Laying instructions No. 5a

For carpet floor tiles and planks

- Element EVA
- Element-Magnet-EVA
- Element Sonicwave
- Microcut
- SW 800
- Terrano Dimension
- System
- UNIT
- Sonicwave V143
- Sonicwave V144

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1.0 Preliminary Notes

The information in these laying instructions is of a general nature. They serve as explanations for the experienced floor layer and **do not** claim to be complete.

For more comprehensive information, please **be sure to read** our ”General additional information on laying technology”, which you can also access in full on our website www.anker.eu under the heading "Service" > "Downloads".

1.1 Climatic Condition

If you want to avoid application-related damage, you **have to make sure** that the carpet tiles are adapted to the later corresponding, usual usage room climate before they are processed. To do this, unpack them and lay them out in the room for between 6 and 12 hours without processing them.

In accordance with the recognised rules of technology and the information sheet "Beurteilen und Vorbereiten von Untergründen" (Assessment and Preparation of Substrates) of the "Bundesverband Estrich und Belag" (Federal Association for Screed and Coverings) (as of February 2002) and the VOB (*), Part C, DIN 18365, Paragraph 3.1.1, we **strongly advise you** not to apply the corresponding building materials (primers, fillers, adhesives) at a room temperature below 18°C and a floor temperature below 15°C and a relative humidity above 75 %.

1.2 Subfloor

Every textile floor covering, i.e. also carpet tiles, is a so-called semi-finished product that only becomes a finished product with its professional and proper processing. Therefore, the entire processing has an influence on the durability and thus, of course, also on the duration of its service life.

Therefore, the warranted performance characteristics of the carpet can only be used permanently if the installation is carried out as described in these installation instructions and in strict compliance with the corresponding "(General additional information on laying technology” of the current

"Verbände übergreifender Kommentar" (General commentary on associations) on the "Allgemeine Technische Vorschriften (General technical regulations) ATV / VOB, Part C, DIN 18365 Floor covering work", as of the September 2016 edition, 1st edition (*) – in particular section 3.4, paragraph 3 – as well as the latest bulletins and guidelines.

For this reason, all building materials, other materials and substances to be used must be such that – perfectly coordinated with each other – they guarantee a functional subfloor structure in accordance with ATV / VOB (*).For this reason alone, it is important for you that the recommendations and processing instructions of the flooring and building material and auxiliary material suppliers, e.g. of adhesives and levelling compounds, do not contradict each other.

However, if their statements are different, you as a processor are forced to compare the information of the manufacturers involved. In this respect, it is clearly more advantageous for you as a floor layer to remain in the system – that is, to use building materials from a single manufacturer – instead of using different products from different manufacturers, as these can quite obviously not be coordinated with each other.

2.0 Seam Pattern

The individual carpet tile elements are produced by punching or cutting. The visibility of the seam pattern depends not least on the respective surface. Apart from very few exceptional cases – with certain qualities in corresponding colour settings – the existing seams can be perceived more or less clearly.

This fact is especially true for structured surfaces when low-pile areas collide. As a rule, these appear as if there is a defect, although of course this does not correspond to reality. Such typical local product points do not allow for an optically quiet closed surface structure, but instead provide a very lively impression at least within a long period of time.

According to the current state of the art, it is impossible to leave carpet tile constructions with Bouclé or loop surfaces untouched, especially in the transverse or so-called head area.

As a result, the respective loop ends line up there. Due to this characteristic of the product, the seams are clearly visible, at least temporarily. So-called grazing light that enters the room through floor-to-ceiling windows considerably increases the visibility of seams. As a rule, this visual impression will correct itself as far as possible with increasing use.

The carpet tiles can be laid in a checkerboard pattern as well as in a T-seam or half-offset / masonry pattern (see Fig. 01 + 02)

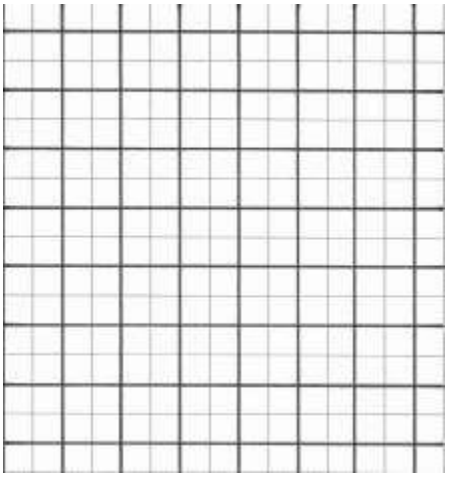


Fig. 01: Cross stitching
Checkerboard pattern laying

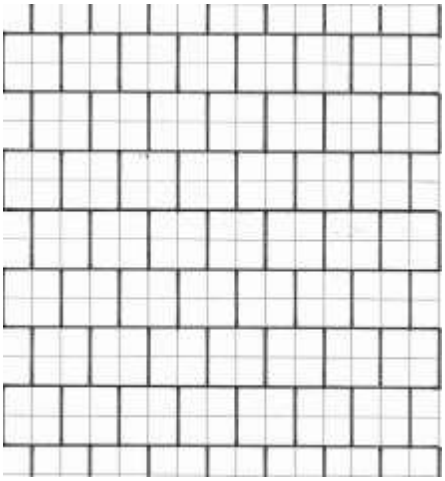


Fig. 02: T-seam / half-offset/
Masonry-pattern

3.0 The Laying Process

3.1 Basic Laying Planning

- Please note that only carpet tiles of the same manufacture may be laid next to each other. For this reason, you must check the batch numbers on the individual packages for consistency. These numbers are also clearly printed on the backs of the tiles.
- Although minor commercial deviations in the colour shade of such a production are possible, observing all instructions does not exempt you as a floor layer from checking the colour uniformity between the floor tiles before applying them.
- Complaints with regard to colour differences can no longer be accepted after the carpet tiles have been laid - as they are not saleable as new goods.

- According to the VOB (German Construction Contract Procedures) guidelines (*), a dry, level, dust and dirt-free subfloor is an absolute prerequisite for a perfect laying procedure. It is therefore extremely important that you completely remove existing textile floor coverings and adhesive residues beforehand.

3.2 Preparing for Laying

- As a rule, the carpet tiles are laid in the same direction - unless this contradicts the customer's wishes. The pile direction is marked on the back with an arrow.
- Measure both the length and the width of the room to be designed. If possible, you should also measure the diagonal to determine the extent to which there is an angular difference.
- As a rule, the room layout is prepared (graphically) on the basis of the dimensions given in the construction drawing by starting from two adjoining walls and then putting them into practice. Consequently, make the room layout from two adjoining walls. Measure a 90° angle at the distance of a tile in one corner of the room to be laid out and extend it accordingly at both walls by means of line A.
- This auxiliary line visibly shows the difference in case of an existing angle difference. Now move this auxiliary line parallel to it as auxiliary line A into the room at a distance of several tile measurements. (Fig. 03 + 04).
- To make work easier, make another auxiliary line, the auxiliary line B, which marks the right angle to the guide line A. It indicates where the first row of tiles ends so that you can continue to cover the room from there (Fig. 03).

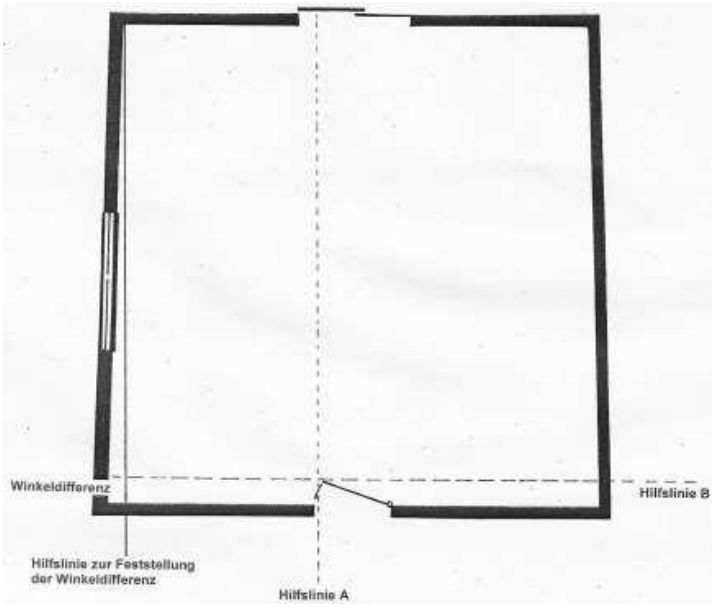


Fig. 03: Laying Planning

- To prevent lateral slippage during subsequent use, start laying the carpet tiles on the fully rolled anti-slip coating (ARB).

We recommend:

Manufacturer	Adhesive substance	Application quantity	Applied with	Flash-off time
ARDEX	AF 825	approx. 150 – 200 g/m²	Moltoprenerolle	≥ 60 min
UZIN	U 2.100			
WULFF	Fixiergel			
UZIN	U 5000	approx. 40 g/m²	Spray Unit	≥ 10 min

A primer applied to the substrate beforehand optimises their effect and the earlier the product is applied, before the recommended necessary flash-off time has elapsed, the more intensive the subsequent bond.

Although we **generally advise against this**, you can – however, **solely at your own responsibility** – also use another equivalent product of your choice.

As a matter of principle excluded from this, basically undesirable possibility, are all qualities in whose product description certain adhesives / adhesive substances are prescribed in order to fulfil the requirements of CE certification with regard to fire behaviour. These adhesives are part of the fire test that is included in the CE certification.

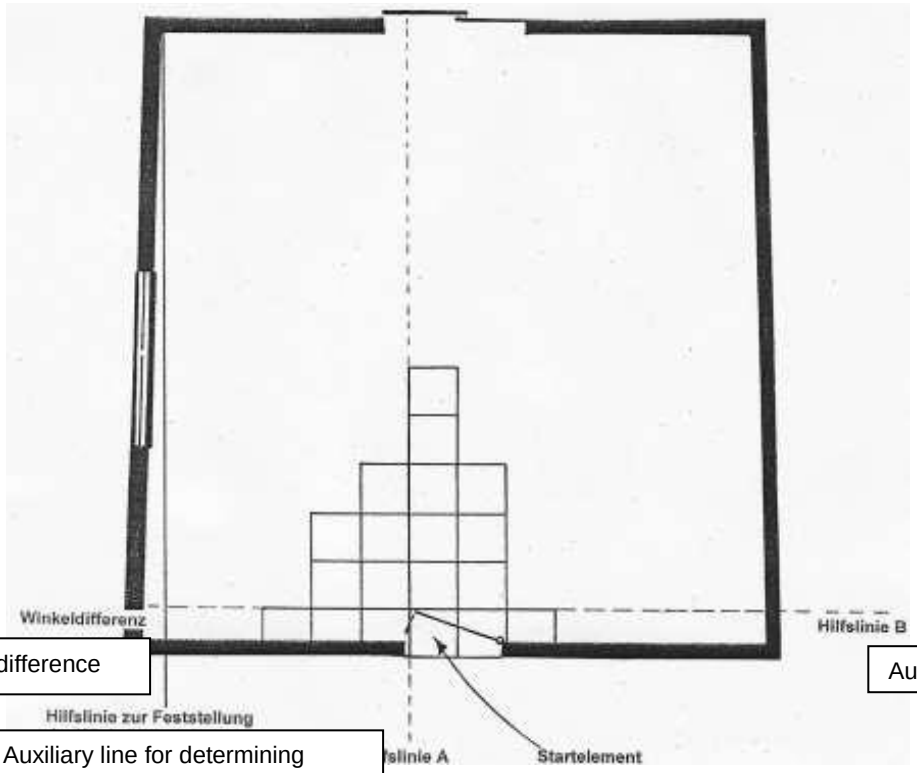
If adhesives other than those listed in the product description are used, both the stated fire behaviour according to DIN EN 13501-1 and the stated building material class according to DIN EN ISO 9239-1 and DIN EN ISO 11925-2 as well as the stated CE certification are **no longer legally valid**.

3.3 Laying Procedure

After applying the anti-slip coating (ARB) - observing the necessary flash-off time - lay the first element tile in the angle formed by the auxiliary lines A and B. Beginning with a starting element laid from the door (Fig. 04 + 05).

Starting with this tile, you then successively cover the entire room with one additional tile at a time. To do this, either lay a complete row of tiles from the door to the opposite wall first, or work in steps and with tight joints from the start. After the entire area has been laid out, please roll it with a ≥ 50 kg articulated roller.

After that, the carpet tile surface can be loaded, because anti-slip / anti-slip coatings and pressure-sensitive adhesives, which will never harden once they have dried transparently, are completely and unrestrictedly loadable.



Angular difference

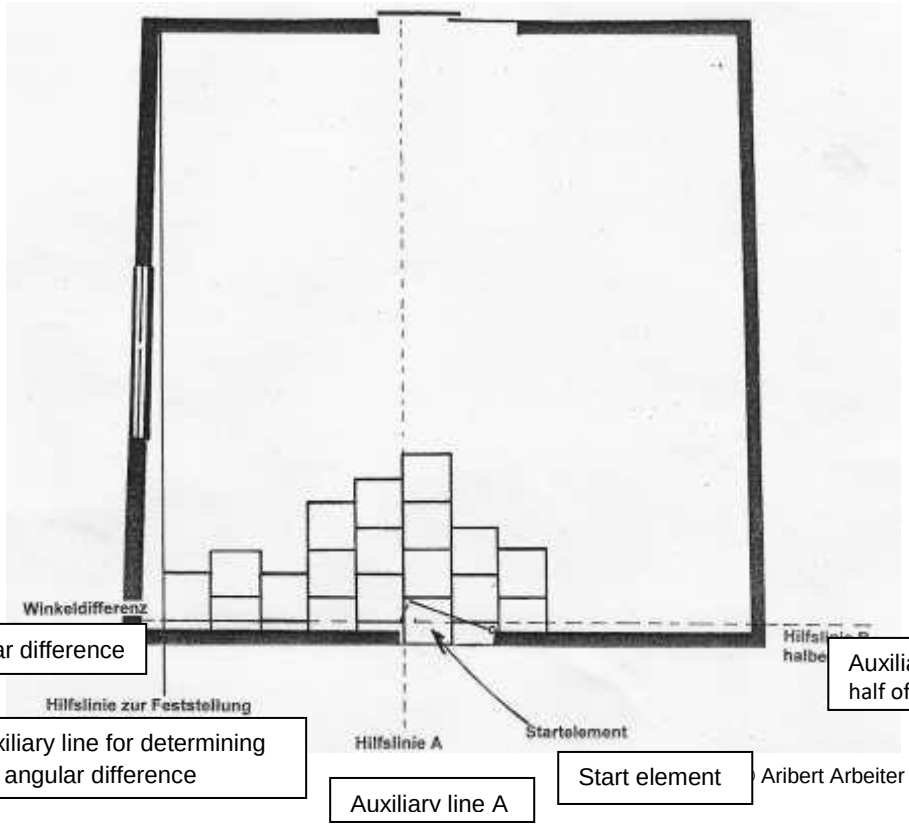
Auxiliary line B

Auxiliary line for determining the angular difference

Start element

Auxiliary line A

In the case of carpet tiles whose pile consists of higher than above-average pile material, you must take precautions to ensure that the individual tiles can be connected to each other easily and securely.



Angular difference

Auxiliary line B
half offset

Auxiliary line for determining the angular difference

Start element

Auxiliary line A

For example, you should - without exception always – either brush the pile of the already laid elements to the side using a root brush or press it to the side with a toothless spatula in such a way that the pile cannot be pressed down onto the adhesive substance when the next tile is laid.

You can cut the border tiles using the following methods:

- You transfer the corresponding dimensions to the carpet tiles to be cut to size. The cut will be executed with the knife along a rail.
- However, you can also place the element that is supposed to be adjusted on top of the last complete carpet tile laid out so that it butts up exactly against the wall. Now you can cut the carpet tile below with a knife, possibly with the help of a rail. Then simply exchange the positions of the two carpet tiles (Fig. 06).

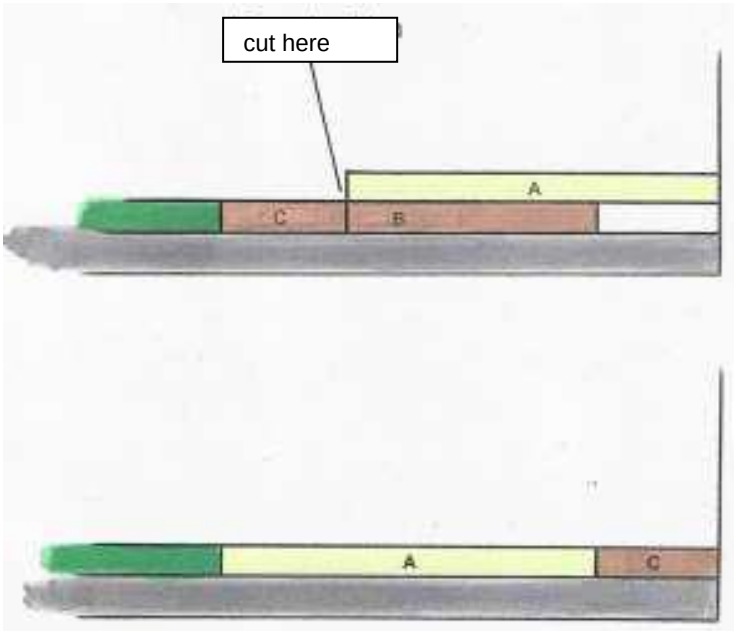


Fig. 06: Laying

In small rooms of approx. 25 m², it is generally sufficient to fix the edge tiles with suitable double-sided adhesive tape.

4.0 Laying with Smart Connect / Floating Laying

If the subfloor must not come into contact with a sticky substance, the use of so-called Smart Connect is an option.

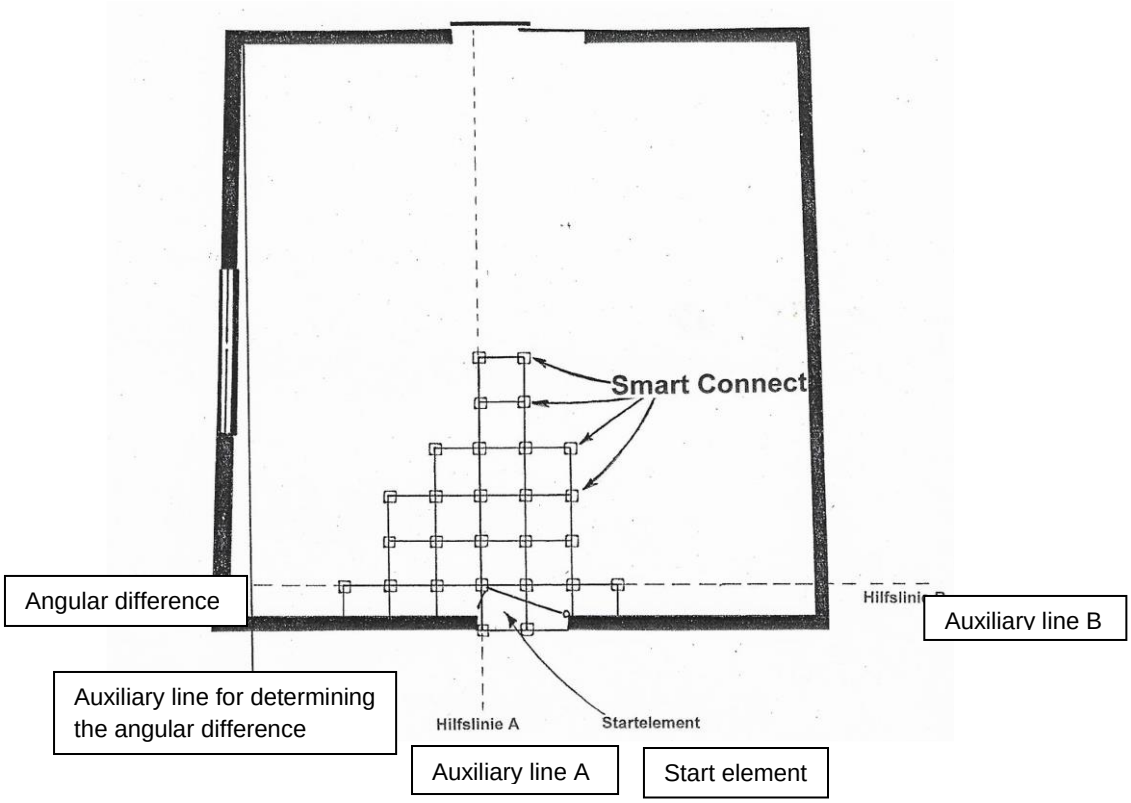


Fig. 07: Laying with Smart Connect / Flex Fitters © Aribert Arbeiter

Smart connect are square plastic plates with an edge length of approximately 7.5 - 10.0 cm. Smart Connect are fixed to the back of the tiles at the corner points of four abutting elements, thus creating a firm yet detachable connection between the tile elements.

Following the procedure described, the Smart Connect pad is pushed a little more than a quarter of its area under the corner of a tile. This is now pressed on. The position of the Flex Fitter is now fixed. The corners of the other three tiles are now pressed onto the Smart Connect plate in equal parts. The connection between the individual tiles is now established (Fig. 07). After the entire surface has been processed in this way, please roll it with a ≥ 50 kg articulated roller.

ATTENTION:

For the long-term use of the acoustic-improving special needle fleece back variations, such as SonicWave, SW 800, V143 and V144 the Smart Connect plads are not or only partially suitable. Therefore, when using these back variants, they may only be used as fastening or connecting material for a maximum period of six weeks.

5.0 Laying on double floor element installed on site

To ensure that any height differences and dimensional tolerances of the subfloor (max. 1.0 mm from one edge of an element to the edge of the adjoining double floor element) are as slight as possible or, preferably, not noticeable at all, you should not lay the carpet tiles – if this is feasible – congruently with the raised floor elements on the same. Ideally, the tile should lie on the intersection of four double floor elements (Fig. 08).

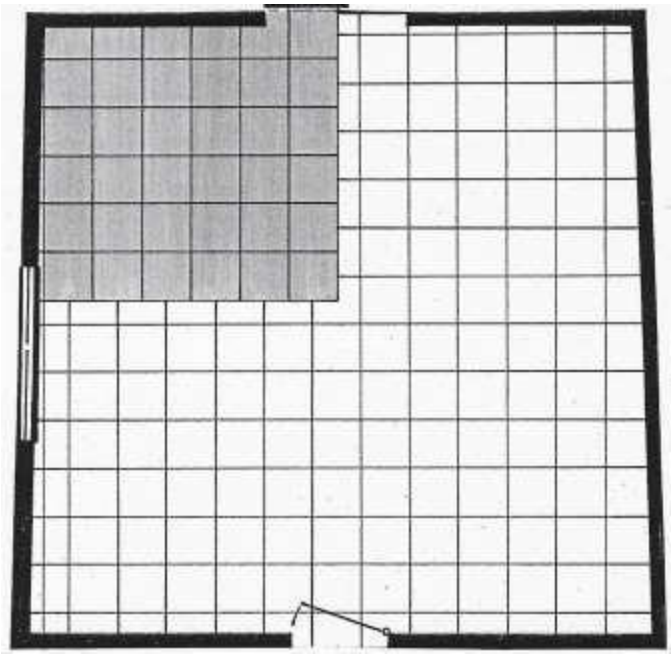


Fig. 08: Laying © Aribert Arbeiter

To enable **uncomplicated** removal of the double flooring elements, no sticky / adhesive substance may get into the joints, otherwise the elements would stick together. This can be ensured by masking off all joints with protective tape (e.g. masking tape) before applying the primer / ARB.

Although this is an extensive and time-consuming activity, it is definitely worthwhile. If you do not mask the floor, not only can the double floor elements no longer be lifted, but over time they will also crack and squeak when the floor is used. A complaint would therefore be inevitable.

At present, only when using the Uzin product U 5000 is it possible to dispense with covering the joints of the raised floor with adhesive tape.

6.0 Laying Element Magnet EVA

With the magnetic version, you only have to bear in mind that a metallised subfloor construction must be present for the magnetic version to function as such. Apart from that, you only need to comply with the specifications described in these laying instructions according to section 1 – 6.

To prevent cut, non-magnetised or too small and thus insufficiently magnetic tile pieces - for example in the edge area - from slipping during later use, press this incomplete element tile piece onto the full-surface application of the recommended anti-slip coating specified above or onto a suitable piece of double-sided adhesive tape.

7.0 Laying planks

Planks are merely tiles that have been altered in size. The quarter-square metre is 50 x 50 cm for carpet tiles, while it is available as 25 x 100 cm for planks.
The processing method of the planks is essentially comparable to the installation of carpet tiles. Only the application on the dried non-slip coating differs slightly.
The short edge is placed at the desired point and only then inserted over the long side. All other procedures are the same or individually insignificantly different compared to tiling and are therefore not of sufficient decisive relevance to be listed here in detail.

Additional Note

- Every time a carpet tile is lifted, dust inevitably gets onto the sticky layer of the anti-slip coating (ARB). The dust forms a separating layer and the adhesive coating loses its effectiveness over time. Especially during the construction phase, this circumstance must be taken into account.
- A new ARB must then be applied to ensure the usage properties of the pavement. If the same type of ARB is used, the residues of the old anti-slip coating do not have to be removed beforehand.
- **ANKER** has no influence on a proper and professional processing and for this reason assumes no guarantee for the processing result.

As mentioned before, in addition, please also take into account our website www.anker.eu where you can find even more interesting information under the term "Service" > "Downloads".

And on our ANKER YouTube channel you can experience the technology tips visually https://anker.eu/service/video-archiv/technik-tipps/

If you still have questions, please call us. We will be happy to help you:

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Appendix

Approximate quantities required- information on Smart Connect

…Checkerboard pattern laying

Tile quantity / Piece	Size / m²	Smart Connect requirement only at the corners of the inside of the tiles / surface **without** wall areas	Smart Connect requirement at the corners of the inside of the tiles **and** the wall areas
4	1	1	5
40	10	27	51
200	50	171	231
400	100	363	481
4.000	1.000	3.630	4.810
8.000	2.000	7.260	9.620
12.000	3.000	10.890	14.430
20.000	5.000	18.150	24.050

…T-seam or masonry-pattern

Tile quantity / Piece	Size / m²	Smart Connect requirement only at the corners of the inside of the tiles / surface **without** wall areas	Smart Connect requirement at the corners of the inside of the tiles **and** the wall areas
4	1	3	8
40	10	59	88
200	50	279	451
400	100	591	902
4.000	1.000	5.951	9.063
8.000	2.000	10.902	18.167
12.000	3.000	16.894	36.375
20.000	5.000	27.835	72.791

The data in this table are basically derived from squat, i.e. square or rectangular, dimensions. They do not indicate the additional requirement due to flex-fitters that have become unusable, nor the smaller requirement due to the use of tile pieces – as often happens, for example, in the edge area. In this respect, these figures are merely a calculatory guide and therefore without guarantee.