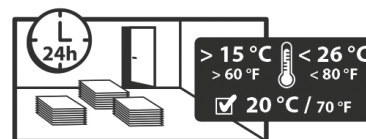


# FLOORS IN BUILDINGS

Refer to the applicable standard: NF DTU 53.1 P1-1 dated 12 November 2016.

## [410] LAYING GRADUS CARPET TILES & PLANKS

Tiles must be taken out of their boxes at least 24 hours before installation and stored in the room in which they are going to be laid. Examine the materials prior to installation to ensure that there are no visible defects. If such defects exist, please notify GERFLOR and do not begin installation without its prior approval.




The Streetwise, Stratus, Lafite Connect, Brickworks, CityScene and Urban Myth ranges have a bitumen backing and are laid with a tackifier adhesive. Please note that the Emphasis range should only be used as an accent colour to complement other product ranges. It should not be used in large surfaces or in areas of heavy traffic.

For information about the product and its areas of use, see the Technical Data Sheet: [www.gerflor.com](http://www.gerflor.com)

### 1. AREAS OF APPLICATION

CONDITIONS FOR ADHESIVE LAYING	GRADUS tiles/planks must be laid with Tackifier.
INSTALLATION TEMPERATURE	The substrate temperature must be at least +10°C.
USAGE TEMPERATURE	The ambient temperature must be at least +12°C.
TYPE OF PREMISES	Dry rooms, low traffic areas: P2/3-E1 such as: Offices - Corridors - Shops located in upper floors - Waiting rooms, restaurants, conference rooms, reception areas, cinemas - Hotel rooms, etc.

### SUBSTRATES

TILES	If the substrate requirements are met and more than 90% of the room's surface is in good condition, remove the defective tiles, fill the gaps with levelling compound, and then lay the tiles / planks after the substrate has dried. Otherwise, the entire floor covering will have to be taken up and the substrate prepared from scratch. The tiles must not have any uneven areas and the grouting joints must not be > 5 mm wide and 1 mm deep. Otherwise, fill them with a grouting product or levelling compound over the entire surface.
CONCRETE FLOOR, PAINTED CONCRETE, LEVELLING CONCRETE LIQUID CEMENT SCREEDS, CALCIUM SULPHATE BASED ANHYDRITE SCREED <i>(see section 2.2)</i>	If necessary, apply a levelling compound to eliminate any surface irregularities. Sand, dust off and vacuum carefully and apply a primer. Gerflor recommends that you refer to the technical specifications of the primers for instructions. Painted concrete: thickness < 1 mm (cross hatch test: defects < 20%).
PVC COMPACT TILES AND COMPACT ROLLS <i>(asbestos-free)</i> , COMPACT LINOLEUM	If the substrate requirements are met and more than 90% of the room's surface is in good condition, remove the defective tiles, fill the gaps with levelling compound, and then lay the tiles after the substrate has dried. Otherwise, the entire flooring will have to be taken up and the substrate prepared from scratch.
RESIN	There must be no defects in the resin, (loss of adherence, chalking, chipping). Otherwise the entire flooring will have to be taken up and the substrate prepared from scratch.
RAISED ACCESS FLOORS <i>(see DTU 57.1 standard)</i>	Sag under the 2-m rule at any location on the raised floor surface must not exceed 2 mm.
WOOD-BASED PANEL FLOORING (DTU 51.3) ON JOISTS OR ON BATTENS	Authorised provided it is not on crawl space or on paving.
GLUED PARQUET	<b>Complete removal.</b>
PARQUET NAILED ONTO BATTENS SPACED NO MORE THAN 0.30 M APART WITH VENTILATION OF THE INSIDE FACING	<b>Complete removal or lining boards. Not allowed on crawl space.</b>
FLOATING PARQUET OR PANEL	<b>Complete removal.</b>
LAMINATED FLOOR	<b>Complete removal.</b>
OSB BOARD	Possible.
TEXTILE SUBSTRATES (CARPET), FLEXIBLE UNDERLAYS AND SUBSTRATES	<b>Prohibited.</b>
	
VERANDA	<b>Prohibited.</b>
UNDERFLOOR HEATING	
UNDERFLOOR HEATING WITH CIRCULATING HOT WATER AT MAXIMUM 28°	Possible.
RADIANT UNDERFLOOR HEATING SYSTEM THE REGULATIONS REQUIRE ≤ 0.15 M² X° KELVIN / WATT	Possible.
LOW TEMPERATURE WATER REVERSIBLE UNDERFLOOR HEATING	Possible.

**Any loose-lay substrate must be completely removed. If the substrate is not in this list: please contact us.**

**IMPORTANT:** The information in this document is valid from: 01/01/2019 and is subject to change without prior notice. We are continuously making technical improvements to our products; before starting any work, our customers should check with us that this document is still in force.

# [410] LAYING GRADUS CARPET TILES & PLANKS

## 2. SURFACE PREPARATION

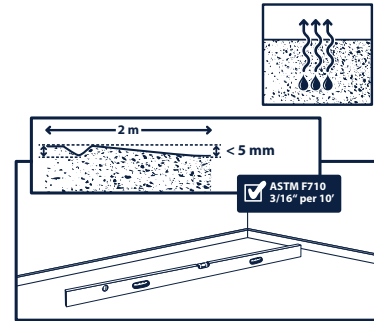
### 2.1. SUBSTRATE REQUIREMENTS

The underlay must be laid on a clean, sound, dry and solid substrate.



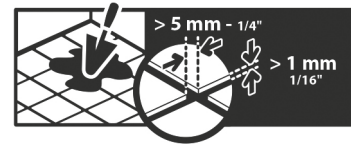
The moisture content must not exceed 4.5% with a carbide bomb test (Control Carbide Moisture), and 0.5% for anhydrite screed.

- The evenness must be < 5 mm under a 2-metre straight edge.
- The substrate must not have any uneven areas > 1 mm every 20 cm.
- The substrate should be smooth and dust-free.



#### 2.1.1 Tiled substrate

The dividing joint or grouting joint must not have a gap > 5 mm wide and 1 mm deep. The tiles must have no unevenness.



### 2.2. PREPARATORY WORK ON NEW OR RENOVATED CONCRETE SUBSTRATES

The surfaces should be prepared with care so as to remove any soiling, laitance, curing compounds or any other foreign bodies. If the substrate does not meet the requirements, a substrate preparation must be carried out:

- On substrate with moisture content < 4.5%: the compound must meet class P3 specifications.
- On conventional mortar substrates, the laying of textile tiles is possible only when the residual moisture content is < or = 4.5%.
- Patching levelling: a resin mortar (bearing the NF mark for concrete repair products) may be used in isolated areas which do not meet the requirements in terms of evenness and surface finish.
- Crack treatment: treat cracks before applying a patching compound or if the unevenness is > 1 mm or there is a gap of > 1 mm.
- Joint treatment:
  - Contraction joints: treat joints before applying a patching compound if the unevenness is > 1 mm or there is a gap of > 5 mm.
  - Construction joints: similar to cracks, same treatment.

## 3. INSTALLATION

### 3.1 LAYING CONDITIONS

Materials used for laying textile floor coverings must be acclimatised for 24 hours prior to laying in an enclosed, ventilated and secure room, protected from moisture and at an ambient temperature greater than or equal to 15 °C.

The tiles should be stored flat, after being removed from their packaging.

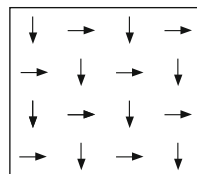
### 3.2. GENERAL CONDITIONS

Each enclosed room must be considered separately. Different batches must not be mixed together.

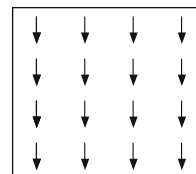
### 3.3. LAYING DIRECTION

Tiles and planks can be laid in the same direction, at 90° or randomly.

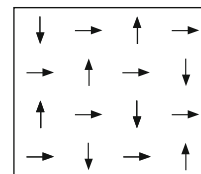
*(Please refer to the technical data sheet or product specifications to check the laying direction of the tiles.)*



Laying at 90°



Laying in the same direction



Random laying

# FLOORS IN BUILDINGS

Refer to the applicable standard: NF DTU 53.1 P1-1 dated 12 November 2016.

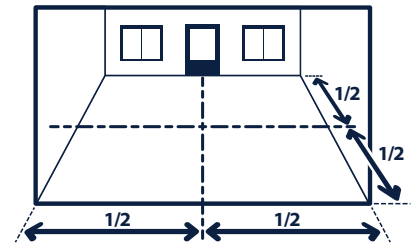
## [410] LAYING GRADUS CARPET TILES & PLANKS

### 3.4. MARKING OUT OF GUIDELINES

#### 3.4.1 For tiles

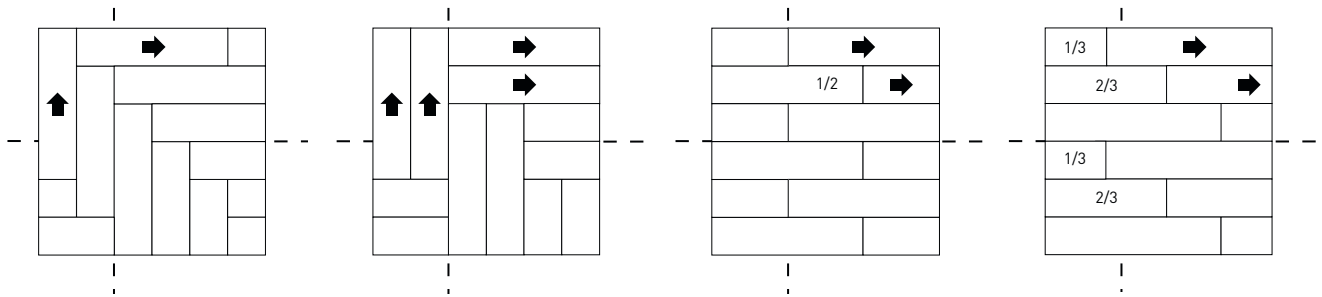
Mark out the starting axes for laying the tiles following the requirements as illustrated opposite:

- Centre a row of tiles on the main axes.
- Check that the cut tiles around the edges will be larger than a half-tile.



#### 3.4.2 For planks

There are different types of laying for planks: 4 examples are given below.



### 3.5. ADHESIVE

#### 3.5.1 Permanent adhesive for GRADUS tiles

MANUFACTURER	SIKA-CEGECOL	BOSTIK	HB FULLER
PRIMER	YES	YES	YES
ADHESIVE	CG 100 DPA	ADESI-TECH	TEC™ 542
COVERAGE	A4 spatula (TKB Standard) or roller 150 / 200 gr/m <sup>2</sup>	A4 spatula (TKB Standard) or roller 150 / 200 gr/m <sup>2</sup>	A4 spatula (TKB Standard) or roller 150 / 200 gr/m <sup>2</sup>

For any other adhesive: please contact us.

#### 3.5.2 Application of adhesive with spatula

Single coat application of one of the products listed above, applied using:

a very finely serrated spatula with coverage of 150 gr/m<sup>2</sup>, A4 type (TKB specification). Change the spatula as often as necessary to keep to this coverage requirement.

It is imperative to apply the adhesive using a notched spatula.



#### 3.5.3 Application of adhesive with roller

Application of the adhesive using a roller on raised access floors requires particular care in order to ensure the necessary spread rate (100 to 150 g/m<sup>2</sup>).

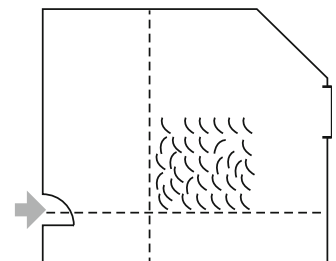
We recommend using a foam roller, making two passes with the roller. The second pass should be made when the layer of adhesive applied in the first pass is translucent.



#### 3.5.4 Recommendations for application

Carefully follow the instructions provided by the adhesive supplier. Recommendations for application:

- Apply adhesive to an area no larger than can be covered within the working time.
- Carefully respect the waiting time, which depends on the temperature, the humidity level, the substrate's porosity and the quantity of adhesive applied.
- Wait until the layer of adhesive is translucent before laying the tiles.



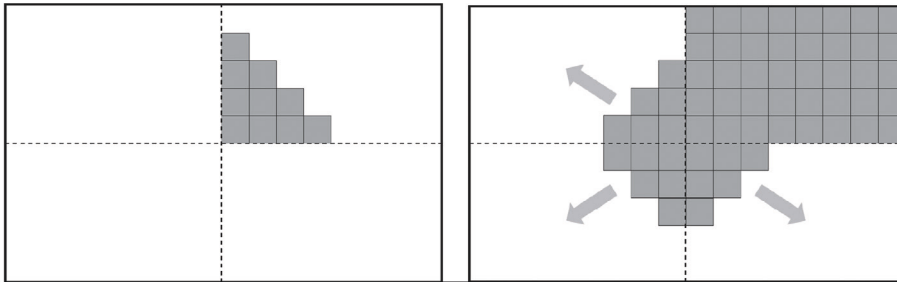
Refer to the applicable standard: NF DTU 53.1 P1-1 dated 12 November 2016.

## [410] LAYING GRADUS CARPET TILES & PLANKS

### ■ 3.6. LAYING TILES & PLANKS

After the full waiting time for the adhesive, fit the first tile/plank where the axes intersect.

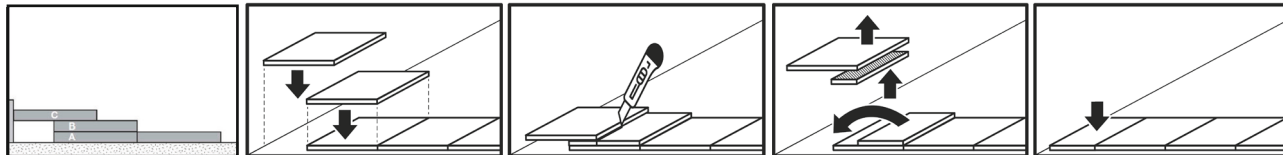
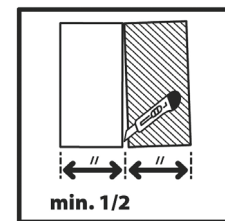
- Lay down the tiles/planks in a pyramid pattern along the guidelines on the floor.
- Make sure the tiles/planks are grouted properly, with joints butted tightly, and then smooth them.



### ■ 3.7. CUTTING TILES & PLANKS

For cuts around the edges, adjust so that the edge tiles are greater than or equal to half a tile/plank. Scribing is used to cut the edges:

- Position the tile/plank to be cut (B) on the last full tile/plank laid (A).
- Take a full tile/plank to use as a gauge (C) and then lay it upside down on the tile/plank to be cut, pressing on the partition (wall).
- Mark the tile/plank to be cut (B) along the edge of the gauge using a cutter with a straight blade.
- To trim the protruding fibres, use ROMUS velvet scissors Ref. 93870
- Cut off the tile/plank to be laid neatly and then fit it into place.



### ■ 4.1. EXPANSION JOINTS IN SUBSTRATE

- Joints without a difference in levels: ROMUS profile CJ 20-5 or equivalent may be suitable.
- Joints with overlay profile: the profile is fitted over the floor covering and is secured on one side only.

### ■ 4.2. CONNECTION TO ADJACENT ROOMS

To join two rooms, Gerflor recommends using a threshold profile. The threshold could be made of wood or metal. Various thresholds are available from manufacturers such as DINAC and ROMUS among others.