

INSTALLATION OF TEXTILE FLOORING (BBKL 04)

INTRODUCTION

Textile floor coverings are floor coverings made from natural or synthetic fibers. In addition to the fiber type, textile floor coverings are also distinguished by construction, material composition, production method and application. Furthermore, textile floor coverings are differentiated by kind of pile (with or without pile). Floor coverings with pile have a textile wear layer made of yarns or fibers that protrude from a carrier (e.g. velour). Floor coverings without pile consist of a non-pile wear layer and possibly an additional backing layer such as needle punch.

The history of carpet flooring dates back about 10,000 years. Nomadic tribes used to felt sheep's wool into flat-woven fabrics that covered the floor. The oldest carpet flooring that still exists is about 2,500 years old and was discovered in the tomb of a Mongolian prince by archaeologists. Alexander the Great brought the first carpet flooring to Europe from the Orient in the 3rd century BC. In the 8th/9th century AD, the first large European carpet centers emerged in Spain, where besides trade, the production of carpet flooring was also advanced.

These days, carpet flooring is generally offered in rolls and tiles, as well as „fitted carpets“ or „outstanding carpets.“ A definition can be found in DIN EN 1307:2019-06 „Textile floor coverings - Classification“ and ISO 2424 „Textile floor coverings - Terms.“

FEATURES

The different formats require a differentiation in the laying method. While textile floor coverings usually are fully bonded by craftsman, textile tiles are primarily fixed or laid loose. Fitted carpets or outstanding carpets are generally laid loose over existing floor coverings.

The material type is also an important criterion for purpose of textile floor coverings. While silk carpets (natural fibers) are still considered as luxury items today, carpet tiles made of polypropylene and/or polyamide fibers are extensively used in office blocks, for example as a needle-felted carpet (needle punch) that is bonded.

NOTES AND HINTS ON ADHESION TEXTILE FLOOR COVERINGS

As usual, the installer is responsible for complying with his inspection duties according to DIN 18365 „Floor Covering Work“. The subfloor must be checked for evenness, sufficient strength,

cleanliness and appropriate residual moisture. The room climate conditions must also be checked. All common screed types and old subfloors (free from old adhesive, level compounds or other residues) and wood-based panels are suitable for all-over adhesion, in principle. The subfloors are usually prepared for adhesion by sanding, priming and all-over levelling. The STAUF product range offers various suitable primers, level compounds and installation materials. After proper and professional use of primer and level compound, installation can begin. It is recommended to sand the applied smoothing compound, using a single-disc sanding machine including sandpaper with a suitable grain size (usually 40-80 grain), in order to achieve optimal absorbency of the compound (and therefore better adhesion of dispersion adhesives) and to remove any inclusions and/or small irregularities that may have formed during levelling and to achieve a very even (homogeneous) surface.

Textile floor coverings should be stored in the room to be built in for about 24-48 hours before installation so they can adjust to the climate (acclimatization). Rolls should be roughly laid out in the room for this purpose, carpet tiles are preferably stored in the center of the room. After acclimatization, rough cutting of meter goods is carried out with a suitable professional floor layer's knife („dolphin knife“). Seams are always cut in the method recommended by the carpet manufacturer (e.g. double cut, pole passage cut or back side cut). Never butt the factory edges against each other (detailed information can be found in the laying instructions of floor covering manufacturer). After rough cutting, the adhesive is applied. Suitable products, such as universal or special adhesives, can be found in the STAUF product range or on our website at www.stauf.de/en/products/floor-coverings-adhesives/

Depending on type or composition of textile floor covering (manufacturing process, „stubbornness“, pattern, etc.), the rolls are flipped along or across the seam. Folding back across the seam is done up to about the room center, for flipping along the seam it is recommended to fold (flip) the covering about 1/3 to the right and left of the seam. Since the seams have been cut by the installer according to the manufacturer's specifications and the seam area or textile floor covering has been adjusted according to pattern/rapport or other criteria, it is particularly important to secure the covering against slipping before flipping or to flip the covering so carefully that a shift of the rolls is excluded. The adhesive is then applied with a suitable STAUF notched trowel. In the room center, it should be ensured that the application of the adhesive ends on a straight line, so that overlapping of the applied adhesive is largely avoided when applying the adhesive to the second half of the room. Missing spots and adhesive

TECHNICAL DATA SHEET

nests should also be avoided. After the appropriate flash time of the adhesive, the covering can be inserted into the adhesive bed within the open time. The covering is then rolled with a suitable roller (weight approx. 50 kg) or rubbed with a suitable "rubber" under sufficient pressure. Finally, the fine cutting of the covering is carried out, matching the geometry and conditions of the room. The still unglued surface is now glued using the same procedure. The adhesive is applied up to the existing clean adhesive edge. After about 45 minutes after the first rolling or rubbing, the covering should be rubbed/rolled again.

highly viscous products are sometimes applied with a very fine trowel in exceptional cases. After sufficient flash time and installing, the flooring must also be immediately rolled or rubbed and 45 minutes later re-rolled or re-rubbed.

Self laying carpet tiles are usually laid on a „slip stop“ (STAUF D 70) or a fixative (STAUF CT Fix), depending on the manufacturer's specifications and the area of use. The „slip stop“ primarily prevents horizontal movement of individual tiles, while a fixing creates both horizontal and vertical grip. The stickiness of the fixation can be regulated by the drying time and the open time. The products are usually applied to the substrate with a roller,

POSSIBLE SETUP:

SUBSTRATES

- ✓ Cement(flow)floors
- ✓ Calcium sulphate (flow) floors
- ✓ sanded mastic asphalt screed
- ✓ Pre-fab floors or wood-based panels (like chipboards (P4 to P7), OSB boards (OSB/2 to OSB/4))

PRIMERS

- ✓ Dispersion-based primers: STAUF VDP 130, STAUF VDP 160 or STAUF D 54
- ✓ Reactive primers: STAUF VPU 155 S sprinkled, STAUF VEP 195 sprinkled or primed with STAUF VDP 160, STAUF WEP 180 sprinkled or primed with STAUF VDP 160

LEVEL COMPOUNDS

- ✓ Cementitious levelling and smoothing compounds: STAUF XP 10, STAUF XP 20 or STAUF SSP Rapid
- ✓ Gypsum based levelling and smoothing compounds: STAUF GS or STAUF GS Basic

FLOOR COVERING ADHESIVES AND FIXATIONS

- ✓ Universal bonding: STAUF D 37, STAUF D 20, STAUF D 6
- ✓ Carpet bonding: STAUF D 11, STAUF D 8
- ✓ Fixation: STAUF D 70, STAUF CT Fix
- ✓ Bonding of conductive floor coverings: STAUF D 3-L

LIMITATION OF LIABILITY

The information provided above corresponds to the current state of the art. The information is purely indicative and non-binding, since we have no control over the installation process and because the actual installation conditions on site vary. Thus no claims can be made based on this information. The same is true for the commercial and technical advisory services that are provided without obligation and free of charge. We therefore recommend carrying out sufficient testing of your own in order to determine whether the result is suitable for the intended purpose 032023