

STREAMO

MARINE FLOORINGS FOR SHIP INTERIORS



**INSTALLATION GUIDELINES
FOR TILES AND PLANKS**



Gerflor[®]
theflooringgroup

TABLE OF CONTENTS

1. STORAGE AND HANDLING CONDITIONS	4
2. SUBFLOORS	4
3. MATERIALS	4
3.1 Laying direction	4
3.2 Laying the materials	4
3.3 Layout.....	5
4. ADHERING THE MATERIAL	5
4.1 Use of Perm'Adhesive	6
5. FINISHING	8
5.1 Skirting finishing	8
6. HEAT WELDING FOR HOMOGENEOUS TILES ONLY	9
6.1 Preparation	9
6.2 Grooving	9
6.3 Heat welding with Gerflor CR40 welding rod.....	9
6.4 Trimming the welding rod.....	10
7. WORKSITE CLEAN-UP	10
8. COMMISSIONING - TRAFFIC	10
9. TOOLS	11

WARNING:

Because technology is constantly evolving, it is up to your clients to check with our product support department that this is the applicable document before starting any work. The contractor must comply with local building codes applicable at the effective contract date.

The material must also be inspected before laying to avoid any problems with visible defects.

If any visual defects are observed, please inform GERFLOR and do not start laying without their consent.

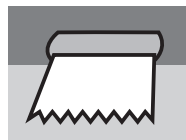
GERFLOR cannot accept liability for visual defects in material already laid.

This document is applicable as of 01/10/2021 and may be amended at any time without prior notice.

LAYING INSTRUCTIONS FOR TILES AND PLANKS



Room temperature
Min: 18°C Max: 24°C



Subfloor temperature
Min: 18°C Max: 24°C

This document has been referenced against BS 8203: 2017. In other countries, different local standards may apply.

1. STORAGE AND HANDLING CONDITIONS

Stack boxes of tiles or planks not higher than 1 m (+/-39") with the edges of the boxes flush to one another. Overhanging edges may curl the tiles or the planks. Handle all materials carefully and safely.

2. SUBFLOORS

The subfloor must be flat, sound, dry, smooth and free of any dust or impurities and, for concrete slabs or cement screeds, must have a moisture content not exceeding 2.5% for all cement based subfloors and 0.5% for calcium sulphate subfloors using the carbide bomb method or retain a maximum of 75% Relative Humidity.

Depending on the porosity of the subfloor, a primer may be advisable.

The application of a levelling compound is also often advisable to achieve perfect flatness and / or for gluing to metal subfloors.

Subfloor preparation must be carried out according to the adhesive manufacturer's recommendations.

3. MATERIALS

Streamo floorcoverings are suitable for use in interior areas only on board any type of vessel or off-shore platform.

- Tiles and planks are laid edge to edge, tight against each other.
- Homogeneous tiles with formats larger than 500mm x 500mm are required to be hot welded using the matching CR40 welding cord.
- Heterogeneous Luxury vinyl tiles do not require any heat welding.

■ 3.1 - LAYING DIRECTION

TILES	PLANKS
Homogeneous at 90° Heat weld for tiles with formats > 500 x 500 mm	Same direction Not welded
Heterogeneous at 90° not welded	

■ 3.2 - LAYING THE MATERIALS

Temperature conditions: 18 to 24°C (64-75°F), before and during installation.

- Tiles and planks must be removed from their boxes at least 24 hours prior to installation and stored flat on an even surface in the room where they will be laid.
- The planks or tiles must be stored in the same conditions as the installation conditions to avoid variations in size.
- Select tiles and planks according their batch number.
- Do not mix batch number in the same room.
- Mix tiles or planks from the same batch when laying to avoid colour differences and obtain a consistent layout.



The material must be inspected before laying to avoid any problems with visible defects. If any visual defects are observed, please inform GERFLOR and do not start laying without their consent.



In the case of underfloor heating, the heating must be turned off 48 hours before, during and 24 hours after the installation. The heating system should be turned on gradually only 72 hours after the installation. That will allow the substrate and the flooring to adapt to the temperature change together. A sudden temperature change could result in adhesion problems.

LAYING IN AREAS WITH SKYLIGHTS OR LARGE BAY WINDOWS

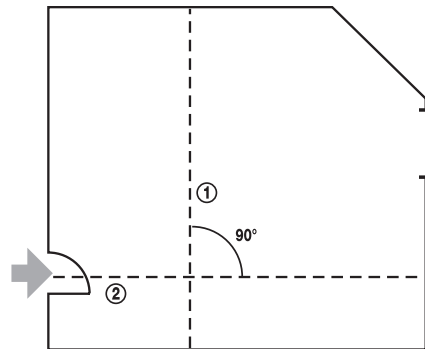
In areas with bay windows, large windows or sky lights, temperatures at floor level can reach up to 40-50°C when exposed to sunlight. It will be necessary, on the one hand, to use adhesives which are resistant to high temperatures, and on the other, to install temperature regulation (air conditioning, 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.

■ 3.3 - LAYOUT

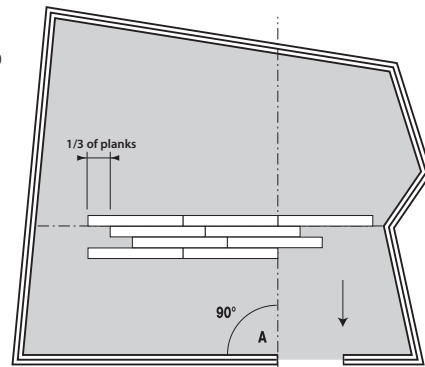
FOR TILES:

- Strike a chalkline (1) parallel with the main doorway to allow the perimeter tiles to be at least 1/2 tile.
- Position the second guideline (2) perpendicular to the first line, locating it so as to balance out cut tiles.
- Before spreading adhesive, it is recommended to lay one or two rows of tiles along both guidelines to check for proper alignment.



FOR PLANKS:

- Strike a chalkline parallel to the length of the room and a second one at right angle to the room's main doorway.
- Before spreading adhesive, it is recommended to lay one or two rows of planks along guideline to check for proper alignment.
- For a more natural effect, planks are best laid in a random fashion with all header joints offset by at least 100 mm.



4. ADHERING THE MATERIAL

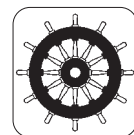


Adhesives are required to be IMO certified.

For standard installations, Gerflor only recommends the use of Gerflor Perm'Adhesive.

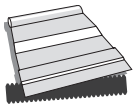



In areas subject to direct sunlight and / or rapid temperature change, the use of a suitable IMO high temperature grade or new generation hybrid adhesive is recommended.

The use of Gerflor's Streamo products with other IMO adhesives remains under the adhesives manufacturer's responsibility. Should a customer wish to use another adhesive then a written validation and specification for its use should be provided by the chosen adhesive manufacturer to ensure that the correct adhesive is specified and that the combination of subfloor, adhesive and flooring is compatible and meets customer's requirements.



LAYING INSTRUCTIONS FOR TILES AND PLANKS

■ 4.1 USE OF PERM'ADHESIVE

NAME		GERFLOR PART N°
THRIFTLINE TROWEL		E6130001
NOTCH PROFILE 28 cm - A1 (x10)		E6310001
NOTCH PROFILE 18 cm - A2 (x10)		E6310003
NOTCH PROFILE 28 cm - A4 (x10)		E6310005

- The material must be acclimatised at least 24 hours prior to the bonding onto the subfloor.
- Gerflor Perm'Adhesive should be applied to absorbent subfloors with an A2 trowel and for non-absorbent subfloors with a A1 or A4 trowel.
- For absorbent subfloors, one bucket of Perm'Adhesive will cover 45 sqm.
For non-absorbent subfloors, one bucket of Perm'Adhesive will cover 60 sqm.
- Trowel - Any Type (TKB specification). Change the trowel blades as often as required to achieve this coverage.

RECOMMENDATIONS

- Make certain that the adhesive has been protected from sub-zero temperatures during storage.
- Use the spatulas recommended by Gerflor.
- The use of a different adhesive than Gerflor Perm'Adhesive is still possible but is under the adhesive manufacturer's responsibility. Closely follow their instructions.

■ PERM'ADHESIVE APPLICATION

FOR TILES:

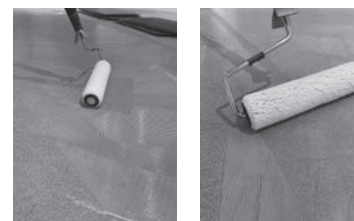


Tack time too short: bubbling.

Tack time too long: incomplete adhesive transfer onto material.

Absorbent surfaces

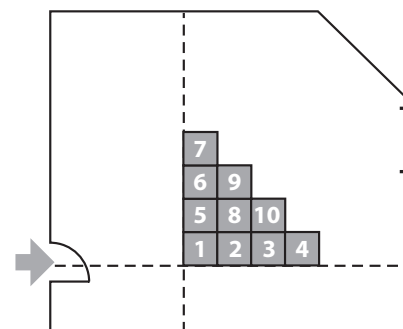
- Apply the adhesive using an A2 or 1.5 x 5 mm 'V' notched trowel then immediately roll with a short pile roller, which has been pre-coated with adhesive, to obtain a smooth, uniform appearance, to minimise adhesive grin through.
- Tiles can be placed into the adhesive immediately although it is advisable, when installing tiles, to leave the adhesive for approximately 10 minutes before placing the flooring, reducing the potential for sliding.
- Apply the tiles along both guidelines. To achieve correct joints between tiles, lay the tiles using the "staircase" method.
- Remove fresh adhesive stains as work progresses using a suitable method.



Non-absorbent surfaces

- Apply the adhesive as previously described but using an A1 or A4 trowel and allow the adhesive to dry to a firm tack before laying the floorcovering.

When installing vinyl tiles, apply the adhesive with an A2 or 1.5 x 5 mm 'V' notched trowel, then roll with a paint roller pre-coated with the adhesive. Roll tiles immediately after placement into the dry adhesive film using a 50 kg flooring roller.



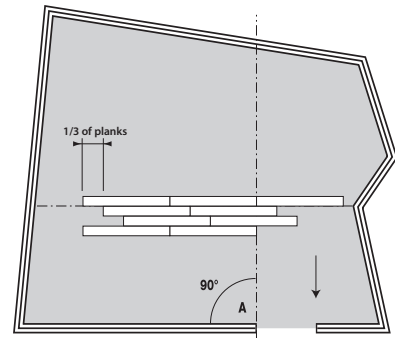
Do not use the paint roller to extend the area covered by the adhesive, as this will reduce adhesion.

FOR PLANKS:

- Please refer to TILES for the adhesive application.

	Tack time too short: bubbling.
	Tack time too long: incomplete adhesive transfer onto material.

- Position the first plank, then continue following the guidelines (see diagram). The first plank of the second row must 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.
- Remove fresh adhesive stains as work progresses using a suitable method.
- **For planks with decorative strips:**
Apply the adhesive as above and begin to install the first few planks of the first row. Install the decorative strip tightly against this first full row, Install the next full plank tightly against the decorative strip and continue this process row by row.



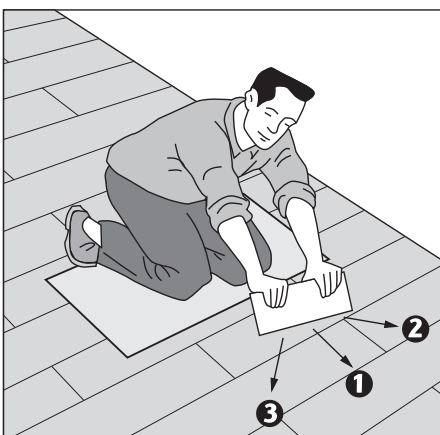
SMOOTHING

NAME		GERFLOR PART N°
CORK PRESS WITH ROUNDED EDGES 300 x 120 x 250 mm		E6640001
PRESSURE ROLLER (50 kg)		E6320001

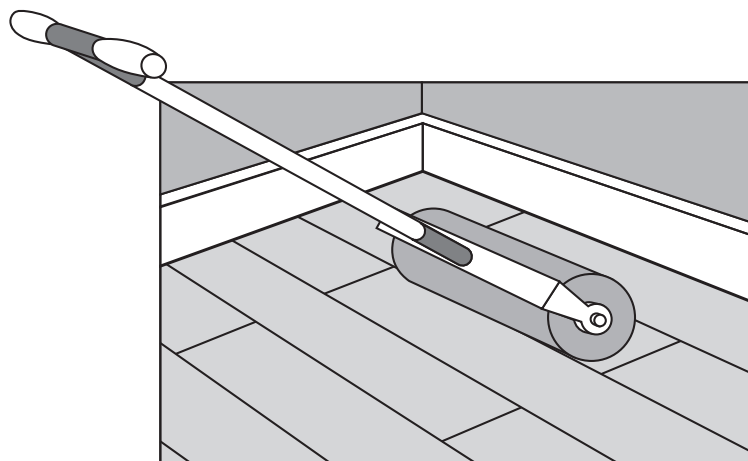
Smoothing is an important phase and should be performed with care to promote adherence of the adhesive to the material. Smoothing is completed in two steps:

- Manually using a smoothing press before the adhesive has completely set, to achieve proper transfer to the back of the material
- Using a 45/50 kg (100 lbs) roller in both directions over the entire surface at the end of the installation.

With Gerflor Perm Adhesive, the area can be used immediately.



Manual smoothing







Rolling out

LAYING INSTRUCTIONS FOR TILES AND PLANKS

5. FINISHING

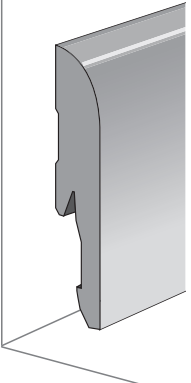
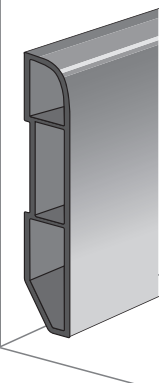
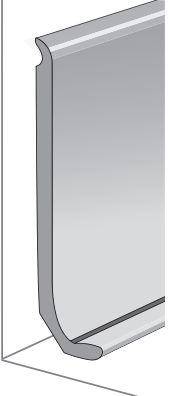
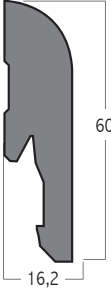
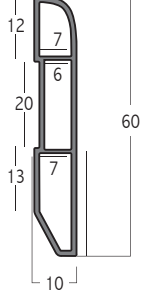
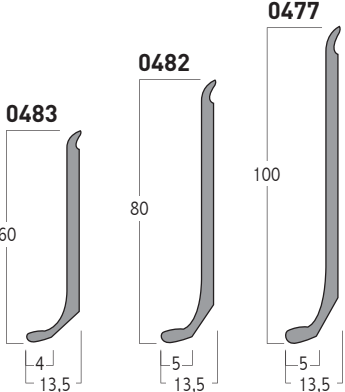
■ FINISHING TOOLS

NAME		GERFLOR PART N°
DOLPHIN KNIFE		E6000001
STRAIGHT BLADES		E7510003
HOOKEED BLADES		E7520001
CONCAVE BLADES		E7520006

■ 5.1 - SKIRTING FINISHES

Use of Decor skirting or Vynaflex semi-rigid skirting profiles:

We recommend installing skirting after trimming to achieve a better finish of rooms.
A specific skirting installation guide is available upon request.

MDF ⁽¹⁾ skirting	Vinyl skirting	Semi-rigid vinyl skirting
WOOD DECOR SKIRTING	DESIGN SKIRTING	VYNAFLEX PLAIN COLOR
		
5947	6086	0483 - 0482 - 0477
		

6. HEAT WELDING FOR HOMOGENEOUS TILES ONLY

Heat welding should be performed 12 to 24 hours after installation to ensure the adhesive has fully cured.

Heat welding is required between homogeneous tiles in order to:

- Control natural contraction within the tiles through aging and climatic conditions
- Ensure the watertightness of the floor
- Prevent water ingress, leading to debonding
- Facilitate easier cleaning (no dirt between the tiles)


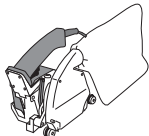
Method: Heat welding is performed in three steps after the floor material has been laid.

■ 6.1 - PREPARATION

- Ensure that the gap between the adjoining sections of the flooring to be welded does not exceed 0.5 to 1 mm max.
- Seams must be grooved and clear of debris before welding.
- Ensure the nozzle is clear of debris.
- Turn on the gun adjusting the temperature dial to between 4.5 & 5 and leave to heat for 5 minutes before use.

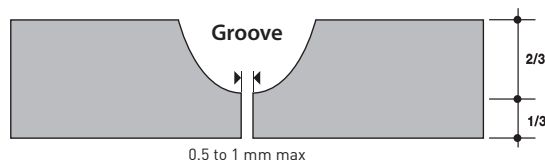
■ 6.2 - GROOVING

Various tools are available to produce a good quality and consistent groove. Gerflor recommends the Linea groover (E8060001).

NAME		GERFLOR PART N°
LINEA GROOVER		E8060001
ELECTRIC GROOVER		E8050001 (230 V) E8050003 (110 V)

Streamo Homogeneous Tiles:

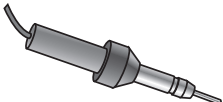

- Groove the material to 2/3 of its depth.
- Groove manually using a triangular scraper and a straight edge if necessary or mechanically using an electric groover.



■ 6.3 - HEAT WELDING WITH THE GERFLOR CR40 WELDING ROD

■ MANUAL WELDING

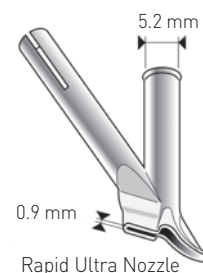
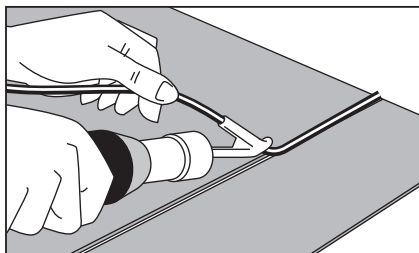
NOTE: Always practice on a scrap piece of material first to assure proper temperature and speed. Doing so will prevent failure.

NAME		GERFLOR PART N°
WELDING GUN LEISTER TRIAC'S		E8090002 (230 V) E8090005 (110 V)
RAPID ULTRA NOZZLE 4-5 mm		E8100002

LAYING INSTRUCTIONS FOR TILES AND PLANKS

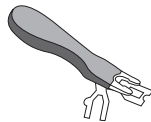
Manual welding is performed using an electronically-controlled hot welding gun and a speed nozzle.

For all Gerflor floorcoverings, we recommend the use of a Rapid Ultra Nozzle, diameter 5 mm, 0.9 mm air slot.



■ 6.4 TRIMMING THE WELDING ROD

■ USING A MOZART KNIFE

NAME		GERFLOR PART N°
TRIMMING TOOL MOZART		E8300002
SPARE BLADES (x 5)		E8040001

Step 1:

- Pre-trim using the 0.7 mm trimming guide under the MOZART knife blade (Fig. 1)

Step 2: The welding rod must be fully cooled.

- Turn the trimming guide 90° to the side to fully trim off the surplus welding rod (Fig. 2)

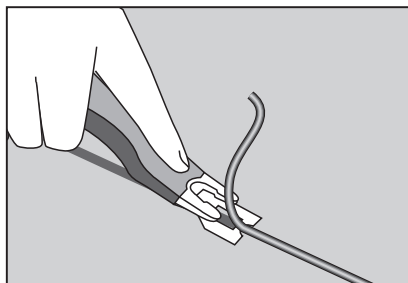


Fig. 1

0.7 mm Trimming guide under the blade

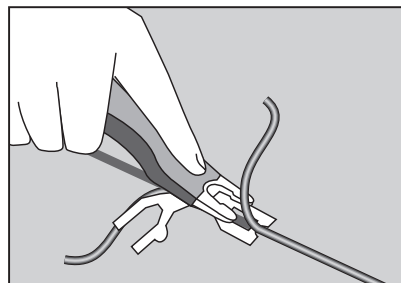


Fig. 2

Trimming guide turned 90°

This trimming method is used to prevent hollow welds

7. WORKSITE CLEAN-UP

When installation has been completed, the flooring must be cleaned at least 24 hours afterwards.

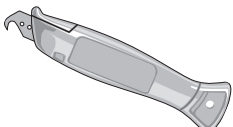
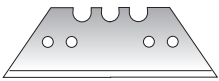

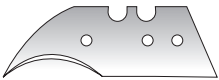
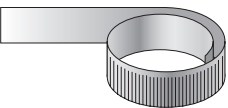
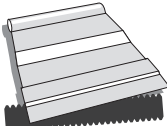



- Remove dust and waste using a broom and an industrial vacuum cleaner.
- Eliminate traces of adhesives with a suitable product recommended by the glue manufacturer.
- Wash the floor using an automatic scrubber or mop with alkaline detergent.
- Rinse with clean water to eliminate all traces of detergent and leave to dry

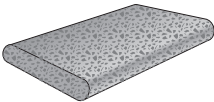


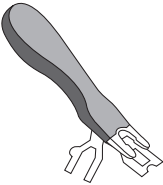

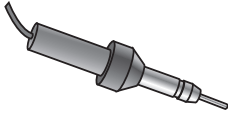

If additional works must be performed after the flooring installation, protection of the flooring is required to prevent any damages or scratches before the commissioning.

8. COMMISSIONING - TRAFFIC

- Normal pedestrian traffic: with Perm'Adhesive, the area can be used immediately.
- Fitting out or placing furniture: 24 hours after laying
- Do not use rubber furniture feet caps: risk of rubber staining, which cannot be removed.

9. TOOLS

	GERFLOR PART N°
INSTALLATION	
	Dolphin knife (Loose) E600001
	Straight blades (100 units) E7510003
	Hooked blades (100 units) E7520001
	Concave Blades (100 units) E7520006
	Expanding ruler 210x8 cm Flexible steel E6150004
ADHESIVES	
	Thriftline trowel E6130001
	Notch profile 28 cm - A1 (x10) E6310001
	Notch profile 28 cm - A2 (x10) E6310003
	Notch profile 28 cm - A4 (x10) E6310005

	GERFLOR PART N°
ADHESIVES	
	Cork press with rounded edges 300 x 120 x 25 mm E6640001
	Pressure roller (50 kg) E6320001
WELDING	
	Linea Groover E8060001
	Mozart knife E8300002
	Spare blade (5 units) E8040001
	Welding gun Leister Triac's E8090002 (230 V) E8090005 (110 V)
	Ultra Rapid Nozzle 4-5 mm E8100002

LAYING INSTRUCTIONS FOR TILES AND PLANKS



STREAMO

MARINE FLOORINGS FOR SHIP INTERIORS

43, Boulevard Garibaldi
69170 Tarare - France
Tel.: +33 4 74 05 40 00
Fax: +33 4 74 05 06 83
Email: streamo@gerflor.com
www.streamobygerflor.com



Gerflor
theflooringroup