once the water has evaporated, would be deposited once more, causing dull ring marks.

Products for cleaning epoxy grout residues from surfaces:

- MAPEI / Kerapoxy Cleaner
- FILA / FilaCR10
- LITOKOL / Litonet- Litonet Gel New Formula
- ADESITAL / Kerapoxy Cleaner
- LATICRETE / Epoxy Remover
- KERAKOLL/ Fuga-Soap Eco (pulizia di Fugalite Eco)
- TECHNOKOLLA / Epoxy Det
- FABERCHIMICA / Alkaline Cleaner – Wax Remover

/ Laminam 3+ and Laminam 5

Cleaning Filo series

The cleaning post installation of Filo collection's products (Argento and Ghisa) must be carried out quickly after completing the grouting using clean water and sponges until all residues are removed. Acid-based products cannot be used to clean slabs of this series, so the removal of dried residual adhesives and grouts (both epoxy and cement based) could not always be possible

The ordinary cleaning of above surfaces should be made with water and neutral detergents.

Alcohol for domestic use and possibly basic agents (such as bleach) may be used for more

stubborn grime, however it is necessary to rinse with plenty of water after using them. Perform the cleaning using a soft sponge dampened with water and detergent, followed by rinsing and drying of the treated surface with a dry cloth to remove any residual dirt or detergent. The cleaning recommendations and procedures below are provided for informational purposes only. Always perform a preliminary test on a slab that was not installed or on a portion of the surface located in a hidden area to verify that the methods and products used do not cause damage to the surfaces.

Filo

textures /	operation /	detergents producers / cleaning product /
Argento and Ghisa	cleaning post installation (cement grout)	>Fila/Fila Deterek (1:20 dilution) >Faber Chimica/Cement Remover (20% dilution for maximum 10 minutes)
	cleaning post installation (epoxy grout)	>Fila/ Fila Cr10 >Faber Chimica/Wax Remover (20% dilution for maximum 10 minutes)
	intense cleaning	>Fila/ Fila Cleaner or Ps87 (dilution 1:30) > Faber Chimica/Tile Cleaner (10% dilution for maximum 10 minutes)
	ordinary cleaning	> water and neutral soap >Fila/Fila Cleaner (dilution 1:200) >Faber Chimica/Floor Cleaner
	limestone stains	>Fila/FilaBrio

A preliminary test on a hidden part of the material is recommended.

/ Laminam 3+ and Laminam 5

Intense cleaning

/ Used to remove particularly tough stains or residues. Generally, it is advisable to carry out an initial cleaning with hot water and mild detergent. If this operation is not sufficient, depending on the nature of the staining agent, it is possible to use increasingly strong cleaning techniques, using a few special products such as:

- / Non-abrasive detergents with neutral pH
- / Abrasive detergents (excluding Filo- Argento and Ghisa)
- / Acid or basic detergents (excluding Filo- Argento and Ghisa)
- / Thinner-based detergents (excluding Filo- Argento and Ghisa)

The following table summarizes a few cleaning instructions for different stain types taken from tests made on the product Collection Neve.

staining agent /	type /	cleaning method /
Green staining agent, vaseline grease, olive oil, coffee, tea, tomato, balsamic vinegar, coke, red wine, shoe polish, iodine, methylene blue	cleaning with hot running water	Cleaning with hot running water
Greasy and oily substances	mild or degreasing detergent	Fila PS 87 Faber chimica - Coloured stain remover any other mild or degreasing detergent
Rust / metal marks	acid-based detergent	Fila Deterdek diluted muriatic acid available on the market
Chalky residues	acid-based detergent	Descaling Detergent cillit bang super cleaner for limestone and stubborn dirt Faber chimica - tile cleaner
Ink/ Felt-tip pen	thinner-based detergents	Fila PS/87 - Fila SR/95 Nitro Thinner, White Spirit, acetone
Tire	strong graffiti cleaner	Fila Ps/87
Graffiti	strong graffiti cleaner	Fila No Paint Star

NOTE: Effective on all our products except items in the "FILO" metallic series an Lucidati. When using acid detergents we recommend that you always carry out a test on an uninstalled tile or on a hidden portion of the surface. Rinse the surface thoroughly with water after application then dry the surface in order to remove all detergent and dirt residues.

/ Laminam 3+ and Laminam 5

Ordinary cleaning

To clean the Laminam slabs daily it is possible to use mild detergents. They must be diluted in water according to the indications specified on their packages. Matt coats may form on the slab surface in time and with the use of standard detergents available on the market. A few beverages, such as coke, water and wine, if spilled on the floor, can eliminate such coats and restore the original look.

Dull halos of this type are thus the only clean parts of the floor. To avoid the formation of these coats use only mild detergents for the routine cleaning; for removing such deposits, it is instead necessary to dewax the whole floor.

Below you find a certificate that summarizes a test made on Laminam slabs from the CATAS (authorized center of research).

Surface resistance to cold liquids (cleaning products PTP 53:1995)

Products	Contact time: 16 h
Cif Gel con candeggina	5*
Cif Spray Attivo con candeggina	5
Cillit Bang Calcare e Sporco	5*
Cif Power Cream Cucina	5
Ajax Classico Universale	5
Glassex con ammoniaca	5
Vetril Multiuso Igienizzante	5
Candeggina Ace	5
Viakal	5*
Alcool denaturato	5
Ammoniaca (sol.6/7%)	5
Mastro Lindo	5
Ajax pavimenti	5
Rio Casamia pavimenti	5
Lysoform Casa	5



RAPPORTO DI PROVA
138119 / 1
 Ricevimento campione: 29-02-12
 Esecuzione prova: 13-03-12
 Emissione rapporto: 16-03-12

Evaluation
 5 > no defects
 4 > slight change in colour or gloss
 3 > moderate change
 2 > strong mark
 1 > structure changed

NOTE:
 The test method is in accordance with EN12720:2009

* Excluded
 Filo (Argento and Ghisa)

Care and Maintenance for Laminam 12+

Laminam 12+ slabs are cleaned extremely easily. However, for best results follow the instructions given below.

For all the following cleaning operations, it is advisable to carry out tests in advance on a small portion of material using the foreseen cleaning product to make sure that this does not damage the surfaces.

Remember that, generally, it is easier to remove stains when done rapidly. Smears and stains on the surfaces are usually the result of incorrect, in-depth cleaning.

Under no circumstances use hydrofluoric acid or products containing hydrofluoric acid.

Cleaning after machining / installation

The instructions given in this paragraph are valid for all Laminam 12+ finishes.

It is fundamental to ensure correct cleaning after processing and/or installation as if this is done badly or incorrectly it may cause smears that would compromise everyday cleaning.

After each cutting operation on water-jet machines, disc cutters or numeric control machines, clean the slab surface with plenty of water to remove any processing residues, then dry with a squeegee or glass wiper. Do not store

any machine-processed material when wet. To eliminate any residues of dust after processing, we recommend washing the product using an acid-based detergent. After processing and gluing the material, clean the ceramic surface to remove any contaminants (patinas, glue residues...) that may be present.

Once catalysed, two-component products (adhesives, plasters etc.) and silicon-based products are hard to remove. During the gluing stage, it is thus important to prevent them from being spread over the surface of the slab, as the removal of residues and hardened smears is not always possible.

It is necessary to clean the slabs and remove any such residues before the glue has completely hardened. Clean the affected areas using a soft cloth dampened with acetone or solvent, as indicated by the glue manufacturer.

If necessary, we recommend protecting the surface of the slab before applying glue, with a plastic film or rubberised adhesive tape.

Moreover, clean the slab surface after installation with water and neutral detergent using a sponge or damp cloth. Do not use abrasive substances or equipment.

/ Laminam 12+

Cleaning and maintenance Laminam 12+

Routine

Generally, for everyday cleaning of Laminam 12+ use hot water and neutral detergents if required, with a soft cloth. Follow the instructions given on the detergent package.

Rinse with plenty of water and dry the surface with a soft cloth.

To prevent matt stains, do not use products containing wax.

Stains not promptly removed may leave more or less visible traces on the surface, in accordance with the tolerance of the specific type of finishing.

Intense

To remove stains or particularly resistant residues from the Laminam 12+ surface, clean first with hot water and neutral detergent.

If this is not sufficient, use increasingly incisive cleaning techniques and specific products, depending on the stain, including:

- Non-abrasive neutral pH detergents
- Slightly abrasive detergents
- Acid or alkali detergents
- Solvent-based detergents

It is fundamental to comply with the information given in the technical data sheets and product labels.

/ Laminam 12+

Staining agent	Type of detergent	Product
Olive oil Paraffin oil Coffee Tea Tomato Balsamic Vinegar Lemon Coca cola Red wine Beer Milk Butter Fruit Juice Jam Cosmetics	Clean with hot soapy water then rinse off with a clean cloth Spray & Wipe	- Ajax Baking Soda
Grease and oily substances Wax Rust Metallic marks	Neutral detergent, degreasing agent	FILA PS 87 FILA Deterdek Commercial diluted hydrochloric acid
Limescale residues	Acid-based detergent	Descaling Detergent Descaler limescale and stubborn dirt cleaner Faberchimica Tile cleaner
Ink Marker pen Nail varnish	Acid-based detergent	Acetone White spirit Niter diluent FILA PS87 FILA SR95