# **Preparation of resilient floorings**

before applying Dr. Schutz surface products

## 1

#### **General**

Surface coatings, both permanent coatings and care films, can only provide good results on sub-surfaces if these are professionally prepared. If a coating does not adhere properly, then as well as detaching, also poor mechanical or chemical consistency can be the consequence.

For the process of coating there is a difference between wetting and adhesion.

Good wetting is understood as a completely closed wet film. This is necessary, so that the remain-ing dry film also completely covers the sub-surface. For a good surface wetting it is necessary that water-repellent sub-stances (e.g. grease, fat, waxes, silicones) are thoroughly removed by wet cleaning, leaving no residues. Poor wetting can be recognized when the fluid on the surface con-tracts (to form "islands") and non-wetted areas reappear. For safety reasons we recommend in principle carrying out strip-cleaning before applying a coating. In the case of renovation this has to be carried out in any event.

The adhesion of coatings to the sub-surface means anchoring the layer to the surface. This can be due to a chemical reaction with the surface, or mechanically by interlocking with the roughness of the surface. For this purpose the surface must also be accessible for coating by careful cleaning beforehand. Roughening by sanding for mechanical interlocking is especially recommended be-fore sealing with permanent coatings. Carrying out wet-sanding, which is possible on these kinds of floor, helps to extend the lifetime of the sanding medium. Roughened surfaces are typically also easier to wet. Wet-sanding prevents dust occurring, so that this technique can even be used in clean rooms, or when partially renovating the floor while it is in use.

Because the result is heavily dependent on the skills of the worker, it is clear that the responsibility for the result lies with the worker. Here it should also be emphasized that different surfaces re-quire various intensities of preparation, insofar as the treatment of the surface must be carried out by someone with knowledge and experience. Before strip-cleaning the floor must undergo a professional assessment, as long as nothing is known to the contrary. Here part of the assessment also concerns whether the sub-surface can probably cope with the burden of water and cleaner, as well as the mechanical work down on it. This can be critical in the case of a floating installation, or laying a floor on fixed aids. If appropriate, concerns should be raised.

In the following you will receive advice about how these requirements on site can ensure that the coating of floors is safely accomplished. Please note that especially when applying permanent coatings, mistakes in pretreatment can only be corrected with considerable time and trouble, if at all.

## 2

#### Wet-cleaning and strip-cleaning

It is customary for cleaning to be done with the help of cleaning pads. The lifetime of a pad can be very short in individual cases, which means it must be exchanged frequently. If a pad shows that it no longer works, because it has been worn down by the sub-surface, or because care-products or dirt have clogged the pad, then it must be replaced by a new pad. Compared to pads, grit-brushes offer an optimal solution. They clean better on structured floors and they do not clog up. A further advantage of the grit-brush is its wide range with little wear and tear, and its resistance to cleaning chemicals. Dr. Schutz offers high quality, tested pads and grit-brushes, which are optimally and specifically suitable for the purpose of coating floors.

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The choice of pad or brush depends on the surface and its later coating. The guiding principle is as hard as possible, but as soft as necessary.

- If the surface is only to be treated with a mopped wash&wax product (e.g. **Dr. Schutz Floor Cleaner R1000**), then not so hard, less abrasive pads or brushes (red) are used. These are also used when the floor covering is softer, or subject to scratches.
- If a layer-forming care-film is used (e.g. **Dr. Schutz Secura**, **Ultra High Shine**, **Medica**, **Floor Mat**, **Floor Shine**), we recommend green as first choice, or black on scratch-proof factory-applied finishes, or the PU renovation pad.
- In the case of permanent PU sealers (**Dr. Schutz PU Sealer**, **PU Color**, **PU Anticolor**), sanding grooves are well covered, due to the high amount of solids in these coating products. Because of the permanent character of the sealing, adhesion is so important that one should go really hard on the surface (gritbrushes or pads green or black, PU renovation pad, HiPro pad).
- Dr. Schutz Clean&Strip (medium alkalinity, all floors) is to be used for the gentle removal of care-product residues. Dr. Schutz Turbo Strip (medium alkalinity, PVC, lino/rubber after work sample), or Dr. Schutz Super Basic Cleaner (high alkalinity, only PVC and poured PU floors) in wet-cleaning effective-ly also dissolve thicker dispersion care-films and facilitate their removal with brush or pad.
- The applicable concentration of the cleaning products in the solution depends on the substances to be removed. Our recommendation: begin with 5 parts water to 1 part cleaner, if necessary use a higher concentration up to undiluted. The layer of the cleaning solution is 150-250 ml/m². A soak-in time of 10 minutes is recommended, in difficult cases also longer. Please note that the areas with a strip-cleaning solution must always be kept moist. Avoid any dry patches forming. When using these cleaners keep at a distance from nearby fixtures and fittings, so that their surfaces are not damaged. The edge areas have to be worked on carefully by hand.

### Neutralizing and roughening/sanding back

At the end of the cleaning step the floor is rinsed with clear water ("neutralized"). At the same time it is advantageous to roughen the surface while it is wet. In the choice of sanding grit the principle is: as coarse as possible, as fine as necessary.

- Roughening the surface before applying a permanent sealer (e.g. PU Sealer, PU Anticolor, PU Color) has a decisive effect on adhesion. If a surface cannot be sanded, it should not be sealed either. We recommend as a system-relevant abrasive Dr. Schutz Abranet ACE for smooth surfaces, as well as Dr. Schutz Abranopp extreme for structured surfaces. Both these abrasives are more effective and safer than the PU Renovation Pad and, what is more, they have a longer working life. In addition, with these abrasives the worker has a very good check on when they are spent. And there is another advantage in making sure that the optical result is assessed. After sanding the surface of the floor must be easily recognizable as matted whitish.
- For the application of a care-film (e.g. Secura, Ultra High Shine, Medica) we further recommend the **PU Renovation Pad**, because a thin care-film might not be sufficient to cover coarse sanding grooves.

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- In the case of care-products with fewer solid substances, suitable for mopping, the surface should not be roughened and only neutralized with a red pad.

A condition for coating is that the floor surface must be clean and dry, free of dust, grease, oil, wax, or residues of care-products, or removable factory-applied finishes. In the case of subsequent permanent sealing, the entire area of the floor must be sanded matt. The result must be assessed professionally. The dry floor can then be treated with the chosen Dr. Schutz permanent sealer or with a Dr. Schutz care-film.

## 4 Recommended Machines

We recommend a slow-running mono-disc machine (150 rpm, e.g. Dr. Schutz SRP1) using Dr. Schutz Gritbrushes or the appropriate pads and Dr. Schutz abrasives. The effect of the machine can be increased by additional weights.

For removing the cleaning solution we recommend a wet-suction vacuum-cleaner (e.g. Dr. Schutz Wet Suction Cleaner PS27).

Drying of the floor is supported by good ventilation, which can be accelerated by heating or working with a fan (e.g. Dr. Schutz Blow-Dryer TG1).

## 4 Please note

- Whether a chemical strip cleaning of the floor is necessary can also be ascertained by selective treatment with **Dr. Schutz Elatex**. If, after about one minute's soaking into the floor, this leaves a mark after wiping it down, then this means that removable coatings exist and, particularly before permanent sealing, these must be properly removed. This test should be repeated after strip-cleaning, in order to establish whether everything has been removed.
- When using alkaline strip cleaner the result of neutralization can be evaluated with a universal-indicator-paper, which is judged to be good when the pH value of the solution is lower than 8. Please note: at the same time the indicator-paper can also be laid on moist joints to check neutralization locally.
- When abrading the floor, this must result in sanding and not polishing! Fast running machines lead more easily to a polishing effect. High speed single disc machines are therefore not suitable. Sanding is done with sharp abrasive materials, while blunt or clogged abrasives tend for polishing. A polished surface has exactly the opposite effect from what is desired, as it is then more closed than before, while what is wanted is that the surface becomes opened by sanding. Therefore the lifetime/worn condition of abrasive materials is to be assessed critically during their application.
- Any floor which cannot be sanded should also not be sealed permanently.
- Linoleum must principally be tested beforehand as to whether it has colour-fast retention, by testing on an inconspicuous area, in order to rule out any discoloration resulting from using abrasive
  materials, brushes or strip cleaning materials.
- If the appearance of the floor is unacceptably changed by strip cleaning or sanding, then it can be covered with **Dr. Schutz PU Color** lacquer, if required with creative elements, which offers interesting possibilities to enhance renovation.
- Bear in mind that especially joints and the corners of rooms need longer drying times. When using chemically crosslinked surface products, the surface MUST be completely dry beforehand.
- When considering structured surfaces, the possibility of preparing the surface should be judged ac-

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cording to the type of floor. Of course all of the general notes above also apply within "structural valleys", which are typically difficult to reach with a single disc machine. In the case of slight structures, when abrading with a strip cleaner we recommend using a grit brush with a high and deep structure (e.g. Dr. Schutz Grit Brush green or red) and in the neutralization step using abrasive materials or a pad, as mentioned above. The more pronounced the structure is formed, the greater the skill and expert knowledge required by the professional.

- Before strip cleaning click flooring or loose lay vinyl floors contact our Technical Applications Advice, because in such cases the approach to be taken depends on the type of floor and not all types can be approved for such treatment.
- If the expected safety of application for the treatment of the surface is not beyond doubt, in such cases always do a test patch beforehand.
- You can find recommendations for setting up individual floors and with reference to situations in different buildings on our homepage under www.dr-schutz.com.
- The Product Information and Safety Data Sheets of the above mentioned products are to be taken into account.

Abranop Extreme  $d = 406 \, mm$ Art.-Nr. 8000926100



Abranet ACE d = 406 mm, Korn 150 Art.-Nr. 8000928100



#### Dr. Schutz - We Care About Floors

Headquarter Dr. Schutz GmbH Holbeinstraße 17 D-53175 Bonn Tel.: +49 (0)228 / 95 35 2-40

Fax: +49 (0)228 / 95 35 2-46 E-Mail: export@dr-schutz.com www.dr-schutz.com

Dr. Schutz U.K Ltd. Unit 24, Anglo Business Park, Smeaton Close, Aylesbury Bucks HP19 8UP

Contact: Richard Nelson Tel.: +44 (0)1296 437827 Fax: +44 (0)1296 334219 E-Mail: richard@dr-schutz.com Ireland Dr. Schutz Ireland 35 Pic Du Jer Park, Ballinlough, Cork

Contact: Paul O'Reardon Mobile: 0877678388 E-Mail: drschutzireland@gmail.com

North America Schutz NA 4701 Bath St 46 Philadelphia PA 19137

Contact: Sam Jamison Tel.: +1 (877) 272-4889 Mobile: +1 (215) 510-7874 E-Mail: sam@schutzNA.com

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