



## FITTING INSTRUCTIONS



# Fitting instructions

These fitting instructions have been written to comply with the sector-wide norms and standards as applicable in 2022.

## Preface:

Planning and the choice of method always depend on conditions at the site. Please note that danfloor a/s (danfloor) cannot be held responsible for the carpet-fitter's execution of the work – irrespective of compliance with these fitting instructions.

The use of adhesive or other materials must observe manufacturer's or supplier's instructions.

## danfloor's general instructions:

For the best results, please follow these general instructions.

## **Temperature, air humidity and humidity in the building fabric:**

Normally, room and floor temperatures should be within a range of 17-25 C and air humidity between 35-75% RH. Residual moisture in concrete floors must not exceed 75-90% RH. Also note instructions from the supplier of adhesive.

## **Installation surface for carpets:**

The floor must be level, firm and even, without cracks or damages. Note that, when fitting our flatwoven products with a short, uniform pile, that uneven structures in the sub-floor will be more visible once the product is installed.

Existing floorings such as vinyl, linoleum or laminate should be removed before fitting carpets.

For carpets, the sub-floor must have the same flatness as for other floor coverings – normally  $\pm 2\text{mm}$  measured with a 2 m straight edge.

The floor must be clean, dry and uniformly absorbent. To ensure these requirements, it may be necessary to use filler or to prime it first.

It is similarly important that any floor heating is turned off and the floor cooled before fitting, and two days after fitting.

## **Checking delivery, acclimatisation of carpets and adhesives:**

Place the carpet and other materials in the room 24 hours before fitting, for acclimatisation purposes.

Carpets must be laid out in order to perform a visual check for any visible defects. If deficiencies are found, the supplier must be contacted BEFORE the carpet is installed. Otherwise, the carpets are considered to be accepted as delivered.

Always follow the manufacturer's instructions with respect to adhesive and other materials.

## **Placing of carpet lengths within the room:**

- danfloor carpets are marked with arrows to show the production direction. Always lay the rolls in the same direction and to use only rolls from the same batch to ensure colour uniformity likeness between the lengths.
- Similarly, rolls should be laid out/fitted in roll number order.
- Where possible, joins should be avoided at exposed places in the room such as door openings, entrance halls and other highly exposed places.
- Carpet lengths should be installed selvedge to selvedge, to minimise any differences in colour between selvedges and the middle of the roll.

## Cutting of selvages and matching pattern repeats:

danfloor carpet rolls are delivered in standard widths of 400 or 500 cm widths, +- 1%. Selvage trimming from the factory may vary over the length of the carpet, which is why the selvages must always be neaten by a couple of centimetres on each side for carpets with uniform or small pattern repeats. For Colorpoint or Graphic tufting with large patterns, trimming and matching of the pattern must be performed. This is typically between 3 and 5 cm on each side.

It is important to take this into consideration when measuring the room before ordering.

If more trimming is required, resulting in a shortfall of material, the factory must be contacted before fitting continues. In some cases it will be possible to deliver extra material from the same production batch.

To make neat joins, the right tool must be used. See recommended cutting tools in the following table.

The best and neatest joins are made using carpet clamps in connection with full adhesion/wet adhesion. The appearance of the join depends on the type of carpet and its patterning. It is not always possible to achieve a completely invisible joint.

When fitting on stairs, the carpet should be fitted, or as a minimum finished, with a stair nosing.

## After fitting – cover and protection:

After fitting and before using, carpets should be protected against damage and/or dirt from subsequent users of the space, craftsmen in general, depending on the circumstances and expected load. Avoid covers that can break down and use only breathable membranes.

Types of backing and recommended fitting methods:

METHOD	FULL ADHESION					LOOSE FITTING	CARPET GRIPPERS	FLEXLOCK
	WET ADHESION	EASY RELEASE SYSTEM	WET FIXATION	ADHESION WITH TACKIFIER	DRY FIXING			
SG/AQ	++	++	++	o	+	+ <sup>1</sup>	o	
KT	++	++	o	o	+	+ <sup>1</sup>	o	
TD/UT	++	++	o	o	o	+ <sup>2</sup>	+	
UV	++	++	o	o	o	+ <sup>1</sup>	o	
TILES	++		o	++ <sup>3</sup>	o	o	o	+

o = NOT SUITABLE    + = SUITABLE    ++ = SUITABLE (RECOMMENDED)

Fixing, methods and terminology:

- **Full adhesion** is a type of carpet-fitting that involves the carpet being attached across the entire floor surface. The following methods are used:
  - **Wet adhesion:** The sub-floor is primed and the carpet fitted by means of dispersion glue spread with a notched trowel.
  - **Easy release system:** The carpet is installed, on a slip-primed subfloor, with wet dispersion adhesive applied using a. This method ensures that, if the carpet is removed, the damage to the sub-floor or prepared surface is minimal.
  - **Wet fixation:** The carpet is installed using a dispersion glue dispersed with a roller. This method should be used only where the subfloor is filled.
  - **Adhesion with tackifier:** For carpet tiles only. These are installed using tackifier adhesive dispersed with a roller and left until dry to the touch. Concrete floors must first be filled and primed.

- **Dry fixing:** The carpet is installed using an underlay of double-sided tape, which covers the entire surface.
- **Loose fitting:** The carpet is loose-fitted using only tape or glue at the ends and/or sides (for residential use only – contract installations must always be full adhered).
- **Flexlok pads:** For carpet tiles, corner fixings without adhesive.
- **Carpet grippers:** The carpet is installed on a cushioning layer and affixed to carpet grippers along the walls. This method is often used in hotel guestrooms and similar. It allows quick and easy replacement of the carpet.

## Recommended types of adhesive

	FULL ADHESION				LOOSE FITTING	IMO-APPROVED
ADHESIVE TYPE	WET ADHESION	EASY RELEASE SYSTEM	ADHESION WITH TACKIFIER	DRY FIXING	EDGE FIXING	
<b>ALFIX</b>						
ELASTOCOL 010*	++	o	o	o	o	
ELASTOCOL 030*	++	o	o	o	o	
ELASTOCOL 035*	o	o	++	o	o	
<b>ARDEX</b>						
AF 270*	++	o	o	o	o	
AF 720*	++	o	o	o	o	
AF 830*	o	o	++	o	o	
AF 2224*	++	o	o	o	o	
PREMIUM AF 260*	++	o	o	o	o	
PREMIUM AF 2100*	++	o	o	o	o	
<b>BOSTIK</b>						
ADHESITECH*	o	o	++	o	o	
BOSTIK FIX TAC PLUS*	o	o	++	o	o	
<b>CASCO</b>						
CASCOPROOF SOLID 3480*	++	o	o	o	+	X
TÆPPELIM 3457*	++	o	o	o	+	
CASCOPROOF TAPEFIX*	o	o	++	o	o	X
CASCO FIXERINGSLIM 3455*	o	++	o	o	o	X
<b>DANA LIM</b>						
DANATEC TÆPPEFIX 278*	o	o	++	o	o	X
GULV- VÆGLIM EKSPRES 245*	++	o	o	o	+	X
<b>F. BALL</b>						
STYCCOBOND F3*	+	o	o	o	+	
STYCCOBOND F40*	+	o	o	o	+	
STYCCOBOND F41*	o	o	+	o	o	
<b>HB FULLER</b>						
SWIFT TAK 2050*	o	o	+	o	o	
<b>KILTO</b>						
M1000 ECO*	++	o	o	o	+	
PRO GRIP T3793*	o	o	++	o	o	
<b>LECHNER</b>						
POLIPLEX 325*	++	o	o	o	o	
POLIPLEX ECO*	++	o	o	o	o	
HYCOSTIK	o	o	++	o	o	

ADHESIVE TYPE	FULL ADHESION				LOOSE FITTING EDGE FIXING	IMO-APPROVED	IMO-GODKENDT
	WET ADHESION	EASY RE-LEASE SYSTEM	ADHESION WITH TACKIFIER	DRY FIXING			
<b>MAPEI</b>							
ULTRABOND ECO 170*	++	o	o	o	o	o	
ULTRABOND ECO 195*	++	o	o	o	o	o	
ULTRABOND ECO 200*	++	o	o	o	o	o	
ULTRABOND ECO 220*	++	o	o	o	o	o	
ULTRABOND ECO 350*	++	o	o	o	o	o	
ULTRABOND ECO 373*	o	o	o	++	o	o	
ULTRABOND ECO 800*	o	o	o	++	o	o	
ULTRABOND ECO FIX*	o	o	o	++	o	o	
ULTRABOND ECO TACK*	o	o	o	++	o	o	
<b>SCHÖNOX</b>							
FLOORTEX*	++	o	o	o	o	o	
EMICLASSIC*	++	o	+	o	o	o	
COMBI PROOF*	++	o	o	o	o	o	
MULTIFLEX	o	o	o	++	o	o	
<b>STAUF</b>							
STAUF CT FIX*	o	o	o	++	o	o	
<b>TAPE</b>							
SIGAN 1*	o	o	o	o	++	o	
SIGAN 2*	o	o	o	o	++	o	
SIGAN 3*	o	o	o	o	++	o	
<b>THOMSIT</b>							
THOMSIT T425	o	o	o	++	o	o	
<b>TREMCO</b>							
TREMCO SF200*	o	o	+	++	o	o	
<b>UZIN</b>							
UZ 57*	++	o	o	o	o	o	
UZ 90*	++	o	o		o	o	
UNIVERSALFIX*	o	o	++	o	o	o	
UZIN U2100*	o	o	+	++	o	o	
UZIN U2500*	o	o	o	++	o	o	
<b>WULFF</b>							
WULFF AC 11*	++	o	o	o	o	+	

## Carpet-fitting instructions for Broadloom carpets:

### Full adhesion:

Full adhesion should be used when installing floors larger than 25m<sup>2</sup>, or in offices and similar where rolling furniture may be used – such as office chairs on rollers, trolleys, etc. Full adhesion may take the form of wet adhesion, slip adhesion or dry fixing, depending on the expected traffic on the carpet.

### Wet adhesion:

This is the strongest form of adhesion. The glue is dispersed with a notched trowel and may be worked on for some time. This allows the person installing the flooring opportunities and time for adjusting joins, etc. during fitting.



- When installing the single length, the carpet should be roughly trimmed along its length and placed in position. Half of the width is then flipped over lengthways and the adhesive is applied to the sub-floor. The flooring is then installed in the wet adhesive. The other half is flipped over and the process is repeated.
- When joining two or more lengths, trim selvages and match the pattern. Apply adhesive to roughly 1/3 of the carpet width on each side of the join and press the corrected edges together. Affix carpet clamps over the join. Flip the rest of the carpet over and glue down the middle 1/3 of the carpet width. Repeat the procedure for lengths 2-3, etc.
- Immediately after installation, use a drum roller to flatten and trim the flooring along walls, etc. For the best results, trimming should start from the middle and out towards the corners. Drum-roll the flooring once more lengthwise within 30-40 minutes of applying the adhesive.

#### **Double Stick:**

- Originates from a method designed to incorporate a cushioning layer (underlay).
- The carpet is installed using dispersion glue as for wet adhesion. It is important that each layer is smoothed with a drum roller between procedures.
- danfloor is responsible for the quality of the carpet in itself, and only when installed directly on a fixed sub-floor. danfloor is not liable for the fitting, choice of underlay and other characteristics of this method.

#### **Easy release system:**

- This method is useful where a replacement of the flooring might be made at a later date. Replacements can be made quickly and without damage to the sub-floor.
- Prepare and treat the subfloor with slip primer. Once this has dried, disperse the adhesive with a notched trowel, as for the wet-adhesion procedure above.
- Ensure that both the primer instructions and adhesive instructions are followed.

#### **Wet adhesion: (Suitable for lower traffic volumes only – household)**

- Apply adhesive with a roller. Install the carpet in the wet adhesive along the same lines as the wet adhesion procedure above.

#### **Adhesion with tackifier: (Suitable only for carpet tiles)**

- Carpet tiles are installed on a roller-applied tackifier that is dry to the touch on a prepared sub-floor. See the section on carpet tiles.

#### **Dry fixing: (Seldom used)**

- The carpet is installed on double-sided tape, which covers the entire surface.

#### **Loose fitting:**

- Loose fitting should be used only for fitting carpets in private homes and for areas of less than 25m<sup>2</sup>.
- Loose fitting involves fixing the end edges along the walls (contrary to the production direction) using double-sided carpet tape no less than 5 cm wide.
- Trim the carpet along the edges.
- Press the carpet firmly down on the tape.
- When cutting angles or similar, the double-sided tape is used at the centre of the join and strengthened with an extra strip of tape on both sides of the join.

### Alternative edge-fixing and joining using dispersion glue:

- After cutting as above, the carpet is flipped back along the end walls.
- Apply dispersion glue along the length for roughly 25-30 cm along end walls and press the carpet firmly down.
- For joins, carpets are adjusted at the join and both edges folded back. A strip of dispersion glue is applied along approximately 25-30cm of both sides of the join and the carpet is laid carefully down.
- Avoid getting adhesive on the pile and overlapping: press carefully to form a neat join.

### Carpet grippers:

- This type of fitting is used for rooms where a quick and simple change of carpet might be required at a later date, whilst retaining the underlay. An example is hotel rooms and similar.
- The use of carpet grippers demands exact workmanship and skilled fitting. The result is excellent comfort, footfall sound insulation and elasticity. The carpet can be further tensioned subsequently.
- When joining carpets, weld with a suitable welding tape before trimming and tensioning.
- Pay attention to the characteristics of the underlay for expected use and degree of comfort required.

### Flexlok – Specially designed for carpet tiles

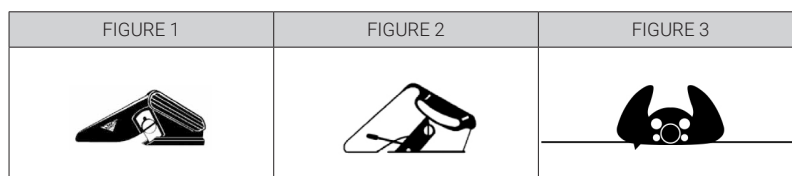
- Flexlok pads are used for corner fixings on carpet tiles. Read more about them in the section on carpet tiles..

### Flatwoven carpets:

- As suggested by the name, flatwoven carpets have a minimal total thickness and relatively firm surface. They are used primarily for contract installations with high traffic.
- Flatwoven carpets must be glued directly to a prepared sub-floor. Requirements for the subfloor condition are extremely high. Even a minor lack of smoothness will show up as a shadow on the surface of the carpet. It is also important, that the right tools are used. Blades should be changed frequently to avoid fraying.
- The carpet-cutter must be held at an oblique angle to the strip being cut.
- Joins across the production direction are not recommended and should be avoided. However, if one is made, adhesive should be applied at the edges before joining, to minimise the risk of subsequent fraying.

### Recommended carpet knives depending on type of construction and backings:

CONSTRUCTION	TYPE OF BACKING	CUT FROM	USE CARPET CUTTER SHOWN IN FIGURE NO.
LOOP - PILE (LOOP PILE)	SG/AQ, KT	BACKSIDE	2
	UT, UV, TD	FRONT SIDE	1
CUT - PILE (VELOUR)	SG/AQ, KT	BACKSIDE	2
	UT, UV, TD	FRONT SIDE	1
FLATWOVEN	TD, KT	FRONTSIDE OVERLAP	3





# Fitting instructions for patterned carpets

## Planning:

For perfect pattern-matching and smooth installation, good planning is essential, from the moment of ordering to the arrival of the carpet rolls at the place of fitting.

Thorough and correct preparation involves, for example, exact drawing and measurements and an installation plan. This to avoid errors in ordering and production.

## On delivery of the carpets:

Always check the product on arrival so that any errors and faults come to light. This includes transport damage. Never cut or prepare the carpet before checking that the pattern-matching can be carried out as expected. If in doubt contact danfloor.

Roll out all lengths and note the sequence of batch and roll numbers – with respect to your fitting plan for each room. Colorpoint or Graphic tufted carpets must be trimmed to pattern match.

For patterned carpets ordered in 400 cm widths, account should be taken of up to 3 - 5 cm waste on each side when trimming for pattern-match. This and the pattern repeat must be taken into account when measuring and ordering.

When fitting several lengths, it is important that adhesion does not commence before all pattern repeats accord. All joins must be trimmed and pattern-matched over all lengths before adhesion. Always adjust the pattern from the middle of the longitudinal direction, to minimize subsequent stretching. In large rooms with two or more lengths, begin pattern-matching and glueing of strips in the centre of the room.

## Tolerances:

Carpets can be flexible to varying degrees, irrespective of production methods, certain tolerances are permitted.

danfloor refers to the common European standard EN14159 concerning certain permitted tolerances in carpets – pattern disruptions, bends in the pattern, diagonal distortion and pattern deviations in the longitudinal direction. With the correct tools, deviations that are less than, or equal to, the tolerances in that standard can be adjusted for by skilled fitters. As a general rule, it is not possible to make a complaint on the basis of these acceptable deviations. See diagrams below.

# Fitting instructions for carpet tiles

danfloor contract tiles can be used in locations with severe demands such as offices and public areas. They may be installed in corridors, meeting the most stringent demands with regard to fire escape routes, etc. Naturally, carpet tiles can also be used in private homes.

## Fitting methods:

Carpet tiles cannot be loose-laid. They must generally be installed by means of a tackifier, slip-, or wet adhesion. The use of a tackifier enables lifting and replacing of the tiles without further adhesion – for example on raised access floors. Flexlok pads for corner fixing without glue is another application.

## Recommended types of tackifier:

Below is a list of recommended suppliers and tackifier types, depending on the task. Consult these suppliers for further advice and always follow the adhesive supplier's instructions.

## Fitting:

For the best result, we recommend fitting carpet tiles in a chequerboard pattern. The product instructions must always be followed in order to comply with the conditions of the guarantee. The instructions ensure the best results.

## Recommended method for fitting carpet tiles using a tackifier:

The sub-floor must be clean and dust-free. Absorbent sub-floors should be primed to ensure the best results. Determine the direction of fitting and mark out the start point.

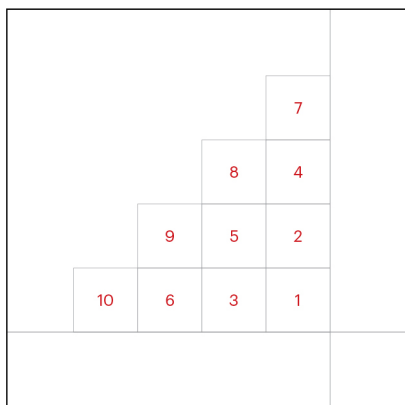
From the starting point, draw two precise 90-degree lines using a laser or similar. Apply the tackifier with a suitable roller and allow the adhesive to dry to touch.

Check the direction of the arrows and fit the tiles using the stair-technique as illustrated. The tiles must lie close to each other but should not be pressed. Ensure that pile material does not get trapped in the joins.

Trimming along walls and elsewhere can be done by folding the tile and cutting with a curved knife.

It is a good idea to mark the arrow direction on small offcuts for later use. It is also recommended that small pieces and inserts are installed with wet glue to ensure permanent adhesion.

Finish by rolling the flooring with a drum roller along both the length and width. Vacuum-clean the flooring and cover it as per our recommendations, to protect from subsequent traffic from other craftsmen.



Mounting using the stair method ensures an accurate mounting by following the recorded perpendicular chalk lines.

TYPE OF GLUE	CONSUMPTION G/M <sup>2</sup>	DEALER
ALFIX ELASTACOL 035	CA. 120-150	ALFIX
ARDEX AF 830	CA. 120-150	ARDEX
BOSTIK ADHESITECH	CA. 120-150	BOSTIK
BOSTIK FIX TAC PLUS	CA. 120-150	BOSTIK
CASCOPROFF TAPEFIX	CA. 120-150	CASCO
DANATAC TÆPPEFIX 278	CA. 120-150	DANA LIM
ECODUR S20	CA. 120-150	ECODUR
HB FULLER SWIFT TAK 2050	CA. 120-150	HB FULLER
KIILTO PRO GRIP T3793	CA. 120-150	KIILTO OY
MAPEI ULTRABOND ECO 373	CA. 120-150	MAPEI
MAPEI ULTRABOND ECO 800	CA. 120-150	MAPEI
MAPEI ULTRABOND ECO FIX	CA. 120-150	MAPEI
MAPEI ULTRABOND ECO TACK	CA. 120-150	MAPEI
STAUF CT FIX	CA. 120-150	STAUF
THOMSIT T425	CA. 120-150	THOMSIT
TREMCO SF200	CA. 120-150	TREMCO
UZIN U2100	CA. 120-150	UZIN
UZIN U2500	CA. 120-150	UZIN