Needled Floor Coverings | Cleaning and Maintenance

FINDEISEN needled floor coverings are particularly wear resistant.

The optical sensitivity to visible soiling also plays an important part where this is concerned. With textile floor coverings it is, in fact, just as important as their wear-resistance properties.

The sensitivity to visible soiling does not only depend on the colour and pattern, but also on the construction.

Light and vivid colours hide the dirt less than darker colours and must, therefore, be cleaned more frequently.

Stain-resistant colour combinations prolong the necessary cleaning intervals.

For heavily used floor spaces, needled floor covering with a high proportion of coarse fibres have stood the test of time especially well.

The rough-fibre structure of the surface combines rustic optics with a textile character.

The combination of course and fine fibres makes soil particles in various conditions of aggregation less visible as the case might be with other floor coverings.

Needled floor coverings are also especially easy to care for and clean to their best advantage and, accordingly so, are extremely economical.

These cleaning and maintenance instructions base on the experience of FINDEISEN GmbH, on the requirements of the latest RAL 991 A3 and the latest rules of the "Arbeitskreis werterhalt.org (available at www.werterhalt.org).

The indications in these instructions are only applicable to FINDEISEN floor coverings.

<u>In principle</u> the cleaning and maintenance of FINDEISEN needled floor coverings depend entirely on the usage of the floor covering!

Every floor covering, hence also a FINDEISEN needled floor covering, does only look attractive for a long time, if it is cleaned and maintained correctly.

In this connection, the latest comments on the Technical Rules DIN 18365 "Floor Covering Work" (issue 09-2016, point 2.1, page 27) say: "Preconditions for the suitability of a floor covering are methods of cleaning and maintenance adapted to the usage of the needled floor covering, the provision of soil-collecting areas and a usage-relevant colouring".

And, in addition, under point 3.1.5, page 66: "It is the business of the client/user to clean and maintain the floor covering or have it cleaned and maintained acc. to the respective specifications of the producer of the floor covering so that, acc. to appearance, use and wear, it corresponds in every respect to the intended purpose".

Cleaning must neither damage the needled floor covering nor affect the substrates.

1.0 Cleaning at the End of the Construction Works

In principle, the finished needle punch floor covering must be protected in a suitable manner against contamination (such as that which may occur as a result of construction work by subsequent trades) until the premises are handed over to the client (or the floor covering users).

It should be noted that for a completed but not yet accepted trade, there is an Obligation to maintain on the part of the contractor (protection of the floor covering against damage or soiling by subsequent trades).

Acc. to the VOB, this is a special service to be paid for separately.

If, nevertheless, such soling should exist after the installation of needled floor coverings and prior to handing over the rooms to their users (e. g. due to construction works), it has to be

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removed by a professional final cleaning. The cleaning at the end of the construction work means the dry removal of dirt.

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For this, remove the worst of the dirt by thoroughly brush-vacuuming the needled floor covering. The dirt and dust that have penetrated more deeply into the floor covering should be removed u-sing a contra-rotating double-brush machine with dirt collecting boxes.

The dust is directly collected in two boxes that are fitted on both ends in front of the brushes.

Steps exceeding this measure are not part of a cleaning at the end of the construction work, this type of cleaning being defined only as dry removal of coarse and fine dirt.

Never perform a wet cleaning after the end of the construction works, since, otherwise, the moisture makes the fine construction dust clot, such clots being very difficult to remove!

In case the here described type of cleaning is not sufficient to make the needled floor covering look perfect, contact a qualified specialist company for further cleaning measures.

2.0 Prophylaxis

With proper prevention and care, you can - due to the optimum visible cleaning-related characteristics of FINDEISEN needled floor covering - delay intensive cleaning for a very long time!

Of course, this also includes realizing that FINDEISEN needled floor covering should not be expected to function as a dirt trap.

About 80 % of the dirt are being carried in from outside on the soles of the shoes. If this dirt is not removed regularly, a sticky film will form by which new dirt will get caught.

Entrance and transition areas (e. g. from hard floors to needled floor coverings) should, therefore, be provided with soil-collectors sufficiently sized to remove the respective ingress of dirt.

Well-planned soil-collecting areas absorb most of the dirt and moisture reliably before it is carried into the building and, hence, provide optimum protection for all entrance and transition areas.

The needled floor covering is significantly protected from dirt and wearing.

The length of the soil-collecting system essentially contributes to reducing the quantity of dirt that enters the building.

The soil-collecting system, ideally, is 8 - 10 steps long, starting in the outside and reaching into the interior of the building.

Soil-collecting areas should be brush-vacuumed regularly (daily) so that they them-selves will not become sources of soiling ("stamp-pad effect.")

This stamp-pad effect may also be produced when, by unprofessionally maintaining adjoining hard floors, for instance wax-containing cleaners get on the needled floor covering.

Correctly designed and dimensioned soil-collecting areas are capable of absorbing dirt and moisture walked into the building to a large extent.

The more dirt is trapped in the entrance area, the less the maintenance costs of the general cleaning.

During wet-weather periods, it might be necessary to let the floor covering dry first to ensure the necessary removal of soil by brush-vacuuming.

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3.0 Regular Cleaning

The dust contained in the air also contributes to a large extent to soiling. Normally, it consists of small dust particles, volatilized oils, industrial and traffic emissions, smoke, pollen, skin flakes, hair or the like.

Major part of these dirt particles contains fat and, due to its physical properties, sticks to the floor covering fibre, thus favouring contact soiling.

Therefore, regular dedusting and (immediate) removal of dirt are important parts of an optimum cleaning programme.

Regular (daily) dry-mechanical cleaning of FINDEISEN needled floor coverings should, always, be carried out with a brush vacuum cleaner.

Always use a brush-vacuum cleaner with electrically driven rotating brush, i. e. guaranteeing high-performance brushing and sucking.

This is the only guarantee that the dirt sticking to the needled floor covering fibres is also removed effectively.

From our experience best results can be achieved by electric driven brush-vacuum cleaners with a power consumption of > 150 Watt.

Regular cleaning with a suitable brush vacuum cleaner considerably helps to preserve the appearance of a needled floor covering and prolongs the life of such needled floor covering.

Make sure to adjust the correct height of the brush and to work thoroughly.

A brush vacuum cleaner can only work efficiently, if it is regularly maintained; this applies especially to the brush, the filter, and the filter bag. Always use brushes adapted to the respective flooring.

Note

Pneumatically driven brushes or brushes driven by 12 volts or 24 volts do not meet the above recommendation.

Though they achieve higher speeds, they, according to our experience, do not produce the required cleaning action.

Never use a vacuum cleaner with an even floor nozzle to clean a FINDEISEN needled floor coverings, because an even floor nozzle does not achieve the cleaning action of the rotating brush of a brush vacuum cleaner.

4.0 Removal of Stains (Spot Removal)

The removal of stains (spot removal) should be part of the daily cleaning to permanently preserve the impressive character of FINDEISEN needled floor coverings.

Spilled liquids, normally cause visible ugly spots and should, therefore, be treated immediately.

Spots of all kinds can best be removed while still as fresh as possible.

If spots are not immediately treated and spilled liquids get treaded down, this may change the colours of the installed FINDEISEN needled floor coverings.

Normally, liquid staining substances should be removed to a large extent by dabbing them off with an absorbent material (cloth, cellulose) or better yet with a wet vacuum cleaner.

If necessary, as for spots which have dried, the residues and bound soil can be dissolved with lukewarm water or carpet shampoo, and spot removal by beating.

Liquid spot removal agents have proven best at doing so.

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Spot sprays based on solvents, however, may cause disadvantages with needled non-woven. The instructions of the producer of the respective spot removal agent should, there, be followed exactly.

After a careful spot removal, the loosened staining substances must always be vacuumed off thoroughly, the best being by means of a handy wet vacuum cleaner.

The chemical agents applied on the floor covering must, in any case, be completely removed again, so as not to increase the tendency to get soiled again!

Repeated rinsing with clear water of the spot treated and appropriate vacuuming can be a good idea.

This prevents remaining residues from forming new stains (i. a. through soil adhesion).

We advise against using washing-up liquid or washing powder, as these will in-crease the tendency of the spot for getting soiled again.

5.0 Intensive Cleaning (Thorough cleaning)

Intensive cleaning means the cleaning of the entire surface of the floor covering according to RAL 991 A3. It should be carried out as required by the type of building, but at least once per year. This cleaning should always be performed by a specialist company.

Intensive cleaning (thorough cleaning) includes all cleaning treatments exceeding regular cleaning. Intensive cleaning is necessary when the floor covering is soiled extensively or when partial cleaning made the floor covering look uneven.

The individual methods available, however, vary as to their intensity and applications.

In general, it is recommended to give preference to the method that is most material- and environment friendly.

Intensive cleaning ensures an optimum removal of stains that could not be removed by regular cleaning.

The aim of intensive cleaning is to remove all soiling that cannot be removed during maintenance cleaning.

Hygienic standards, such as offensive smells in old people's homes, disinfecting in hospitals, kindergartens, schools, etc., might also be the reason for cleaning the entire surface.

The pad-cleaning and dry-foam cleaning methods, as well as shampooing/spray extraction and the thermo-electric TEP-TOP-Clean® method lend themselves for intensive cleaning.

The method/procedure to be selected depends on the type and condition of the floor covering installed and on the degree to which it is soiled.

For resumable FINDEISEN floor coverings (if they are marked as such), shampoo sizing/spray extraction (according to point 5.4 of these cleaning and care instructions) is not suitable. The relevant instructions in accordance with point 5.6 of these cleaning and care instructions must be observed.

Note

Brush-vacuuming and a treatment of stains according to section 4.0 are integral parts of all the intensive cleaning methods described hereafter.

5.1 Powder Cleaning

This method shall never be used for FINDEISEN needled floor coverings.

5.2 Pad Cleaning

Pad cleaning requires a cleaning liquid to be sprayed on the floor covering and be rubbed in by means of a textile pad.

Thanks to a great variety of pad shapes and equipment constructions (for instance for the

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thermo-electric cleaning method, see 5.5), as well as methods of working, this cleaning method offers a great range of variations and applications as might be required in individual cases.

5.3 Dry-Foam Cleaning

With dry-foam cleaning, a prefabricated foam is applied and rubbed in a single operation.

After a sufficient time of action and drying, the dissolved soil should be removed together with the extractable residues of cleaning agent by means of a brush vacuum cleaner.

5.4 Shampooing/Spray Extraction

Intensive cleaning by a wet cleaning method is used to remove heavy soiling or considerable residues of soil and cleaning agents.

Wet cleaning requires that the laid floor covering be intact and involves a drying period of at least 24 hours.

For resumable FINDEISEN floor coverings (if these are marked as such), shampoo drying/spray extraction is not suitable. The relevant instructions in accordance with point 5.6 of these cleaning and care instructions must be observed.

Wet cleaning by shampooing or spray extraction requires professional equipment that should only be operated by experienced staff (cleaning specialists).

For shampooing, use single- or three-disk machines. The coaction of the shampooing solution and the rotation of the brushes makes the foam enter into the floor covering.

The foam binds the dirt and becomes a carrier of dirt. Therefore, it is absolutely necessary to extract the foam by means of wet vacuum cleaner already while shampooing. The dirty foam must never dry in the floor covering.

For spray extraction the cleaning solution is sprayed into the floor covering and the dirty water produced is sucked off immediately.

Subsequent extraction with clear water can further reduce dirt and possible detergent residues.

The moisture load on the installed floor covering should be as low as possible, i. e. it is absolutely necessary to vacuum (extract) carefully and thoroughly and, if necessary, repeatedly without adding any further liquid using the suction nozzle of the spray extraction unit.

The above procedure must always be kept to in order to avoid, among other things, the following disadvantages:

- reduced adhesive adhesion and resulting negative effects on the lying behaviour and/or dimensional stability of the installed needled floor covering
- faster resoiling
- longer drying time

Excessive long wetting of the glued needled floor coverings must be avoided in any case, because this can be compared to "water damage". Often, in particular in case of spray extraction equipment of little extraction capability, large quantities of water remain in the needled floor covering and, thus, in the glue areas.

A long-lasting, and thus improper, ingress of too much moisture during wet cleaning inevitably damages or at least impairs the glue bond and, thus, may lead to a removal of the floor covering and/or to dimensional changes (forming of joints) in the seam areas.

Only equipment with a high suction capacity does ensure that as little as possible water remains in the floor covering, so that one can expect the floor covering to dry fast.

The cleaning specialist should, therefore, check the moisture content of the floor covering regularly with a suitable measuring instrument.

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Installation on Floor-Heating

FINDEISEN needled floor coverings that are installed or glued on floor heating constructions should only be cleaned with the heating system being turned off, so as to prevent stripes from forming.

Notes for dissipative gluing

Dissipative gluing which has been done with black adhesive containing soot is sensitive with regard to the dissolving soot particles, and so one should always avoid drenching irrespective of the above instructions.

5.5 Thermoelectric Cleaning TEP-TOP-Clean®

TEP-TOP-Clean® is a system specially developed to clean floor coverings intensively.

This method is offered by Paul Geißler GmbH (for more details, please visit www.paul-geissler-gmbh.de).

First, the loose or slightly adhering soil is extracted by a counter-rotating brush vacuum cleaner.

Following the treatment of stains, an enzymatic solution is evenly applied to the needled floor covering. This cleaning procedure makes the dirt dissolve and be absorbed by a special cleaning pad.

The internal construction of the cleaning machine operating at a defined speed ensures a constant heat build-up (thermo-electric system) of approx. $30\,^{\circ}$ C.

At the end, the floor covering is vacuumed again by means of a brush vacuum cleaner.

The advantages of this method are:

- no chemical residues thanks to the application of an enzymatic cleaner
- no rapid resoiling the floor covering may be walked on immediately
- Resource-friendly by saving a significant quantity of drinking water

5.6 Instructions regarding Removable FINDEISEN Floor Coverings

Some FINDEISEN floor coverings may be installed resumable. This type of installation can be realized with FINDEISEN modules as well as with FINDEISEN rolls, provided they are marked accordingly.

Adhesive systems are used that are sensitive to moisture. For this reason, shampooing/spray extraction (according to point 5.4 of this cleaning and care instructions) is out of the question for these floor coverings.

The use of resumable FINDEISEN floor coverings on e. g. raised floor constructions or "climate floors" is also a moisture-sensitive construction. For this reason, shampooing/spray extraction (according to point 5.4 of these cleaning and care instructions) is not an option for these floor constructions either.

For the cleaning of removable FINDEISEN floor coverings we recommend pad cleaning (point 5.2), dry-foam cleaning (point 5.3) or thermoelectric cleaning (point 5.5).

With these cleaning methods the floor covering is not drenched, but only moistened, so that an optimum cleaning effect is achieved without drenching the gluing system and the substrate.

6.0 Instructions regarding the Room Climate

Basically, floor coverings and, hence, also FINDEISEN needled floor covering are always designed for rooms in which indoor climate conditions generally recommended for the comfort of human beings are lastingly fulfilled. These include an air temperature ranging from >18 °C to approx. 22 °C (max. 26 °C) and a relative humidity ranging from 40 to 65 %.

The user is responsible for compliance with the aforementioned indoor climate requirements during the occupancy phase.

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Staying below or exceeding the mentioned values does not only reduce the comfort of the people present in the respective room but can also lead to damage to the floor covering by (physically unavoidable) dimensional changes of the floor covering lines or modules.

So favors e. g. permanent undershooting of the recommended relative humidity of at least 40% under drying of the needled floor covering.

This can lead to dimensional changes (e. g. joint formation) in the seam areas of the respective needled floor covering sheets.

The floor covering manufacturer cannot be held responsible for the floor covering defects (such as joints forming in the seam areas of the respective needled floor covering rolls) resulting from unsuitable room air conditions.

7.0 Concluding Remarks

Before intensively cleaning (thorough cleaning acc. to RAL 991 A3), always judge the resistance to moisture of the type of installation and of the substrate, as otherwise the floor covering surface may develop bubbles or bumps and/or changes in shape.

If, based on the construction data, the resistance cannot be definitely clarified, a test cleaning should be carried out on an inconspicuous spot.

In addition to this, the fixing to the substrate should be checked by trying to lift the needled floor covering at various spots, especially near seams, using an awl.

For resumable FINDEISEN floor coverings, it is mandatory to observe the relevant instructions in accordance with point 5.6 of these cleaning and care instructions.

All FINDEISEN needled floor coverings can be cleaned, if the specifications described in these instructions for Cleaning and Maintenance are observed.

If any faults or damages appear on our floor coverings which are attributable to non-compliance with these directives, we shall not assume any liability or warranty. Any claims of recourse in this connection shall be excluded.

The instructions of the producers of the cleaning and spot-cleaning agents as well as the specifications of the raised-floor and adhesive suppliers have to be followed also.

Our cleaning and care instructions are to be demonstrably handed over to the building owner or client by the contractor for flooring work as early as possible, sensibly with the tender submission.

Only in this way can the building owner receive the necessary information about the correct room climate, cleaning, and care as well as the proper use of the installed needlefelt floor covering in good time, so that this information can then be passed on to the covering user (if any) in good time.

Since floor coverings are usually used soon after the installation work has been completed, handing over the cleaning and care instructions with the invoice or after the installation work has been completed is usually too late.

An early handover, on the other hand, enables the client or floor covering user to adjust to the necessary cleaning and maintenance effort in good time.

In this context, explicit reference is made once again to the current commentary on ATV DIN 18365 "Flooring work" (issue 09-2016, item 3.1.5, page 66).

With the publication of these cleaning and care instructions, previous cleaning and care instructions become invalid.