

INSTALLATION GUIDE

Bentzon Carpets

CONTENTS

- 4 General conditions
- 6 Backings and recommended installation methods
- 8 Fitting instructions for wall-to-wall carpets
- 10 Installation instructions carpet tiles & planks (BC350)
- 12 Recommended types of adhesives

INSTALLATION INSTRUCTIONS

These instructions have been made in accordance with the latest available information and are regularly updated.

Please note, ensuring the floor surface is adequately prepared and choosing the correct fitting method are paramount to a successful installation. Bentzon Carpets can't be held responsible for performance issues where this hasn't been considered or actioned, as our instructions assume this is complete for each specific project. The use of adhesives and other materials should always be in accordance with the manufacturer recommendations.

GENERAL CONDITIONS

To achieve the best result, the following must be completed before work begins:

The room

- Carpet should be fitted when the indoor climate in the room matches that recommended for the adhesive. The temperature of the room and the underlay should normally be between 17 and 25 degrees centigrade, with relative humidity between 35 and 75%.

The floor

- The floor has to be level, solid and firm, without cracks and edges. This is especially important when fitting woven carpet and carpet with short, even pile, as the structure of the subfloor will otherwise be clearly visible on the carpet surface.
- Like the finished floor, the subfloor must be level, normally ± 2 mm maximum deviation on a 2 m straight edge.
- Linoleum and vinyl flooring should be removed before fitting carpet.
- The floor must be clean, dry, evenly absorbent, and free from oil and grease.
- Heavily absorbent underlay should be treated with a primer.
- The humidity of a concrete subfloor must not exceed 75 to 90% RH depending on the requirements of the adhesive manufacturer.
- Any underfloor heating must be off and cooled prior to installation and should remain off for two days. Where possible the carpet and subfloor must be protected from direct sunlight during the installation and for two days afterwards.

Materials

- Place the carpet and other materials in the room to be fitted a minimum of 24 hours before the work begins, in order that the carpet and any adhesive being used are acclimatised. This is especially important during the winter months due to fluctuations in temperature.
- Make sure all carpets are laid out for checking.
- Before cutting, the carpet must be inspected for visible faults. If any visible faults are found, the supplier must be contacted for further discussion and agreement before work continues. If fitting has begun without prior contact and consent, the carpet is considered to have been accepted as is.
- If for any reason it's necessary to temporarily install defective goods, double-sided adhesive tape should be used, rather than any recommended adhesive.
- Application of adhesive, tape or other material must always take place in accordance with the recommendations of the manufacturer.

Placing

- The carpet lengths must always be placed in the same direction and carpet from the same production run must be used in the same room.
- The carpet must be fitted using the correct batch number order.
- As a principal rule the lengths must be installed with the joins perpendicular to the most light-giving windowed wall.
- Where possible joins should be avoided in exposed places, such as doorways, entrances and under chairs fitted with castors.
- Lengths of carpet should be fitted selvedge to selvedge in order to avoid colour differences.

Cutting edges

- Joins must always be made at trimmed edges and with repeat and pattern-matching if applicable.
The carpet must be fitted selvedge to selvedge to avoid any colour differences.
- Joins should always be made by cleanly cutting edges. Lengths should be fitted selvedge to selvedge in order to avoid colour differences.
- When fitting the carpet, calculate based on cutting about 2-3 cm off each side at all joins.
- After cutting the edges, it's important to check for light/dark edges before fixing the carpet to the floor with adhesive. If there are light/dark edges after cutting, the carpet-fitter should try to cut more off the sides. In isolated cases, the fitter may need to cut off more than 2-3 cm. If this means there is too little material, the fitter should contact the factory before continuing work.
- To make professional joins, the fitter needs to use the correct tools. Bentzon Carpets recommends that fitters use different kinds of cutting tools for different types of carpet.
- When fitting with adhesive the best - and the best looking – joins are achieved by using carpet clamps.

Failure to follow the above-mentioned guidelines will mean that the carpet guarantee is voided.

Stairs

- When fitting carpet on stairs they should always be protected by nosings.
- On stairs, the pile direction must go downwards at a right angle to the front edge of the step.

After installation

- After installation, the carpet should be protected against damage and soiling from traffic of subsequent craftsmen until all work is complete and it's ready to be unveiled. The extent and type of covering will depend on the type of load, traffic intensity and whether a dry or wet load can be expected.
NB! Any protective covering used must be dissipative and not rub off on the finished flooring. A laminated moisture-resistant membrane mustn't be used as a protective covering as it isn't dissipative.
- No furniture, equipment etc. should be placed on the carpet before the floor adhesive is completely dry and tempered, which can take up to 24 hours - otherwise there's a risk it may result in visible pressure markings.

BACKING TYPES AND RECOMMENDED FITTING METHODS

Recycling/sustainability

When fitting a new carpet from Bentzon Carpets, we recommend you check the recycling options of your existing carpet and any local recycling initiatives or capability. In many countries, the option exists to contact recyclers who can either reuse or recycle carpets and carpet tiles. These can usually be found by doing a quick search online.

Bentzon Carpets recommends that new broadloom carpets are fitted using an easy release primer which facilitates removal and recycling at the end of their lifetime.

The fitting instructions are valid for the following products with:

- Woven textile backing described as "secondary backing" or "WT" Woven Textile
- Compact felt backing described as "ECC"
- Tila and plank felt backing described as "BC" standard backing for Bentzon Carpets tiles and planks

METHOD	FULL ADHESION					LOOSE LAYING	ON GRIPPERS
	WET ADHESION	EASY RELEASE	WET FIXATION	TACKIFYING	DRY FIXATION		
WT	++	++	0	0	0	+2	+
ECC	++	++	0	0	0	+1	0
BC	+	+	0	++3	0	0	0

0 = NOT SUITABLE + = SUITABLE ++ = VERY SUITABLE (RECOMMENDED)

1. Cuts of less than 25 m2 must be edge fixed* with tape or adhesive. Cuts larger than 25 m2 should be full fixated.
2. Cuts of less than 25 m2 can be edge fixed with adhesive or grippers. Cuts larger than 25 m2 should be full fixated.
3. Please note that a special fixation adhesive is required.

Carpets are textiles, so it's not always possible to prevent the carpet from expanding at the edge when fitting. This may cause "bulges" to occur after fitting. This can be remedied by taking up the carpet and tightening the fitting at the edge.

NB! When installing cuts of more than 25 m2, full fixation should always be applied when the carpet is exposed to extra heavy loads, including, but not limited to: castor chairs, trolleys, pallet trucks and areas that are subject to heavy footfall traffic overall.



Description of full adhesion

Full fixation of the carpet on the whole floor surface ensures total fixation of the carpet. This is achieved by one of the following methods:

- Wet adhesion: The carpet is fitted with a wet dispersion adhesive applied with a trowel.
- Wet fixation: The carpet is fitted with a wet fixation adhesive applied with a roller. This must only be used on a filled subfloor.
- Tackifying: The carpet is fitted with a finger dry adhesive which has been applied beforehand with a roller. This must only be used on a filled subfloor. Concrete floors should be filled and primed.
- Dry fixation: The carpet is fitted on a fully adhered underlay with full surface tape or Velcro.

NB! We don't recommend fitting on top of existing flooring such as linoleum.

FITTING INSTRUCTIONS FOR WALL-TO-WALL CARPET

General rules

Please observe the general rules on pages 4 & 5.

Edge fixation with glue

- Roll the carpet out on the floor and trim it along the edges.
- Pull back the carpet along the end walls.
- Apply glue in a width of around 30 cm to the subfloor along the end walls and firmly press down the carpet.
- Where there are joins, apply 30 cm of glue on both sides of the join.

Full fixation

Full fixation should be used when fitting flooring measuring more than 25 m² and always in rooms where wheeled furnishings are used on the carpet, including office chairs with castors. Full fixation is done using wet adhesion, slip priming or dry fixation.

Wet adhesion

The strongest fit is always with wet adhesion, but with regard to the underlay the adhesive is often applied as "late" wet adhesion in order that water infiltration is diminished.

- The carpet is rolled out and cut roughly to length. Approximately half of the carpet - in the length direction - is rolled back towards the centre and the adhesive is applied to the subfloor with a trowel, after which the carpet is fitted onto the wet adhesive. The process is repeated for the adjoining length.
- When joining the lengths the edges are trimmed and pattern-match established. After this approximately one third of the carpet is glued down on each side of the join and the edges are pressed together. Use carpet clamps at the join. The rest of the length is glued down.
- Immediately after glue-down the carpet is drum rolled and cut along the edges. Edge cutting must always be done starting from the middle of the carpet length and then cutting towards the edges.
- Second drum rolling should be done 30-40 minutes later in the length direction of the carpet.

Easy release system

This is the perfect solution if, at a later stage a fast and time-saving change of flooring is desired without damaging the subfloor and to facilitate the recycling process at the end of use.

- The subfloor is pre-treated with a slip primer. When the primer is dry a dispersion adhesive is applied with a trowel and the procedure mentioned under wet adhesion must be followed.

Wet fixation (Only for domestic carpets)

- Fixation adhesive is applied with a roller and the carpet is fitted onto the wet adhesive using the same procedure used for wet adhesion.

Dry fixation

- Dry fixation is made by covering the whole floor area with double-sided adhesive Sigan tape in 75 cm width.
- Sigan is rolled out in cuts on the whole floor - the covering paper remains.
- The carpet is laid out and roughly cut in length.
- When joining cuts the edges are trimmed and pattern-match established.
- The carpet is cut and laid loose onto the floor. Edge cutting must always be made from the middle of the room and cut towards the corners.
- More than half of the carpet length should be rolled back towards the centre and the covering paper removed from the first two Sigan-lengths. Carefully put the carpet back into position. Continue with the second half of the carpet and subsequent lengths until completion.

Especially for flat-woven products

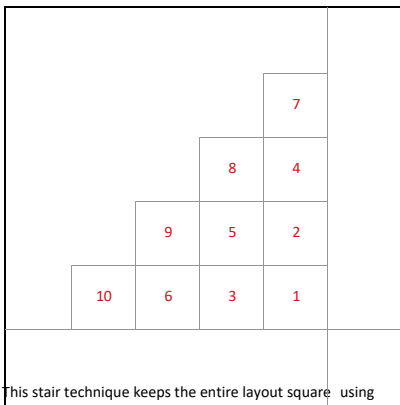
Flat-woven carpet cannot/may not be fitted on underlay and grippers or by using double-sided tape.

Flat-woven carpet must be glued directly to the subfloor.

- It's critical that edges of joins are trimmed with a sharp knife at all times to prevent them from fraying.
- Trim using double cut
- The carpet cutter should be held at a slight slant against the length which has to be joined.
- Cross joins are not recommended, but where this is done, they should be glued at the edges.

INSTALLATION INSTRUCTIONS FOR TILES & PLANKS (BC350)

Carpet tiles and planks are especially suitable for business including offices, hotels, restaurants, shops, banks, hospitals, nursing homes and other spaces where high volumes of footfall and furnishings make great demands on how carpet wears. (Where applicable, carpet can be used in living quarters, including corridors and stairs).



Installation methods

Carpet tiles aren't suitable for loose laying, but can be installed using wet adhesion, easy release system or with a tackifier, which allows easy refitting of the tiles. The subfloor must be level, firm and even, with no cracks or rough edges.

To finish, drum-roll the entire area at least twice. Once in the long direction and once across the width of the room, see page 8.

Tackifying

Is applied and normally recommended for tiles with the advantage of it being possible to reinstall the tiles with the same adhesive in a quick and straightforward manner.


Adhesive types

When tackifying is used, only the approved adhesives below may be applied. They mustn't be diluted with water. See also the instructions from the supplier of the adhesive/tackifier.

TYPE	CONSUMPTION G/M2	RETAILER
EGE MODULAR HÆFTLIM	APPROX. 120-150	EGE CARPETS A/S
ALFIX ELASTACOL 035	APPROX. 120-150	ALFIX
ARDEX AF 830	APPROX. 120-150	ARDEX
BOSTIK ADHESITECH	APPROX. 120-150	BOSTIK
BOSTIK FIX A570 MULTI TACK	APPROX. 120-150	BOSTIK
BOSTIK FIX TAC PLUS	APPROX. 120-150	BOSTIK
CASCOPROFF TAPEFIX	APPROX. 120-150	CASCO
DANATAC TÆPPEFIX 278	APPROX. 120-150	DANA LIM
ECODUR S20	APPROX. 120-150	ECODUR
EUROCOL 542 EUROFIX TACK PLUS	APPROX. 120-150	EUROCOL
HB FULLER SWIFT TAK 2050	APPROX. 120-150	HB FULLER
KIILTO PRO GRIP T3793	APPROX. 120-150	KIILTO OY
MAPEI ULTRABOND ECO 373	APPROX. 120-150	MAPEI
MAPEI ULTRABOND ECO 800	APPROX. 120-150	MAPEI
MAPEI ULTRABOND ECO FIX	APPROX. 120-150	MAPEI
MAPEI ULTRABOND ECO TACK	APPROX. 120-150	MAPEI
SCHÖNOX TACKIFIER	APPROX. 120-150	SCHÖNOX
STAUF CT FIX	APPROX. 120-150	STAUF
THOMSIT T425	APPROX. 120-150	THOMSIT
UZIN U2500	APPROX. 120-150	UZIN

Procedure

The installation direction is clearly indicated by an arrow on the back of the tiles.

 To achieve the best joins, checkerboard installation is recommended. Here, the arrows are placed perpendicular to each other.

Alternatively, certain modular carpet tile qualities can be installed linear with the arrows pointing in the same direction. Labels indicating the recommended installation direction are placed on the boxes. To comply with the product guarantee, the installation direction indicated on the boxes must be followed.

Procedure

- Vacuum the floor thoroughly and apply primer to absorbent subfloors if necessary.
- Determine fitting direction.
- Determine starting position. The starting position should be somewhere close to the middle of the room. From this point, two perpendicular lines are plotted by laser, using the 3-4-5 method or the quadrant method. It's important that the lines through the starting point are exactly at right angles to one another. Extend the lines with chalk lines in all four directions to cover the entire fitting area.
- Apply adhesive with a new or thoroughly cleaned mohair roller. Wait for the adhesive to dry, when transparent.
- If necessary, dampen an area of 2-3 m² closest to the starting point with water spray. This makes it easier to ease the tiles into the correct position, especially when using large 96 x 96 cm carpet modules.
- Check the direction of the arrow and affix the tiles consecutively. Remember to always slide the modules into position in order to avoid pressing pile down into the joints. The tiles should be butted-up close to each other but not squeezed.
- Bend modules along walls and other straight edges over the back, then cut quickly and easily using a curved knife. Bentzon Carpets backing will not leave marks on walls or skirting boards. Irregular edges around pipes, pillars, etc should also be cut using a curved carpet knife.
- Don't forget to mark the pile direction on offcuts. This makes it easier to use them in other parts of the room.
Offcuts measuring less than 20 cm in either direction should be fitted with wet adhesive to ensure permanent fixture and stable positioning of even very small offcuts.
- To finish, drum-roll the entire area at least twice. Once in the long direction and once across the width of the room.
- Vacuum the tiles and cover the floor so that it's protected from dust, subsequent tradesmen or other traffic. See general protective covering recommendations on page 5.
- Avoid too much pressure on adjoining tiles as this will cause them to "peak" or "buckle".

Zigzag tiles

We recommend Zigzag tiles are offset by half a tile or irregular along the long side. Zig-zag tiles mustn't be stacked.

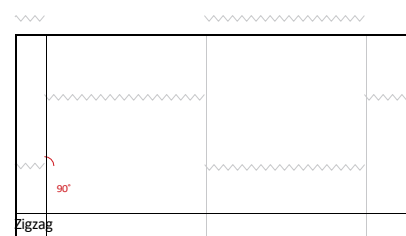
When fitting, row 1 must remain ahead of row 2, etc.

NB! It's important that Zigzag tiles are laid completely straight and closely aligned.

NB! Check measurements before calculating starting point.

NB! Not suitable for installation floors.

NB! Fitting time is longer



RECOMMENDED TYPES OF ADHESIVE

The following types of adhesive have been tested and can be applied for the specific installation method. Recommended amount of adhesive for wall-to-wall carpets are 350-450 g/m²/B1.

ADHESIVE TYPES WET	FULL FIXATION					LOOSE LAYING	IMO-APPROVED
	WET ADHESION	EASY RELEASE	WET FIXATION	TACKIFYER	DRY FIXATION	EDGE FIXATION	
EGE CARPETS A/S							
EGE MODULAR TACKIFIER* EGE	o	o	+	++	o	o	◆
90RH ADHESIVE*	++	o	o	o	o	+	◆
ALFIX ELASTOCOL							
010* ELASTOCOL	++	o	o	o	o	o	
030*	++	o	o	o	o	o	
ELASTOCOL 035*	o	o	o	++	o	o	
ARDEX AF							
270* AF	++	o	o	o	o	o	
720* AF	++	o	o	o	o	o	
830* AF	o	o	o	++	o	o	
2224*	++	o	o	o	o	o	
PREMIUM AF 260*	++	o	o	o	o	o	
PREMIUM AF 2100*	++	o	o	o	o	o	
BOSTIK							
ADHESITECH*	o	o	o	++	o	o	
FIXAS70 MULTI TACK* FIX	o	o	o	++	o	o	
TAC PLUS*	o	o	o	++	o	o	
CASCO							
CASCOPROOF SOLID 3480*	++	o	o	o	o	+	◆
TÆPPELIM 3457* CASCOPROFF	++	o	o	o	o	+	◆
TAPEFIX* CASCO FIXERINGSLIM	o	o	o	++	o	o	◆
3455*	o	o	++	o	o	o	◆
DANA LIM							
DANATAC TÆPPEFIX 278*	o	o	o	++	o	o	◆
GULV- & VÆGLIM EKSPRES 245*	++	o	o	o	o	+	◆
ECODUR							
ECODUR S20*	o	o	+	++	o	o	◆
EUROCOL							
EUROCOL 542 EUROFIX TACK PLUS	o	o	+	++	o	o	◆
HB FULLER							
SWIFT TAK 2050*	o	o	o	++	o	o	
KILTO							
M1000 ECO* PRO	++	o	o	o	o	+	
GRIPT3793*	o	o	o	++	o	o	
LECHNER POLIPLEX							
325* POLIPLEX	++	o	o	o	o	o	
ECO*	++	o	o	o	o	o	
HYCOSTIK	o	o	o	++	o	o	

ADHESIVE TYPES WET	FULL FIXATION					LOOSE LAYING	IMO-APPROVED
	WET ADHESION	EASY RELEASE	WET FIXATION	TACKIFYER	DRY FIXATION	EDGE FIXATION	
MAPEI							
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	
SCHÖNOX							
FLOORTEX*	++	o	o	o	o	o	
EMICLASSIC*	++	o	+	o	o	o	
COMBI PROOF*	++	o	o	o	o	o	
MULTIFIX*	o	o	+	o	o	o	
TACKIFIER*	o	o	o	++	o	o	
STAUF							
STAUF CT FIX*	o	o	o	++	o	o	
TAPE SIGAN							
1* SIGAN	o	o	o	o	++	o	
2*	o	o	o	o	++	o	
SIGAN 3*	o	o	o	o	++	o	
THOMSIT							
THOMSIT T425	o	o	o	++	o	o	
TREMCO							
TREMCO SF200*	o	o	+	++	o	o	
UZIN							
UZ 57*	++	o	o	o	o	o	
UZ 90*	++	o	o	o	o	o	
UNIVERSALFIX*	o	o	++	o	o	o	
UZIN U2100*	o	o	+	++	o	o	
UZIN U2500*	o	o	o	++	o	o	◆
WULFF							
WULFF AC 11*	++	o	o	o	o	+	

o = Not suitable. + = Suitable. ++ = Recommended.

* Meet the European GEV-Ecode EC 1 demands with as little emission into the surroundings as possible. (GEV

=Gemeinsam Emissionskontrollierte Verlegewerkstoffe e.V.)