

RECOMMENDATIONS FOR CLEANING AND MAINTENANCE OF DLW LINOLEUM WITH LPX FINISH

Dear Customer,

We are delighted that you have opted for a DLW LINOLEUM floor covering with LPX FINISH. So you can take pleasure in your floor for as long as possible, please make sure you observe the following basic rules:

- Reduce the amount of dirt brought into the building by means of adequately dimensioned zonal matting.
- Soiling increases wear and may also cause discoloration of the floor covering.
- Dirt with a granular structure will reinforce the abrasive effect on the surface of the floor covering.
- During construction work floor coverings should be kept covered to protect them.
- Abrasives or strong solvents should not be used for cleaning.
- Every floor covering should be cleaned regularly for hygienic and aesthetic reasons and to maintain its value.

DLW LINOLEUM floor coverings with LPX FINISH are easy to maintain. No initial treatment is required with this type of flooring if the following points are observed.

When using DLW LINOLEUM with LPX FINISH, significant cost savings can thus be made in comparison with conventional floor coverings.

Please bear in mind:

Subjecting floor coverings to excessive wear, for example through furniture with sharp edges, dirt (e.g. sand, gravel), constant sliding and pushing repeatedly made over the same areas, represent extreme loads which cannot be withstood without harm by any floor covering on a long-term basis. To avoid premature wear of the floor covering in such areas subject to extreme stress, it can be protected here by applying a treatment coating to the floor covering. When selecting detergents for use on DLW LINOLEUM with LPX FINISH, always make sure that they only have a pH value < 9. Highly aggressive alkaline products may harm the basic natural materials of the linoleum and ruin the floor covering.

For this reason **do not use soft soap.**

Should the factory-applied LPX FINISH become damaged by such excessive treatment, restoration is possible by performing thorough cleaning and applying a polymer dispersion.

The individual steps involved in cleaning DLW LINOLEUM with LPX FINISH are described in detail below:

1 Handover / initial cleaning

Remove soiling from building work in the form of solid dirt or dust by vacuuming or sweeping the floor covering.

a) With minor soiling wet cleaning is recommended, with a neutral or alcohol-based cleaning agent being added to the water.

b) Heavy soiling can be removed either with a cleaning or a single-disc machine, speed max. 150-180 rpm (red 3M pad or soft scrubbing brush) combined with a neutral, alcohol-based or intensive cleaning agent, pH value < 9. The floor covering is then neutralised/rinsed with clean water. Factory-applied **LPX must not be removed.**

If required, the dry floor covering can also be polished with a single-disc machine (beige or red 3M pad) (speed between 300 and 1000 rpm).

As no initial treatment is necessary after cleaning on completion of installation, lengthy drying is not required before further usage either.

If initial treatment is planned for the floor, thorough cleaning should be carried out with a green 3M pad. After vacuuming off the accumulated dirt, systematic neutralisation should be carried out by rinsing the floor covering with clean water. Allow the floor to dry off completely (depending on the indoor climate min. 12 to 24 hours). This procedure avoids adhesion problems with the product used for initial treatment.

2 Initial treatment

No initial treatment after cleaning on completion of installation is necessary for DLW LINOLEUM with a factory-applied LPX FINISH, but perfectly possible if required.

If a coating is required, for example in the health sector, disinfectant-proof products should be used for initial treatment.

We would be pleased to inform you about the treatment products recommended by the respective manufacturer; please call tel.

No. +49 (0) 71 42 / 71 340.

2.1 Surface disinfection

In areas that are regularly disinfected, LINOLEUM LPX must be treated with a polymer dispersion that is resistant to surface disinfectants.

Disinfectants used for the skin and wounds which contain substances resulting in discolouration such as iodine will cause marks on all resilient floor coverings.

3 Routine maintenance

The procedure to be selected depends on the degree of soiling, and possibly also on the initial treatment and the requirements on hygiene and cleanliness. Dry work processes can be selected if permitted by the degree of soiling. This reduces the costs of care and is easy on the environment due to the low level of chemicals involved.

When using wet/damp methods, **cleaning agents** recommended by the respective manufacturer are added to the water. Regular polishing compresses the surface and improves the robustness of the floor covering. This gives better protection against dents and other mechanical effects.

If the floor covering is coated, the products used for routine maintenance have to be selected according to the coating.

3.1 Dry cleaning

Routine dry maintenance is carried out using a fleece cloth holder with an impregnated fleece or microfibre cloth inserted.

3.2 Wet/damp methods

Damp mopping

Light soiling involving loose or easily detached dirt is removed using damp mopping equipment with slightly dampened mop pads. Here the surface of the floor covering is completely moistened with the mopping water (add cleaning product to water according to manufacturer's instructions) without leaving a layer of water on the floor covering.

Wet mopping

With wet mopping apply sufficient water to initially leave a thin film of water on the floor covering. After this has taken effect, even stubborn dirt will have been detached and can be removed with the mop pad rinsed in the water and wrung out.

This method does not require any machines, just a double bucket on wheels with a wringer and mop pad. After the cleaned surface has dried off, it can be polished if required with a single-disc machine (300 to 1000 rpm) and a beige or red 3M pad. In areas which are

subjected to regular wet disinfection, it is recommended adding suitable disinfectants to the water.

3.3 Spray cleaners

Spray cleaners are understood to refer to the (local) intensive treatment of stubborn stains or marks left from walking after mopping. Combined cleaning/maintenance products (cleaners) are sprayed onto

such soiling. The treatment of such soiling is best performed with disc machines that have cleaning pads fitted underneath. Please do not use hard sponges or abrasives as this might damage the LPX FINISH.

3.4 Mechanical cleaning

For large areas there are scrubbing suction machines which perform scrubbing (soft brush or red pad) and vacuuming in a single operation. This process corresponds to wet cleaning. A machine cleaning product suitable for LINOLEUM LPX is added to the water according to the instructions of the cleaning agent manufacturer. The vacuuming device on the machine should be set according to the instructions of the equipment manufacturer.

3.5 Raised floors

The spray cleaner method (see 3.3) and damp wiping procedure should be used here. For the latter, floors should be cleaned using a slightly dampened mop or with treated fleece.

With false floor constructions only the smallest possible amount of water should be used for thorough cleaning to prevent any damage to the raised flooring and cables installed underneath.

4 Thorough cleaning

Thorough cleaning may become necessary with extremely stubborn stains or deposits of maintenance products. The intervals have to be individually scheduled depending on the usage and traffic levels of the floor covering.

Thorough cleaning is carried out after application of the deep-cleaner (water and deep-cleaner => pH value max. 9) using scrubbing suction equipment or a single-disc machine and a green 3M pad or a pad suitable for the coating. After vacuuming off the accumulated dirt, the floor covering should be rinsed thoroughly with clean water and allowed to dry off completely. This is once again followed by initial treatment of the floor covering surface once dry.

5 Conductive DLW LINOLEUM floor coverings with LPX FINISH

The same measures as described under items 1. and 3. are used to clean and maintain conductive DLW LINOLEUM with LPX FINISH.

So as not to adversely affect the electrophysical properties of the floor covering, we recommend only using cleaning agents for initial treatment. If coatings are to be used for initial treatment, their suitability must be agreed with the relevant manufacturer of the product.

6 Additional measures for properties

6.1 Proper installation of zonal matting

Gratings in front of the entrance door must extend over the entire door width so they cannot be circumvented at the side. The grating should be the length of two or three strides, i.e. approx. 150 cm. "Open" or moveable gratings should be used where possible.

6.2 Use of runners and mats

Textile runners and mats can be used to pick up dirt in the entrance area. They protect the floor covering from fine particles of dirt, dust and moisture and are easy to clean.

The use of zonal matting / control zones reduces cleaning costs, considerably improving the resilience of the floor covering to dirt.

6.3 Dry clean restoration

With this method only the maintenance film layers actually soiled / damaged, e.g. main thoroughfares, are scrubbed dry with the Nilfisk 545 combi-machine and a suitable pad with the suction feature switched on to produce a uniform matt appearance to the uppermost maintenance film. Any remaining dust which is electrostatically bonded to the surface of the floor covering is then removed using a floor wiper fitted with a disposable non-woven cloth. A new layer of polymer dispersion is then applied to the scrubbed maintenance film with a mop pad.

Once this has dried, the new maintenance film layer is matched to the rest of the maintenance film by polishing with the Nilfisk 545 combi-machine using a suitable pad (e.g. blue 3M pad) and a spray-cleaner.

This cleaning method is a substitute for the costly and time-consuming procedure of thorough cleaning over

all areas of the installed DLW LINOLEUM LPX (see item 4).

Besides saving water, the amount of waste water produced and reducing labour and work time, this cleaning method is also environmentally-friendly, economical and odour-neutral due to the omission of the alkaline thorough cleaner.

7 Special notes

7.1 Discolouration

Dyed rubber – black in particular – may cause discolouration which cannot be removed following lengthy contact with floor coverings. This occurs for example with car tyres, masking materials, castors and the feet on washing machines, refrigerators, prams etc. Such discolouration does not come about at once but is caused by the transfer of substances and their subsequent exposure to light. To avoid such discolouration, use castors made of polyurethane. If this is not possible, we recommend the use of mats.

Discolouration may also be caused by flowerpots made of terracotta or clay. This can be prevented by using suitable saucers underneath.

Hair dyes and disinfectants with a strong discolouration effect may also damage the surface of coverings irreparably unless wiped off immediately after contact.

7.2 Office chairs / Furniture

For use on resilient floor coverings office chairs must be equipped with castors of the type W (soft) according to EN 12529. Furniture should therefore be fitted with soft pads underneath, e.g. felt gliders. To prevent damage to floor coverings especially at schools or other properties, it must also be ensured that the bearing surfaces of chairs are not abrasive or have sharp edges. For this reason, school furniture should be equipped with Floor Care protective gliders from VS Vereinigte Spezialmöbelfabriken GmbH & Co., Tauberbischofsheim (www.vs-moebel.de), or similar devices. Furniture gliders should be cleaned as regularly as the floor covering itself and checked for damage, replacing where necessary.

7.3 Adhesive tapes

If adhesive tapes are used on the floor covering, please check compatibility with the respective manufacturers.

7.4 General

These recommendations are based on our general practical experience and correspond to state-of-the-art cleaning methods as known to us at the time of publication. We however accept no liability for their completeness, accuracy and applicability in individual cases.

On completion of installation, the surface of the floor covering should be protected from damage, soiling and scratching in areas subject to heavy traffic during the building work by being covered up.

The customer or commissioned cleaning service provider is solely responsible for ensuring compliance with these cleaning and maintenance recommendations. We are not responsible for, and accept no liability for, any damage to or deterioration of a floor covering which is caused by failure to comply with these cleaning and maintenance recommendations.

The slip resistance of a floor covering depends on the level of soiling, cleaning intervals and detergents used on it. Reducing the scope of cleaning may therefore cause problems with hygiene and slipping.

8 List of manufacturers

8.1 Detergents

The manufacturers mentioned are given by way of example. Here you can ask for the appropriate detergents for DLW LINOLEUM WITH LPX FINISH. Equivalent products from other manufacturers may also be used. Observe the manufacturer's product-specific instructions for use and consult the manufacturer of the product if necessary. Information about the usability and compatibility of products and their mode of action is the responsibility of the respective manufacturer, who will be pleased to provide further details. We are not responsible for, and accept no liability for, the fulfilment of the expectations of users in relation to the final result of cleaning following cleaning/maintenance work.

Alfred Kärcher GmbH & Co.
Reinigungssysteme
Alfred-Kärcher-Straße 28-40
D- 71364 Winnenden,
Germany
Tel.: +49 (0) 71 95 / 14-0
www.kaercher.com

Ecolab GmbH
Postfach 13 04 06
D-40554 Düsseldorf, Germany
Tel.: +49 (0) 2 11 / 98 93-0
www.ecolab.com

TANA Chemie GmbH
Ingelheimstraße 1 – 3
D- 55120 Mainz, Germany
Tel.: +49 (0) 61 31 / 9 64-03
www.tana.de

BUZIL-WERK
Wagner GmbH & Co. KG
Fraunhoferstraße 17
D- 87700 Memmingen,
Germany
Tel.: +49 (0) 83 31 / 930-731
www.buzil.com

Johannes Kiehl KG
Robert-Bosch-Straße 9
D- 85235 Odelzhausen, Germany
Tel.: +49 (0) 81 34 / 93 05-0
www.kiehl-group.com

Wetrok GmbH
Maybachstraße 35
D- 51381 Leverkusen, Germany
Tel.: +49 (0) 21 71 / 398-0
www.wetrok.de

CC-Dr. Schutz GmbH
Holbeisstraße 17
D- 53175 Bonn, Germany
Tel.: +49 (0) 2 28 / 9 53 52-0
www.cc-dr-schutz.de

Johnson Diversey Deutschland
GmbH & Co. oHG
Mallastraße 50 - 56
D- 68219 Mannheim, Germany
Tel.: +49 (0) 6 21 / 87 57-0
www.johnsondiverse.com

DREITURM GmbH
Industriegebiet West
D-36396 Steinau a.d. Straße,
Germany
Tel.: +49 (0) 66 63 / 9 70-0
www.dreiturm.de

LOBA GmbH & Co. KG
Leonberger Straße 56 – 62
D- 71254 Ditzingen, Germany
Tel.: +49 (0) 71 56 / 3 57-0
www.loba.de

Dr.Schnell Chemie GmbH
Tanusstraße 19
D-80807 Munich, Germany
Tel.: +49 (0) 89 / 35 06 08-0
www.dr-schnell.de

RZ Chemie GmbH
Industriepark Kottenforst
D- 53340 Meckenheim, Germany
Tel.: +49 (0) 22 25 / 94 46-0
www.rz-reinigungssysteme.de

A list of detergents recommended by the respective manufacturers is also available on request from the Technical Support Service of Armstrong DLW GmbH, tel. No.: +49 (0) 71 42 / 71 340.

8.2 Machines and equipment

Alfred Kärcher GmbH & Co.
Reinigungssysteme
Alfred-Kärcher-Straße 28 – 40
D- 71364 Winnenden, Germany
Tel.: +49 (0) 71 95 / 14-0
www.kaercher.com

Johnson Diversey Deutschland
GmbH & Co. oHG
Mallaustraße 50 - 56
D- 68219 Mannheim, Germany
Tel.: +49 (0) 6 21 / 87 57-0
www.johnsondiversey.com

Columbus REINIGUNGSMASCHINEN
G. Staehle GmbH u. Co. KG
Mercedesstraße 15
D- 70372 Stuttgart, Germany
Tel.: +49 (0) 7 11 / 9 54 49 50
www.columbus-clean.com

Nilfisk-Advance AG
Siemensstraße 25 / 27
D- 25462 Rellingen, Germany
Tel.: +49 (0) 4101 / 39 90
www.nilfisk-advance.de

Ecolab GmbH
Postfach 13 04 06
D- 40554 Düsseldorf, Germany
Tel.: +49 (0) 2 11 / 98 93-0
www.ecolab.com

VERMOP Deutschland GmbH
Kiesweg 4-6
D- 97877 Wertheim, Germany
Tel.: +49 (0) 9342 / 878-0
www.vermop.com

8.3 Cleaning discs and dirt trap mats

Kampmann GmbH
Friedrich-Ebert Straße 128-130
D- 49811 Lingen (Ems), Germany
Tel.: +49 (0) 5 91 / 71 08-0
www.kampmann.de

3M Deutschland GmbH
Carl-Schurz-Straße 1
D-41453 Neuss, Germany
Tel.: +49 (0) 21 31 / 14 -0
www.3m.com

Your contact for queries about cleaning at Armstrong DLW GmbH, Stuttgarter Straße 75, D-74321 Bietigheim-Bissingen:

Telephone: +49 (0) 71 42 / 71 3 40
Fax: +49 (0) 71 42 / 71 1 46
e-mail: service_germany@armstrong.com
Website: www.armstrong.de

Earlier issue of this document are hereby superseded.