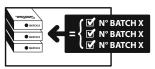
Before laying the flooring, it is a good idea to inspect it and to identify any problems with the appearance. If there are any visible defects, please notify GERFLOR and wait to hear from them before laying the flooring.





For any information on product properties and usages, please refer to its technical datasheet: www.gerflor.com

1. AREAS OF APPLICATION

Floor covering installed in temperature-regulated premises. Temperature between 15 and 25°C.

Acceptable temperature range after installation: $\pm 10^{\circ}\text{C}$ to $\pm 30^{\circ}\text{C}$ Installation above or below these temperatures requires an adhesive which is resistant to high temperatures to be applied over the entire surface. For

AMBIENT USAGE TEMPERATURE	installation in areas close to bay windows which are directly exposed to sunlight, we recommend installing temperature regulation (air conditioning, etc.) or preventing direct sunlight from reaching the floor covering (curtains, voiles, etc.).					
IN FRONT OF OR UNDER GLAZED AREAS	For these reasons, installations near bay windows or skylights (considerable temperature variations) will require application of a two-part polyurethane (PU) adhesive (Mapei G 19) or an acrylic adhesive such as Gerflor Clim Adhesive or Bostik Power Elastic.					
	SUBSTRATES					
TILES	The floor surface must not have any uneven areas, and the joints must not be recessed, otherwise fill them with a levelling compound to eliminate any irregularities.					
CONCRETE FLOOR, PAINTED CONCRETE, LEVELLING CONCRETE, TOPPINGS, LIQUID CEMENT SCREEDS	Closely follow the instructions for preparing the substrate before gluing the planks or tiles. See section 2.1					
PVC TILES AND COMPACT ROLLS	If the substrate requirements are met and more than 90% of the room's surface area is in good condition, remove the defective tiles, fill the gaps with levelling compound and lay the VIRTUO planks/tiles after the substrate has dried. Otherwise, the entire flooring will have to be taken up and the substrate prepared from scratch.					
PVC ROLLS OR TILES WITH BACKING FOAM	Not recommended as there is a high risk of indentation.					
UNDERLAYER	Any soundproof or other existing layers must be removed					
TEXTILE FLOORING (CARPET)	Prohibited; remove then prepare the substrate again.					
LAYING ON VINYL ASBESTOS TILES	Not allowed					
WOOD-BASED PANELS FLOORING (DTU 51.) ON JOINSTS OR ON BATTEENS	Allowed					
GLUED PARQUET	Complete removal					
PARQUET NAILED ONTO BATTENS SPACED NO MORE THAN 0.30 M APART, WITH VENTILATION OF THE INSIDE FACING	Complete removal or lining boards					
FLOATING PARQUET OR PANEL	Complete removal					
LAMINATED FLOOR	Complete removal					
OSB BOARD	Complete removal or lining boards					
UNDERFLOOR HEATING						
UNDERFLOOR HEATING WITH CIRCULATING HOT WATER AT	Possible					
RADIANT ELECTRIC UNDERFLOOR HEATING The regulations require < 0,15 m² x ° Kelvin / Watt	Possible					
LOW TEMPERATURE WATER REVERSIBLE UNDERFLOOR HEATING	Possible					
Please contact us if the substrate is not in this list.						



2. SUBSTRATES

■ 2.1. PREPARATORY WORK ON CONCRETE SUBSTRATES

Preparation: The surfaces should be prepared with care so as to remove any soiling, laitance, treatment products or any other foreign body.



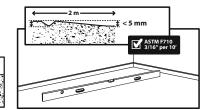




If the substrate does not meet the requirements, a patching compound must be used:

- With a substrate moisture content of < 4.5%, the grouting must meet class P3 specifications
- With a substrate moisture content of between 4.5% and 7%, levelling compounds or special primers
 must be used (Contact the levelling compound manufacturers)
- With a substrate moisture content of > 7%, we recommend applying a rising damp treatment before applying a patching compound.

Moisture content accepted on calcium sulphate liquid screed: < 0.5 %.



Localised 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 level and surface finish.



Crack treatment:

Treat cracks prior to applying a patching compound (see support preparation information).



Contraction joints: Treat joints before applying a patching compound

Construction joints: Similar to cracks, same treatment.



Expansion joints:

Joints without a difference in levels: The RM 20-5 profile with PVC strips supplied by COUVRANEUF covers the joint. Joints with overlay profile: The profile is fitted over the flooring and is secured on one side only.

3. LAYING CONDITIONS



To lay VIRTUO tiles and planks, the site laying conditions must be respected as follows: The ideal ambient temperature for installation

must be between 15 and 26°C for 24 hours before, and 24 hours after, laying.

The planks or tiles must be stored in the same conditions as the

installation conditions to avoid variations in size. If the tiles or planks have been stored in

temperatures of above 12°C, they must be unloaded

from the pallet and stored without being piled up (stacks of less than 5 boxes).

If the tiles or planks have been stored in temperatures of below 12°C, the boxes must be opened and the tiles or planks spread out in the area where they are due to be installed. This will help LVT tiles or planks to acclimatise more quickly.

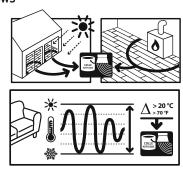
■ 3.1. LAYING ON UNDERFLOOR HEATING

The owner of the heating system must have started up and turned off the underfloor heating in compliance with the installation provisions described in article 6.2.4 of NF P 62-203 (DTU 53.2):

Natural drying of the substrate must be completed by gradually starting the heating system prior to laying the floor covering in compliance with system provisions.

Note that the heating must be turned off 48 hours before application of the floor preparation compound.

■ 3.2. LAYING IN PREMISES WITH SKY LIGHTS OR LARGE BAY WINDOWS



In buildings with bay windows, large windows or sky lights, temperatures at floor level can reach up to $40\text{-}50^{\circ}\text{C}$ when exposed to sunlight. It will be necessary, on the one hand, to use adhesives which are resistant to high temperatures, and on the other, to install temperature regulation (air conditioning, etc.) and/or to prevent direct sunlight from reaching the floor covering (curtains, voiles, etc.).

We advise you to contact your adhesive manufacturer to enquire about the type of adhesive to use.

To avoid major colour differences, mix the planks from several different boxes from the same series.

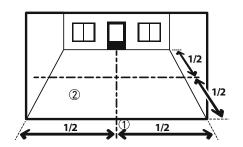
4. LAYING THE COVERING

The tiles or planks must be removed from their box at least 24 hours prior to installation, and stored flat on an even surface in the room in which they are going to be laid.

IMPORTANT:

Direction of installation: see general table (section 2).

- 1. Axis parallel to the main entrance,
- 2. Perpendicular to this axis, with tile cuts the same on each side.



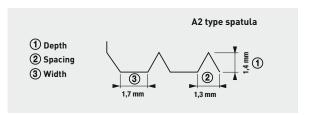
5. GLUING

Application is by simple gluing with a dispersion adhesive in aqueous phase applied with a finely toothed spatula.

Coverage: approx. 300 / 350 g/m², A2 type spatula (TKB specifications). Change the spatula as often as necessary to keep to this coverage.

CAUTION:

For rooms with bay windows, large windows or sky lights, we recommend contacting your adhesive manufacture to enquire about the type of adhesive to use.



	BOSTIK	MANG	SADER	CEGECOL	MAPEI	UZIN	F BALL
Acrylic glue for LVT	MIPLAFIX 800	TECHNIMANG	SADERTECH V8	CEGE 100 DUROCOLL	ULTRABOND ECO 4LVT	KE 66 KE 62	F 46
Direct solar radiation (sun- ny area of bay windows, skylight, skydome)	PU 456 PU 2 components		SOL UR PU 2 components	Adesilex G 20 PU 2 components	KR 430 PU 2 components	F 49 Hybrid acrylic glue(PSA) Pressure Sensitive Adhesive	

CAUTION!

- Carefully follow the instructions of the adhesive supplier.
- Carefully respect the bonding time which depends on the temperature, the atmospheric conditions of the room, the substrate's porosity and the coverage of the adhesive used.
- Insufficient bonding time: blistering.
- Bonding time exceeded: poor transfer of adhesive to the material.
 Apply adhesive to an area no larger than can be covered within the glue's working time.
 Remove any surplus glue spots while work is in progress.

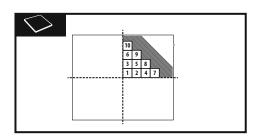
GLUING THE SUBSTRATE AND APPLYING THE TILES

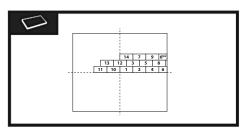
A - For square formats (MINERAL)

- Lay down the tiles in a pyramid pattern along the guidelines on the floor.
- Check the tile joints for evenness.
- 90° lays (see TILE LAYING section).

B - For rectangular format

- Lay down the rectangular tiles on brick stone along the guidelines on the floor,
- Check the tiles joints for evenness.







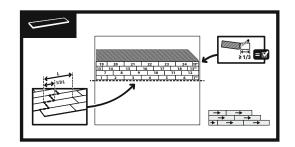
C - For Wood plank formats

Laying principle

- Divide the floor area into two parts with one guideline at right anglesto the room's main doorway.
- Position the first plank and then continue, following the guidelines (see diagram).



- The first plank in the next strip should be offset sideways by one third of its length to ensure that the joints repeat themselves every three strips. This solution is better than offsetting by half a plank. Repeating the joints every second strip is less aesthetically pleasing.
- Press down carefully to provide maximum adhesion.



If other designs, such as Herringbone, Fisherbone are performed, we you specify that they will require cross-checking blades and recreate chamfer effects on the intersected selvedges.

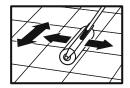
6. SMOOTHING

Smoothing must be done in two stages:

- Manually, using a smoothing press;
- Rolling a smoothing roller over the entire surface once the installation is complete.







Stage 2: smoothing with a roller

7. FINISHING

If the flooring is laid before the skirting, GERFLOR recommends Gerflor's Decor-type skirtings to finish the junction between floor and wall. See implementation principle [504A] SKIRTING DESIGN-6086 and [504B] SKIRTING DESIGN-MDF-5947.

Position the skirtings, making sure that they are not applying too much pressure on the planks/tiles (to allow for expansion). If the skirting is already installed, GERFLOR recommends fitting a guadrant onto the wooden skirting to finish the junction between floor and wall.

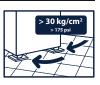
8. PUTTING INTO SERVICE - CIRCULATION

- -Wait 48 hours before allowing normal walking on the installation.
- Do not install fittings or furniture until 72 hours after laying
- Do not allow rubber feet to be used on furniture.
- In the case of underfloor heating, wait 7 days before turning the heating back on.









9. FURNITURE

- Ensure that the leg ends of chairs, tables, casters and others are suitable for soft flooring (PVC, linoleum).
- We recommend flat ends, without a pattern and having a solid contact surface on the coating (no conical tip).
- Prohibit the use of rubber tips.
- Ensure that the office chairs are equipped with type H casters according to EN 12529.



10. CARE

