Protecting floors and buildings.

Cleaning and Maintenance Guideline

This document provides general cleaning and maintenance guidance only. Cleaning methods should be selected to suit the type of contamination, the area of use, and the hygiene standard required. Where there is uncertainty about chemical exposure or a particular cleaning product, testing is recommended before broader use.

1. General Information

We hope you find your newly installed Silikal floor to be in pristine condition. The unique chemical process can leave a light film of paraffin wax on the surface; this is normal and will usually be removed after the first few washes.

The slip resistance and ongoing performance of the floor depend on maintaining reasonable housekeeping. Effective cleaning helps protect the floor from external agents, prolongs service life, and helps maintain its appearance.

Cleaning frequency and method depend on the type of activity being carried out in the building and the type and level of soiling on the floor.

Routine cleaning by environment

Area / use	Recommended routine cleaning
Factory or warehouse where no food items are stored	As a minimum, daily sweeping, vacuuming, or a combination of both is recommended for loose dust and debris.
Food, pharmaceutical, or hygiene-sensitive areas	Sweep, scrub, and dry using a combined scrubber dryer or a separate scrubbing machine and wet vacuum.
Kitchen environments	Sweep, scrub, and dry regularly to prevent build-up of grease, slip hazards, and bacterial growth.
Engineering or workshop areas	Sweep, scrub, and dry regularly to prevent the build-up of dirt and oil deposits that may create a slip hazard.

2. Cleaning Equipment and Methods

The most suitable cleaning method will depend on the type and level of soiling, the size of the area, the surface profile, and the hygiene standard required. In general, cleaning may be carried out manually, by scrubber dryer, or by pressure washing where appropriate for the site conditions.

Manual Cleaning
For smaller areas or localised cleaning, manual cleaning may be carried out as follows:

1. Sweep up loose dirt and debris and place caution signs if required.
2. Apply floor cleaner diluted with water in accordance with the cleaning chemical manufacturer's instructions.
3. Scrub using a deck brush or similar suitable cleaning tool.
4. Rinse with clean water, or as recommended by the cleaning chemical manufacturer.
5. Remove excess water and residue by squeegee or wet vacuum, then allow the floor to dry.
6. If the cleaner leaves a cloudy residue, film, or light white deposit, this may be removed using a mild citric acid rinse. A 30:1 water to citric acid solution may help remove residue left by an all-purpose or alkaline cleaner. After this, rinse again with clean water and remove the residue using a squeegee or wet vacuum.

Machine Cleaning
Where available, a mechanical scrubber dryer with vacuum pick-up is preferred for routine cleaning, as it tends to reduce surface residue compared with manual methods. On textured and slip-resistant surfaces, cleaning machines fitted with cylindrical brushes are generally more effective than rotary disc machines, as they clean more thoroughly within the surface profile. For localised stubborn marks, a light-duty scrubbing pad may assist with removal. Use the least abrasive pad available, test first in an inconspicuous area, then rinse and vacuum pick up.

Pressure Washing
Where appropriate for the site conditions, pressure washing may also be used as part of the cleaning process, particularly for larger areas or where heavier contamination is present. Pressure washing should be carried out in a manner that does not leave dirty water, loosened contamination, or cleaning chemical residue to dry on the floor surface. After pressure washing, the area should be rinsed if required, and excess water should be directed to drain, removed by squeegee, or collected by wet vacuum where necessary. The floor should be allowed to dry before being returned to service.

3. Cleaning Demonstration Video

For a practical demonstration of the recommended cleaning process for Silikal floors, please use the link below or scan the QR code.

Watch the Silikal cleaning demonstration video

https://drive.google.com/file/d/1opcdoyJlel1hBxS3IkIMGjA_PYBRa6BV/view?usp=drive_link

The video is provided as a general visual guide only and should be read together with this guideline.

Scan to watch

4. Cleaning Chemicals and Key Precautions

Silikal generally recommends alkaline-based cleaning agents for routine cleaning of Silikal methacrylic resin floors, including sodium- or potassium-hydroxide based cleaners, when diluted and used in accordance with the cleaning chemical manufacturer's instructions. Surfactants and hypochlorite additives do not normally have a negative effect on Silikal methacrylic resin coatings when diluted and used in accordance with the cleaning chemical manufacturer's instructions. Full-strength bleach must not be used or allowed to remain in contact with the floor.

Specific chemical resistance should be checked against the Chemical Resistance Reference in the appendix. However, commercial cleaning products are often blended formulations and should still be assessed based on the full product formulation, concentration, dilution rate, contact time, temperature, cleaning method, rinsing procedure, and whether residue remains on the floor.

Lime spots can be removed with hydrochloric acid or acetic acid, up to a maximum concentration of 10%, followed by thorough rinsing with clean water.

High cleaning-agent concentrations, for example those based on ammonium hydroxide, ammonium chloride, or nitric acid, may cause clouding or discolouration of the floor without necessarily attacking the material. Cleaning agents should therefore be diluted and used strictly in accordance with the cleaning chemical manufacturer's instructions. After cleaning, the floor should be rinsed thoroughly with clean water and any residue removed by squeegee or wet vacuum. Residue should not be allowed to dry on the floor surface, particularly on textured or slip-resistant finishes.

Different cleaning chemicals should not be mixed unless the relevant cleaning chemical manufacturers specifically confirm that the products are compatible and suitable to be used together. Where more than one cleaning chemical is used as part of the cleaning process, the floor should be thoroughly rinsed and residue removed between products, unless the chemical manufacturers specifically confirm that this is not required. Applying one product over the residue of another may create chemical carry-over and is not recommended.

Solvent-based cleaners must be used with extreme caution and only as spot cleaners where necessary. Do not allow solvent-based products to pond or pool on the floor. Methacrylic systems can react sensitively to alcohol-based cleaners. Caution must also be exercised with all organic solvents. Aromatic and halogenated hydrocarbons must not be used. It is recommended to first test any cleaner in a small inconspicuous area before broader use.

Category	Quick-Reference Summary
Recommended cleaning chemicals	Alkaline-based floor cleaners diluted and used in accordance with the cleaner manufacturer's instructions.
Important application note	Cleaning chemicals should be diluted as instructed. After cleaning, rinse thoroughly with clean water and remove residue by squeegee or wet vacuum.
Residue warning	If cleaning residue is not removed completely, deposits, clouding, discolouration, or gloss change may occur. Residue should not be allowed to dry on the floor surface, particularly on textured or slip-resistant finishes.
Use with caution	Commercial cleaning products are often blended formulations. Suitability should be assessed based on the full product formulation, dilution rate, contact time, temperature, cleaning method, rinsing procedure, and whether residue remains on the floor. Solvent-based cleaners must only be used with extreme caution as spot cleaners where necessary. Limit exposure time, do not allow ponding, and rinse thoroughly after use.
Actions to avoid	Do not mix different cleaning chemicals unless the relevant cleaning chemical manufacturers specifically confirm compatibility and suitability. Where more than one cleaning product is used, rinse thoroughly and remove residue between products unless the manufacturers confirm this is not required. Do not allow full-strength bleach or solvent-based products to remain in contact with the floor. Aromatic and halogenated hydrocarbons must not be used.

5. General Maintenance and Important Limitations

Chemical spillages should be dealt with immediately to reduce the risk of staining or damage. Do not allow spilled materials to remain on the floor for extended periods.

Any cracks caused by structural movement should be noted and repaired as soon as reasonably practicable to avoid liquid penetration into the sub-base.

Any damaged areas that expose the sub-base, or areas damaged by relocation of equipment, should be repaired as soon as reasonably practicable.

Tyre abrasion caused by forklift trucks and similar wheeled traffic is normally unavoidable to some extent. The amount of tyre marking can be influenced by traffic conditions, driving behaviour, tyre type, and the surface texture of the floor. In many cases, minor tyre marks can be removed using the routine floor cleaner. More stubborn tyre marks may require localised treatment using a suitable stain remover or solvent-based spot cleaner. As these products may contain solvents, they should be used with caution, exposure time should be limited, and the area should be rinsed thoroughly with clean water afterward. Where practical, light-coloured tyres, such as white tyres, may help reduce black tyre marks.

Continuous or prolonged contact with solids or liquids above 80 °C is not recommended. Short-term contact, such as for cleaning purposes, is acceptable.

The owner or facility manager should maintain records of cleaning, inspection, and any remedial works carried out on the installed Silikal system.

Important note: Aggressiveness of chemicals can increase with temperature, and concentration can change through evaporation or moisture absorption. Some chemicals may cause discolouration or changes in gloss without affecting the integrity of the floor. Cleaning agents should always be tested for suitability.

For impact damage or maintenance enquiries, please contact your flooring installer or Silikal’s office on 0492 278 038.

Appendix - Chemical Resistance Reference

Silikal flooring systems have been tested against numerous chemicals under standard laboratory conditions. The following tables are provided as a general reference to demonstrate the broad chemical resistance of the system and to assist with general assessment of likely exposure conditions.

These tables are a guide only and are based on standard conditions at approximately +20 °C. Actual performance may vary depending on the specific product formulation, concentration, temperature, exposure time, and site conditions. Some chemicals may cause discolouration or gloss change without damaging the floor surface.

Test medium	SILIKAL® R 62, R 82 RF 6200 pigmented/Base RF 8200 pigmented/Base	SILIKAL® R 71, R 72, R 73, RF 7000 pigmented/Base	SILIKAL® RE 77
Alkalis:			
Ammonium hydroxide 10 %	+	+	+
Ammonium hydroxide 25 %	+	+	+
Ammonium hydroxide, alcoholic	o	o	o
Potassium hydroxide 10 %	+	+	+
Potassium hydroxide 50 %	+	+	+
Calcium hydroxide	+	+	+
Sodium hydroxide 10 %	+	+	+
Sodium hydroxide 50 %	+	+	+
Acids:			
Formic acid 10 %	o	o	-
Formic acid 30 %	-	o	-
Formic acid 42.5 %	-	-	-
Boric acid 3 %	+	+	+
Chromic acid 20 %	+	+	-
Chromic acid 40 %	o	+	-
Acetic acid 10 %	+	+	-
Acetic acid 25 %	o	o	-
Acetic acid 30 %	o	o	-
Acetic acid 80 %	-	-	-
Fatty acid (tall oil fatty acid)	o	o	-
Lactic acid 30 %	+	+	o
Oxalic acid 10 %	+	+	o
Phosphoric acid 40 %	+	+	+
Phosphoric acid conc. (85 %)	o	o	o
Nitric acid 10 %	o	o	o
Nitric acid 30 %	o	-	o
Nitric acid, conc. (65 %)	-	-	-
Hydrochloric acid 10 %	+	+	+
Hydrochloric acid, conc. (36 %)	+	+	+
Sulphuric acid 30 %	+	+	+
Sulphuric acid 50 %	+	+	o
Sulphuric acid 80 %	-	-	o
Citric acid 30 %	+	+	+
Citric acid 50 %	+	+	o

Test medium	SILIKAL® R 62, R 82 RF 6200 pigmented/Base RF 8200 pigmented/Base	SILIKAL® R 71, R 72, R 73, RF 7000 pigmented/Base	SILIKAL® RE 77
Solvents:			
Petrol, 2 star	-	+	+
Petrol, 4 star	-	-	+
Benzene	-	-	+
Biodiesel	-	-	-
Butanol	-	-	+
Butyl ether	-	-	o
Chloroform	-	-	-
Cyclohexane	+	+	+
Dibutyl phthalate	o	o	+
Dicyclophthalate	o	o	+
Diesel oil/heating oil	+	+	+
Ethyl acetate	-	-	o
Ethyl alcohol 10 %	o	+	+
Ethyl alcohol 96 %	-	-	o
Glycerine	+	+	+
Heptane	+	+	+
Hexane	+	+	+
Isopropyl alcohol	-	o	+
Kerosine	+	+	+
White spirit	o	+	+
Methanol	-	-	o
Methylene chloride	-	-	-
Monochlorobenzene	o	o	+
n-Propyl acetate	-	-	o
Perchloroethylene	o	o	-
Petroleum	o	+	+
Phenol	o	o	o
Styrene	o	o	o
Turpentine	+	+	+
Toluene	-	-	o
Trichlorethylene	-	-	-
Xylene	-	-	o

Appendix - Chemical Resistance Reference (continued)

Test medium	SILIKAL® R 62, R 82 RF 6200 pigmented/Base RF 8200 pigmented/Base	SILIKAL® R 71, R 72, R 73, RF 7000 pigmented/Base	SILIKAL® RE 77
Water and aqueous solutions:			
Waste water (sewage)	+	+	+
Chlorine water	+	+	+
Formaldehyde 37 %	+	+	o
Anti-freeze (glycol-based)	o	+	+
Tap water	+	+	+
Sea water	+	+	+
Sodium chloride 5 %	+	+	+
Sodium chloride saturated	+	+	+
Sodium hypochlorite 15 %	+	+	+
Sodium carbonate (soda)	+	+	+
Soap solution	+	+	+
Water, deionised	+	+	+
Water +80 °C	o	o	o
Hydrogen peroxide 30 %	o	o	o
Hydrogen peroxide 80 %	o	o	-
Beverages:			
Beer	+	+	+
Brandy 40 vol. %	o	+	+
Vegetable juice	+	+	+
Lemonade	+	+	+
Milk	+	+	+
Tomato juice / grape juice	+	+	+
Red wine	+	+	+

Test medium	SILIKAL® R 62, R 82 RF 6200 pigmented/Base RF 8200 pigmented/Base	SILIKAL® R 71, R 72, R 73, RF 7000 pigmented/Base	SILIKAL® RE 77
Oils and greases:			
Blood	+	+	+
Drilling oils	o	o	+
Hydraulic oil (e.g. Skydrol B 500)	o	o	o
Linseed oil	+	+	+
Mineral oil	+	+	+
Olive oil	+	+	+
Vegetable fats	+	+	+
Castor oil	+	+	+
Crude oil	+	+	+
Animal fats	+	+	+

Chemical Resistance Rating Key

+ Resistant
Based on preliminary testing, prolonged exposure of the coating to this medium appears possible. Some discolouration or gloss change may still occur without attacking the material.

o Partly resistant
Short-term exposure may be possible, but prolonged exposure is not recommended.

- Not resistant
Even brief exposure may cause damage.

The above tables should not be used as the sole basis for approving a specific cleaning or process chemical. Where there is uncertainty about a specific chemical or blended cleaning product, Silikal's Technical Department may be contacted for general advice. In all cases, it is recommended to carry out a small trial in an inconspicuous area before broader use.