Version: 20.09.2017

# **Preparation of resilient floorings**

prior to the application of Dr. Schutz finishes

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#### **General**

Surface coatings, whether permanent finishes or care films, can only deliver good results if the subsurface has been professionally prepared. Should the coating not adhere properly, then the consequences can be delamination and/or poor mechanical or chemical endurance.

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

By well wetted we refer to an entirely closed wet film. This is necessary so that the remaining dry film also entirely covers the whole subsurface. To wet the surface well, it is necessary to thoroughly remove any water-repelling substances (e.g. waxes, silicones, etc. ...) by wet cleaning, leaving it free of any residues. Poor wetting can be recognized when the liquid seems to shrink on the surface ("forming islands"), which reveals non-wetted spots.

The adhesion of coating to the subsurface is the anchoring of the layer to the surface. This can be attributed to a chemical reaction with the surface, and/or to a mechanical embedding in the roughness of the surface. For this purpose the surface must also be carefully cleaned beforehand in order to enable the coating to adhere. Roughening by sanding, respectively abrading with a sanding pad for mechanical embedding is necessary prior to treatment with permanent sealers. Performed as a wet sanding which is possible on this kind of surfaces it helps to enhance the reach of the sanding material. Typically abraded surfaces are also easier to wet.

In the case of renovation, always begin by carrying out strip cleaning. For newly laid floors only strip clean when dealing with removable factory applied residues or finishes

As the result is heavily dependent on workmanship, it is clear that the responsibility for the result lies with the applicator doing the work. In this respect it should also be emphasized that various surfaces require different intensities of preparation. Therefore the treatment of the surface must be carried out with expert knowledge and experience. Before stripping and cleaning, the floor must undergo an expert assessment, if nothing specific is known about its condition. The likelihood of the subsurface being damaged by water and chemical cleaners, as well as by mechanical work, must be included in such an assessment. Depending on the degree of damage probability, such reservations should be made known.

In the following you will receive guidance as to how these requirements for coating floors on the building site can be safely fulfilled. Please note that mistakes in pretreatment, especially with permanent coatings, can only be corrected with a great deal of time and trouble, if at all.

### 2

#### NEW from 2017

Abrading the surface before applying permanent sealers (e.g. PU Sealer, PU Anticolor, PU Color) and hard sealers (e.g. Secura, UltraHighShine, Medica) is decisive for subsequent good adhesion. Until now the **Dr. Schutz PU Renovation Pad** was recommended for this purpose as the best and also the most relevant abrasive for the systems. Further developments in floors and our own developments in the field of abrasives have prompted us to adapt our recommendation relevant to the systems. From June 2017 we recommend

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the systems relevant abrasive **Dr. Schutz Abranet ACE** for smooth surfaces, as well as **Dr. Schutz Abranop Extreme** for structured surfaces. Both these abrasives are even more effective and safe than the PU Renovation Pad and additionally have a longer lifetime. What is more, the flooring professional has very good control of both new abrasives when the abrasive is worn out. And there is another advantage with regard to safety; after sanding the surface of the old floor, or of a newly laid floor without a removable factory-applied finish, the matted surface is easily recognized as whitish.

#### 3

#### **PRE- & POST-TREATMENT**

As a pre-condition for coating, the floor surface must be clean and dry, free of dust, grease, oil, wax or care-product remnants, or removable factory-applied finishes. In the case of subsequent permanent sealing, the entire floor must be sanded to matt. The result must be professionally assessed. The dry floor can then be treated with the selected Dr. Schutz permanent sealer (e.g. PU Sealer or PU Anticolor), or with a Dr. Schutz care film (e.g. Secura MatHardSealer). We recommend a slowly running single disc machine (150 rpm, e.g. **Dr. Schutz SRP1**), using **Dr. Schutz Grit Brushes** or suitable pads and Dr. Schutz abrasive materials. The effect of the machine can be enhanced by using additional weights. For mopping up the dirty liquid from cleaning we recommend a wet suction vacuum cleaner (e.g. **Dr. Schutz Nasssauger PS27**). Drying the floor is supported by good ventilation. Heating or working with fans (e.g. **Dr. Schutz Dry Fan TG1**) can accelerate the drying process.

3a) Pre-treatment before coating newly laid floors without removable factory-applied finish.

Here chemical strip cleaning is not required. It is enough to wet sand the floor after installation, using **Dr. Schutz PU Cleaner** mixed in a ratio of 1:200. Use **Dr. Schutz Abranet ACE** (for smooth surfaces) or **Dr. Schutz Abranop Extreme** (for structured surfaces). Subsequent neutralization is also not necessary. Vacuum up the dirty liquid after sanding and then mop the floor with clear water.

3b) Pre-treatment on all old floors and on newly laid floors with removable factory-applied finish

Old floors and newly laid floors with removable factory applied finish must first be carefully strip cleaned before being treated with coating materials. In addition, when sealing with permanent coatings the floor must also be sanded.

#### Strip cleaning:

Use **Dr. Schutz Clean & Strip** (medium alkalinity, all floors) for the gentle removal of care-product remnants. **Dr. Schutz Turbo Strip** (medium alkalinity, PVC, rubber after a work sample) or **Dr. Schutz Super Basic Cleaner** (high alkalinity, only for PVC and PU cast floors), which during wet cleaning also effectively soften thicker layers of dispersion care film and make removing them easier with a brush or pad.

The concentration of cleaning material applied in the solution depends on the substances to be removed. Recommendation: start with 5 parts water to one part cleaner, then as required in a higher concentration up to pure cleaner. Treatment with the cleaning solution takes 150-250 ml/m². We recommend allowing the solution to soak in for 10 minutes, even longer in difficult cases. Please ensure that the areas with strip cleaning solution must always be kept moist. Any dry patches are to be avoided. When using these cleaners keep them at a distance from adjoining fixtures and fittings, so that they do not damage their surfaces. The edge

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areas must be carefully worked on by hand. The strip cleaning solution dissolves dirt or soluble care films particularly effectively with the assistance of **Dr. Schutz Grit Brushes**. Our standard recommendation is for the blue grit brush, in the case of more pronounced, or more deeply structured surfaces we recommend the finer red grit brush. The advantage of the grit brush is its wide range, minimal wear and its insensitivity against cleaning chemicals used. The use of green pads is also very common, whereby the lifetime of one pad can be very short in individual cases and it must be frequently exchanged. When the pad ceases to have any effect, because it is worn out by the subsurface, or because care products or dirt have clogged it up, it must be replaced by a new pad.

#### Post treatment (Neutralization):

Finally the surface is carefully and repeatedly cleaned and neutralized with clear water. If you intend to use a permanent sealer, neutralization should take place with the aid of **Dr. Schutz Abranop Extreme** for structured, or with **Dr. Schutz Abranet ACE** for smooth floors. Thereby the cleaning product remnants are mobilized and the surface is wet sanded at the same time, so preparing it perfectly for the subsequent sealing. With Abranet ACE we recommend grain 150. In cases with high resistance to sanding a coarser grain can be used, whereby a finer sanding might later be necessary to counter sanding grooves.

When applying initial care with Dr. Schutz Floor Cleaner R1000 a red pad is used to neutralize the floor.

### 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 blue 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 floors or loose lay vinyl floors contact our Technical Applications, 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 drschutzire-E-Mail: land@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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