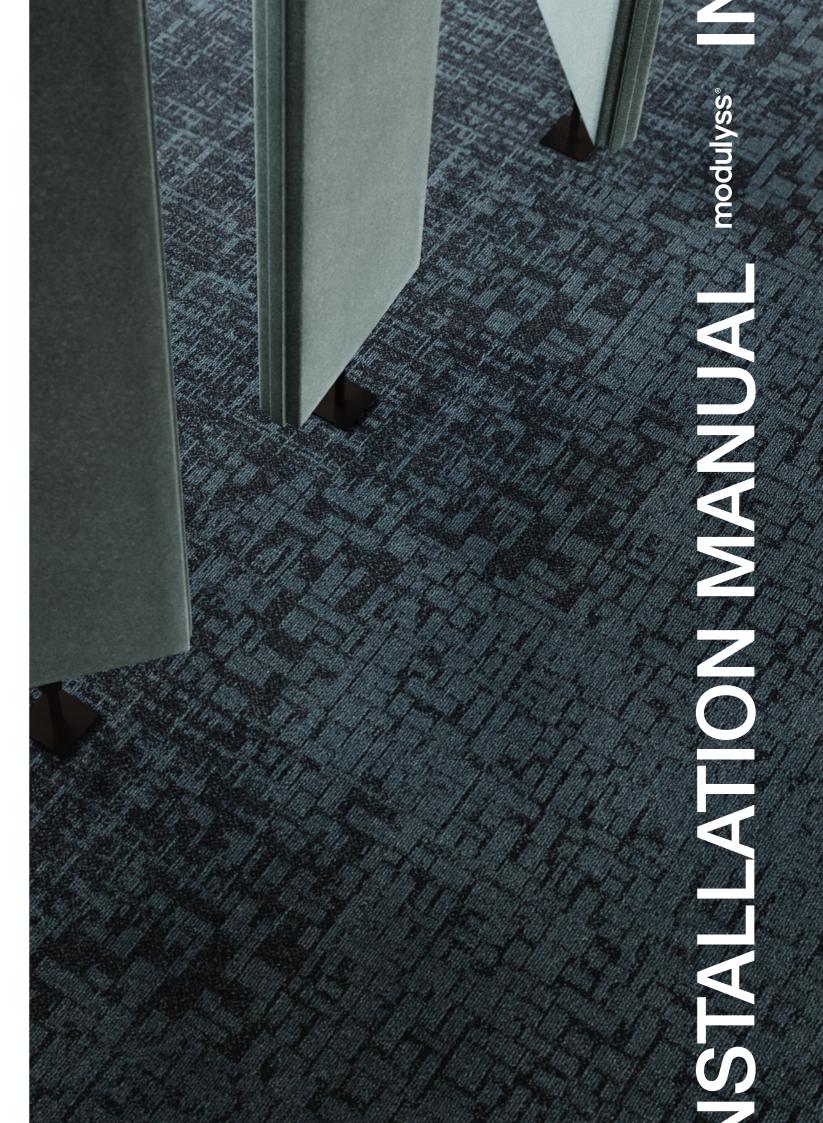
# modulyss®

# INSTALLING CARPET TILES

INSTALLATION

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# 01 BEFORE YOU START

Modulyss carpet tiles are available in different colours, structures and patterns. As a result, the creative possibilities are endless. For optimal results, a correct installation is essential, so please follow these instructions carefully.

#### **CHECK THE TILES**

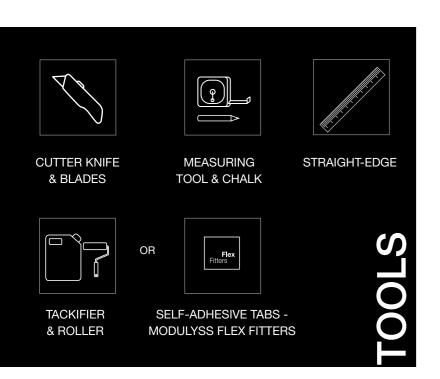
Do they correspond to the requested specifications (product name, colour, dimensions)? Are they from the same dye lot? Do the tiles show any defects or damages?

In case of problems, do not start the fitting, but contact your supplier to find a solution.

#### STORING THE TILES

If you are not installing the tiles immediately, store them in a closed room where the temperature is between 18°C and 28°C.

A pallet contains approximately 20 boxes. Do not stack more than 2 pallets or 10 boxes on top of each other, this is to avoid pile crushing. The boxes must be stored neatly at all times.



### ACCLIMATISATION & SITE CONDITIONS

Take your carpet tiles out of the boxes and let them acclimatise for at least 24 hours. The room temperature should be between 18°C and 28°C. The relative humidity should be between 30% and 65%.

#### UNDERFLOOR HEATING

In a room with underfloor heating, the underfloor



heating system must be switched off at least 24 hours before installation.

Moreover, the underfloor heating system should be operational for at least 10 days prior to the installation of the carpet tiles to ensure that all residual moisture has been evaporated.

48 hours after the installation of the carpet tiles, the underfloor heating system can be gradually brought back up to temperature by increments of 5°C per day, until it reaches standard operating temperature conditions, with a maximum of 27°C on the back of the carpet tiles. Make sure the heating circuit is fully waterproof.

#### TRIAL INSTALLATION

Prior to each installation, up to 100 m<sup>2</sup> can be installed for assessment purposes. If a party has complaints about a deviation from the original specification, and/ or a manufacturing defect is discovered, modulyss must be notified before further installation of the carpet tiles.



# 02 SUBFLOOR PREPARATION

#### STEP 1 IDENTIFY THE SUBSTRATE TYPE

Modulyss carpet tiles can be installed on any subfloor that is:

- **✓** DRY
- ✓ CLEAN
- ✓ FIRM
- **✓** STABLE
- ✓ FLAT

Traces from previous floor coverings or adhesiveresidues must be removed. These general conditions must be respected regardless of the subfloor type.

#### SUBSTRATE TYPES

#### **CEMENT-BASED SUBFLOOR**

A concrete subfloor must be level, clean and dry.

If the surface is granular or porous, a primer should be applied. This primer must be compatible with the chosen adhesive. Please follow the adhesive manufacturer's instructions.

#### WOOD

Installing your carpet tiles on a wooden subfloor such as plywood, chipboard, MDF or hard-board is possible. However, you must always keep an eye on the indoor climate because there is a risk of deformation from moisture or overload. A load of 75 kg distributed over 20 cm should not result in deformation of the floor surface. Uneven floorboards must be carefully sanded and levelled to avoid any risk of imprints being seen through the carpet tiles. Wood block floors should be smooth, sound and securely bonded. If the wooden subfloor is in poor condition and very uneven, we recommend replacing it.

#### ABSORBENT SUBFLOOR

If the subfloor is highly absorbent, a primer must be applied. Brushing the substrate with a wet brush will help determine the degree of absorption: the faster the water disappears, the higher the substrate's absorbency.

To know which type of primer you should use can be determined by testing how quickly the water disappears.

Please follow the primer manufacturer's instructions.

#### RAISED FLOORING SYSTEMS

If the carpet tiles are being installed on raised access floor systems, the subfloor needs to be stable and even. Height differences between the panels may not exceed 1 mm.

#### **CARPET**

A carpet cannot be used as a subfloor because it does not have the right properties.

#### STEP 2 CHECK THE CONDITIONS

The subfloor must be stable and dry in accordance with the requirements of national building standards and regulations. Before the installation can start, the following conditions must be respected:

The ambient temperature should be between 18°C and 28°C.

The subfloor should have a minimum temperature of 18°C.

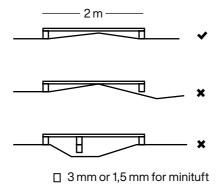
The relative humidity should be between 30% and 65%.

To be respected 48 hours before installation, during installation and 72 hours after completion.

#### STEP 3 LEVEL THE SUBFLOOR

Any cracks, tears or irregularities in the subfloor must be patched and levelled and allowed to dry to ensure the subfloor is flat and smooth. Any unevenness of the subfloor must not be larger than 3 mm measured over a length of 2 m. Measured over a length of 0.2 m, the maximum permissible deviation is 1 mm.

The permitted deviation is even lower for minituft carpet tiles. the subfloor for minituft carpet tiles must not be larger than 1.5 mm measured over a length of 2 m. Measured over a length of 0.2 m, the maximum permissible deviation is 0.5 mm.



#### STEP 4 CHECK MOISTURE CONTENT

At the moment there is no adhesive capable of gluing a textile floor covering to a (permanently) damp subfloor. Before installing modulyss carpet tiles, the substrate must be permanently dry. The relative humidity of the ambient air should be between 30% and 65%. It is generally recommended that the equilibrium moisture content of the wood be limited to 8% to 12%.

For screeds and concrete floors, the permissible moisture content differs, depending on the type of screed. This table indicates the limit values of the permissible moisture content:

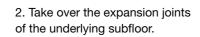
Type backing	Subfloor type	Allowed moisture content (*)	Relative humidity (**)
WATER DAMP PERMEABLE	Cement-based	3 cm-%	75%
WATER DAIMP PERMEABLE	Anhydrite-based	1 cm-%	75%

<sup>\*</sup> based on the Carbide method

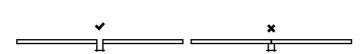
#### STEP 5 INSTALLATION IN A NEW BUILDING

It is characteristic of new buildings that they are still settling and this can result in shrinkage and extension. And this is most pronounced in the first 6 months. We recommend postponing the installation of the carpet tiles for at least 6 months. If this is not possible, we recommend the following guidelines for installation:

1. Provide an expansion joint along the walls.







# 03 INSTALLATION WITH TACKIFIER

modulyss carpet tiles can be installed using anti-slip adhesive or semi-permanent tackifier. Tackifiers are adhesives that form a durable, non-hardening film on the subfloor after application and drying. Tiles are firmly held in place, but can also easily be removed or exchanged.

A modulyss representative can recommend tackifiers according to the type of backing. Always check the instructions of the adhesive manufacturer and never install modulyss carpet tiles on a wet adhesive.

To install modulyss carpet tiles using tackifier, follow our step-by step guide on the next pages.



<sup>\*\*</sup> surface relative humidity

### THE METHODS

Consult the arrow printed on the back of the carpet tiles. This arrow is an aid for laying the product in different directions:

The technical datasheet shows which installation methods are recommended for the carpet tile in question. Please choose one of the recommended installation methods. If you would like to deviate from the described installation options, always consult us first.

A non-recommended installation method will invalidate the warranty. Carpet tile seams will never be invisible, and are usually most visible immediately after installation. Seams become less and less visible with routine vacuuming and use.

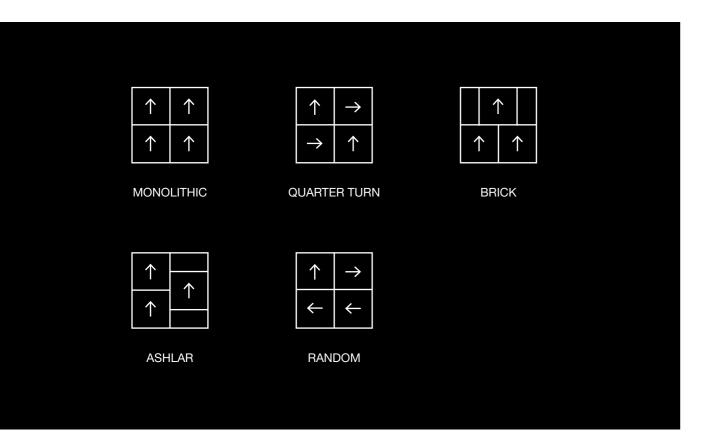
MONOLITHIC/ The carpet tiles are laid in the same direction (arrows pointing in the same direction) to create a uniform floor covering.

QUARTER TURN/ The arrow on the back of the carpet tile is alternately turned 90°

BRICK/ All the arrows point in the same direction, but each tile is moved half a row horizontally so that the 4 corner points never coincide.

ASHLAR/ All the arrows point in the same direction, but each tile is moved half a row vertically so that the 4 corner points never coincide.

RANDOM/ The tiles are placed randomly without any recurring pattern.



### THE STEPS

#### 01/ START

Measure the room to find the best starting point for a maximum size perimeter tile. See graphic 1.

Proper planning should avoid cutting perimeter tiles more than half their width. Do not work with full tiles directly up to the wall because no wall is perfectly straight.

#### 02/ MARK

Apply at least two perpendicular chalk lines to the substrate. See 2A. These chalk lines must extend over the entire length and width.

The intersection point of the chalk lines (see 2B) is best determined in advance so that the desired result can be obtained with as little cutting waste as possible.

#### 03/ SPREAD

Use a roller to apply a thin layer of tackifier or anti-slip adhesive to the subfloor and ensure that it is evenly distributed over the entire rug area. Always check the instructions of the adhesive manufacturer and respect the recommended waiting times.

#### 04/ LAY THE TILES

Refer to the technical data sheet to see the possible installation method(s) per product. Select one of the possible methods or consult your installation plan. Lay down your tiles along the chalk lines. Refer to the arrows on the back of the tile to see the installation direction. Have a look at diagram 4 to see an example of a quarter turn installation.

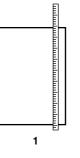
#### 05/ CUT

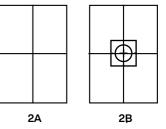
In most cases, to finish the room, carpet tiles will have to be cut with a suitable floor cutting knife. The carpet tiles must be cut from the back (see graphic 5). Always place the uncut side against the adjacent tile.

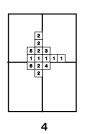
#### 06/ CHECK

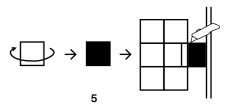
When the installation is complete, the tiles should fit together tightly but they should not be compressed. If the tiles do not fit nicely, open seams can occur. If they are compressed too tightly, bows or domes may appear in the tiles. An additional check can be performed during the installation by measuring the length of 10 tiles that have no visible openings, bumps or overlaps. The size must be equal to 10 times the size of the tile (+/- 0.2%). If this is the case, you have installed the carpet tiles correctly.











### **GOOD TO KNOW**

INSTALLING SPECIAL STRUCTURES, PATTERNS, GRADIENT TILES

#### PATTERN REPEAT

The construction, pattern repeat or cutting of the tiles can result in an undesired visual end result. This can be easily adjusted by replacing the tile with another tile. For example, when 2 tiles with a stripe along the edge are placed next to each other, you will see a thicker stripe. By replacing one of these tiles, you can avoid this visual effect.

#### MINITUFT CARPET TILES

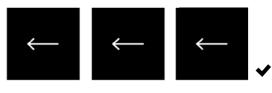
Minituft carpet tiles require extra attention during installation. Due to the low-profile structure, open seams will be visible immediately. A tight fitting installation is an absolute must to minimise this. A thorough check of the seams should be carried out and adjusted by replacing the tiles with another tile if required.

#### **CUT PILE STRUCTURES**

As the name implies, cut piles have cut-through pile loops. When installing these carpet tiles, ensure the pile does not get trapped between the seams of the tiles. See graphics underneath.







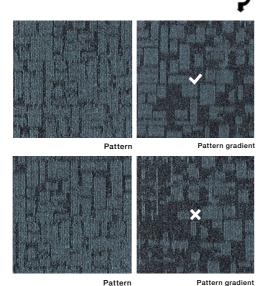
1 2 3

#### **GRADIENT TILES**

Gradient tiles merge two patterns, enabling fluid floor designs and seamless transitions. During installation, remember 3 key rules:

- 1. follow your design
- 2. the design overrules the arrow on the back
- 3. apply 180° U-turn if necessary

Don't worry if, after installation, the arrows on the back of the gradient tiles don't all point in the same direction. Some might be turned by 180° - and that's perfectly okay!



#### TIP-SHEARED STRUCTURES

Tip-sheared carpet tiles are constructed as a loop pile with different heights. When the carpet is sheared, the higher loops are cut, but the lower ones are not. This creates an alternating pattern of loop and cut piles. The varying pile heights can create a visible seam effect during installation. This can be improved by interchanging tiles.

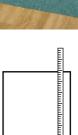
# 04 INSTALLATION WITH FLEX FITTERS

modulyss carpet tiles with back2back can be installed using self-adhesive tabs like our flex fitters. These self-adhesive tabs are an ideal alternative to the traditional adhesives used for installing carpet tiles. With practically no VOCs (Volatile Organic Compounds), this flexible method offers a sustainable solution.

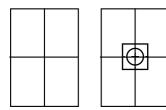
To install modulyss carpet tiles using flex fitters, follow our step-by step guide on the next pages.



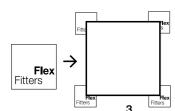


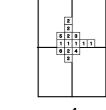


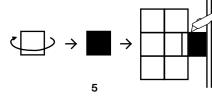
2B



2A







12

### THE STEPS

#### 01/ START

Measure the room to find the best starting point for a maximum size perimeter tile. See graphic 1.

Proper planning should avoid cutting perimeter tiles more than half their width. Do not work with full tiles directly up to the wall because no wall is perfectly straight.

#### 02/ MARK

Apply at least two perpendicular chalk lines to the substrate. See 2A. These chalk lines must extend over the entire length and width.

The intersection point of the chalk lines (see 2B) is best determined in advance so that the desired result can be obtained with as little cutting waste as possible.

#### 03/ STICK DOWN

Flex fitters or self-adhesive tabs should be stuck down to connect 5 tiles. See graphic 3. Start by sticking the first tabs. Then continue as you lay the tiles. At the edges of your area, use 1 flex fitter to connect 2 tiles.

#### 04/ LAY THE TILES

Refer to the technical data sheet to see the possible installation method(s) per product. Select one of the possible methods or consult your installation plan. Lay down your tiles along the chalk lines. Refer to the arrows on the back of the tile to see the installation direction. Have a look at diagram 4 to see an example of a quarter turn installation.

#### 05/ CUT

In most cases, edge tiles will have to be cut with a suitable floor cutting knife. The carpet tiles must be cut from the back (see graphic 5). Always place the uncut side against the adjacent tile.

#### 06/ CHECK

When the installation is complete, the tiles should fit together tightly but they should not be compressed. If the tiles do not fit nicely, open seams can occur. If they are compressed too tightly, bows or domes may appear in the tiles. An additional check can be performed during the installation by measuring the length of 10 tiles that have no visible openings, bumps or overlaps. The size must be equal to 10 times the size of the tile (+/- 0.2%). If this is the case, you have installed the carpet tiles correctly.

#### THINGS TO CONSIDER AFTER INSTALLATION

Please ensure that the installed floor covering is protected sufficiently if other workers are expected to enter the area.

Place heavy equipment on hardboard plates so the carpet does not get damaged.

Ensure that no temperature peaks occur during the 7 days following installation.

During the entire life of the carpet tiles, the limit values of 18°C and 28°C, and the relative humidity between 30% and 65%, should be retained.



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