

1. GENERAL MEASURES AND PREVENTION

Follow the instructions in this manual for cleaning, treating and refurbishing resilient flooring. You will be rewarded with a beautiful, functional, safe and hygienically clean floor at all times.

- Cleaning zones** - Install sufficiently sized and effective cleaning zones (minimum length for 3-4 steps) in entry areas that must be cleaned or replaced periodically. This measure will prevent much of the dirt from entering the building and reduce the risk of mechanical damage to the floor.
- Furniture glides and castors** chairs with defective or missing glides as well as the use of improper or incorrect gliders or **wheels causing mechanical damage floor surface and must therefore be avoided.**

We strongly recommend that all movable furniture is fitted with suitable glides, suitable castors (Type W according to DIN EN 12528 and 12529) and protective pads under the castor chairs.

- General cleaning guidelines** - Proper daily cleaning is not only economical, but also crucial for the **visual appearance and retention properties of the floor covering.** Inappropriate cleaning agents can cause irreversible damage or discolouration of the floor surface. Do not use cleaning agents that form a residual microfilm or have an abrasive effect.

2. QUICK OVERVIEW OF PRODUCTS AND WORK STEPS

Overview of products and work steps

Working step	Product	Moderate load (household)	Medium load (offices)	Heavy load (commerce, warehouses)
Normal cleaning*	Forteclean Daily Cleaner 1:200	1-2x / week	3-5x / week	Daily
Deep cleaning	Forteclean Intense Cleaner 1:5 - 1:10	As required	1x / year	2x / year
Painting after laying, or surface renovation	Dr. Schutz - 2-component polyurethane varnishes	Consult Fortemix, s.r.o. technical consultancy for the appropriate method of permanent surface treatment. Not every method is suitable for every type of space or object.		

* For flooring with ESD electrical properties use Dr. Schutz ESD Floor Cleaner diluted 1:400.

3. THE 10 MOST IMPORTANT PRINCIPLES

- Never use abrasive discs** to avoid the risk of surface damage (abrasive products, solvents, etc.)
- Never use rubber caps** (for chair legs or other furniture). Use PVC or polyethylene protectors instead.
- Regular cleaning** is more convenient and effective than occasional deep cleaning.
- Use recommended cleaning products.
- Always **follow the cleaning product manufacturer's instructions** and health and safety guidelines.
- For rotary washers, choose **soft brushes** (bristles <0.25 mm). Machines with equivalent brushes can be used as an alternative. The type of brushes with hard bristles is not recommended.
- Solvents damage flexible floor coverings.**
- A significant amount of any dirt brought in can be minimized by **using cleaning mats** in front of the entrance and **cleaning zones** in the entrance areas of the building.
- For normal cleaning, we recommend **not to use any aggressive products** (e.g. containing abrasives, alkalis or a high content of organic solvents and degreasing agents).
- If you have a **rotary cleaner-dryer, use it.** Use clean water and pH - neutral agent in weak solution. - To ensure better cleanability, appearance and durability of the substrate, we recommend the products listed below.

4. CLEANING AND MAINTENANCE

4.1. Cleaning after completion of laying

The newly laid floor must be thoroughly cleaned before use to remove all residual manufacturing, ageing and installation contaminants.

For this cleaning, use the **recommended cleaner** diluted with water in the appropriate ratio. In case of slight soiling, this concentration can be increased according to the degree of soiling. Apply the cleaning solution evenly on the floor and **after 10 minutes of application** scrub the entire area with a mop or a single disc rotary machine with a suitable pad or brush. Suck up the dissolved dirt with a water-powered vacuum cleaner and **thoroughly neutralise the** entire area with clean water until all residues of the cleaning solution have been completely removed.

Recommended cleaner:

Forteclean Intense Cleaner diluted 1:5 – 1:10 with water.

Recommended pad or brush:

Red pad standard, Grit brush red.



4.2. Normal daily cleaning (manual or machine wet cleaning)

To remove adhering dirt, use the recommended cleaner diluted with water in a suitable ratio and mop the floor by hand with a suitable mop (e.g. mops with a microfibre cover), use a two-bucket mopping system or clean with a mopping cloth with a suitable pad or brush.

Recommended cleaner:

Forteclean Daily Cleaner (for all types of floors), dilution 1:200 with water.

ESD Floor Cleaner (for floors with electrical properties), dilution 1:200 - 1:400 with water.

Recommended pad or brush:

Red pad standard, Grit brush red.



4.3. Machine spray cleaning - intermediate cleaning

If it is not possible to remove the adhering dirt by conventional manual or machine cleaning, it is recommended to carry out an intermediate intensive machine cleaning with **the recommended cleaner** diluted with water in a suitable ratio according to the degree of contamination of the floor surface. Cleaning should be carried out with a scrubbing machine or single disc machine with red pad or Grit brush using the red spray method (if the subfloor is laid without bonding). This method is also suitable for regular turn-over cleaning in buildings with heavy dirt intrusion.

Recommended cleaner:

Forteclean Daily Cleaner diluted 1:50 - 1:100 with water, spray on and leave on briefly.

Recommended pad or brush:

Red pad standard, Grit brush red.



4.4. Intensive deep cleaning

Intensive cleaning of the resilient flooring is necessary if it is not possible to remove stubborn dirt and residues of treatment products by the methods described in the paragraph Normal daily cleaning. Use the **recommended cleaner** in an appropriate concentration with water. Apply the cleaning solution evenly to the floor and, after the recommended time of exposure, scrub the entire area with a single disc rotary machine with a suitable pad or brush. Vacuum up the dissolved

dirt with a water vacuum cleaner and thoroughly neutralise the entire area with clean (preferably warm) water until all residues of the cleaning solution have been completely removed.

Recommended cleaner:

Forteclean Intense Cleaner, dilution 1:5 - 1:10, leave on for approx. 10-15 minutes.

Recommended pad:

Red pad standard or Grit brush red.



4.5. Removing stains, heel marks and scratches

Resistant stains and rubber heel marks that cannot be cleaned with conventional cleaning methods can be removed **with the recommended product** in conjunction with a microfiber cloth or soft pad. Finally, wash the cleaned area with clean water. Remove stains immediately if possible, as some types of pigment may migrate into the floor surface after a period of time, making removal difficult or impossible.

Recommended cleaner:

Forteclean Daily Cleaner, undiluted.

Elatex, as instructed (beware, it removes protective polymer coatings).



5. REHABILITATION, RENOVATION OR DISCOLOURATION OF THE SURFACE

The floor surface wears down during use, especially in the most heavily loaded areas. This is reflected, among other things, by the greater demands of routine daily cleaning and affects the visual appearance of the surface. In order to facilitate the daily cleaning routine, to optimally protect the floor surface and to ensure a perfect visual appearance, it is necessary to carry out early rehabilitation or renovation of the surface.

5.1. Surface renovation

If your floor looks worn, has lost its original colour and has deep scratches, we recommend contacting a Fortemix, s.r.o. representative as soon as possible. An assessment of the condition of the floor will be made and a proposal will be presented to restore the required technical and aesthetic parameters of the floor. All floor refinishing systems have proven themselves in many facilities.

NOTE: Use the services of Fortemix, s.r.o. Only a trained and certified contractor must carry out the assessment and implementation!

5.2. Basic cleaning and surface preparation

Prior to the application of 2-component polyurethane varnishes, a thorough **intensive deep**

cleaning and surface preparation must be carried out as described in the Dr. Schutz Technical Information - Surface Preparation before Painting.

5.3 Surface painting options

As a permanent coating, use the long-term 2-component polyurethane varnishes **PU Anticolor** (extramat, matt, semi-gloss - for heavy chemical load, resistance to plasticizer migration, resistance to colour chemicals and hair dyes), **PU Siegel** (ultram, extramat, matt, gloss - for heavy mechanical load) or **ESD Medicoat and ESD Topcoat** (special conductive varnishes for renovation of ESD floors). **Surface colour changes can be made with PU Color varnishes (up to 5000 colours according to RAL K5, NCS, Sikkens and Pantone).**

For more information, please contact Fortemix, s.r.o. technical consultancy. The choice of paint depends on the requirements for the durability of the paint and its mechanical and chemical resistance. Permanent On Top PU varnishes with a long service life can withstand very strong mechanical and chemical loads and are resistant to a wide range of disinfectants. The application must be carried out by a professionally trained contractor.

6. IMPORTANT NOTICES

1. There is a risk of liquid leaking under the flooring in the joint area when PVC tiles are laid loose. All cleaning work must therefore be carried out in wet conditions if possible. Ensure that there are no puddles or longer standing water on the surface. The risk of water ingress can be minimised by gently spraying the liquid onto the surface or by using powerful washing machines with good quality suction.
2. If the surface is to be painted, the moisture content under the flooring must be checked very carefully. If necessary, lift the tiles in several places and check the substrate. Since basic cleaning and preparation of the floor surface cannot be done without an increased amount of liquid on the surface, this danger must be pointed out or taken into account when carrying out the work.
3. If the slip-resistant properties of the floor covering (slip-resistance R10 and higher) must be maintained, the application of any polymeric treatment coating or conventional permanent

polyurethane varnish must be avoided. Only Dr. Schutz 2K-PU lacquers with the appropriate R10 Antislip Add or R11 Antislip Add may be applied.

4. Staining products (e.g. hair dyes, wound disinfectants) or migration of plasticizers (e.g. from tires, carpet pads) can cause irreversible discoloration of the tile surface. Avoid contact with these products or paint the tiles preventively with Dr. Schutz PU Anticolor.
5. In general, for all types of flooring and coatings, the recommendation is to protect areas with heavy point loads (e.g. wheelchairs) with suitable polycarbonate pads.
6. Using cleaning agents other than those listed above may cause damage to the tiles. The warranty provided by Fortemix, s.r.o. does not cover damage to tiles caused by the use of cleaning or preservative products other than those recommended in this document.

7. USE OF DISINFECTANTS AND AREA DISINFECTION

In rooms where disinfectants or surface disinfection are used, it is important to follow the instructions for use given by the manufacturer of the product. In particular, the recommended disinfectant concentration, instructions and application procedures.

Due to the large number of distributors and products in the field of disinfectants, it is not possible for Fortemix, s.r.o. to test all products in terms of their effects on the surface of PVC floor coverings. From a general point of view, it can be recommended to use for disinfection only those products for which the manufacturer specifies the appropriate application as disinfection of PVC flooring surfaces

The use of unsuitable disinfectants may adversely affect the mechanical and physical properties (discolouration, softening or sticking of the surface) of the flooring.

Since most disinfectants form a protective film on the surface of the floor covering, contamination can cause the dirt to "preserve" between the layers of disinfectant. Therefore, we recommend a basic cleaning at least once every 3 to 6 months to completely remove these old disinfectant layers, stubborn dirt and other deposits.

8. RESISTANCE TO CHEMICALS

Vinyl flooring has above-average resistance to weak acids, dilute acids, alkalis, soaps and solvents. **Petroleum and strong acids are not harmful if the relevant stain is rinsed off immediately. However, ketones, chlorinated solvents, acetone and similar solvents must not come into contact with the flooring.** If they do, the damage can be minimised by immediate rinsing, and the residues of these reactants must have time to evaporate before the flooring surface is allowed to be loaded again.

Vinyl flooring is suitable for use in most areas where chemicals are used and where there is a risk of accidental spillage.

Beware, some chemicals contain very strong dyes that will stain the flooring even after a short contact. Where these types of chemicals are used, we recommend using dark coloured vinyl to minimise the risk of staining.

Rubber products (mostly dark and coloured rubber - rubber wheels, device protectors, shoe soles, etc.) in contact with the flooring cause an irremovable colour change of the tread, which is manifested by yellowing, browning or blackening of the flooring surface at the point of contact with the rubber product. Burning and smouldering objects leave irremovable stains on the surface.

TYPE OF CHEMICALS	EFFECT	MEASURES
Aldehydes Esters Halogen hydrocarbons Ketones	The flooring is attacked after a few minutes.	Wipe immediately.
Alcohols Ethers Glocols Hydrocarbons (aromatic and aliphatic) Kerosene Edible oil	After a few days, leakage of plasticizers occurs and this is accompanied by shrinkage and embrittlement of the material.	Wipe immediately.
Weak acids and alkalis	No effect	
Strong alkalis	It will damage the gloss and may cause discoloration of some shades.	Dilute and remove.
Strong acids	Long contact can cause discoloration.	Dilute and remove immediately.
Dyes (indicating)	Contact may cause discoloration.	Dilute and remove immediately.

▲ NOTE: Resistance to chemicals is tested by contact with the chemical for 24 hours at room temperature of 21 °C followed by a cold-water rinse. Some stains can be removed by wiping with a nylon cube.

9. OTHER ARRANGEMENTS

These care and cleaning instructions contain general information to maintain the value and quality of the flooring, which has been agreed with the manufacturer. Also observe all the manufacturer's instructions given in its general information for transport, laying and maintenance. By passing this charge on to the user, the flooring company fulfils its obligation to the contracting

authority under the regulations in the standard ČSN 744505 Floors and DIN 18365. If you have any questions about the correct treatment and cleaning of other types of flooring, please contact our technical advice or visit our website www.fortelock.com.



Fig. 1
We recommend using cleaning machines with rotary pads or brushes. If you are interested in a professional cleaning or paving service, please contact us at info@fortelock.com



Fig. 2
The two-bucket method: After applying the cleaning agent, we first clean the mop in the first bucket before dipping it into the second bucket of cleaning concentrate. This prevents dirt from spreading over the area to be cleaned.