





TABLE OF CONTENTS

1. STORAGE IN WAREHOUSE	3
2. SUBFLOORS	3
 3. MATERIALS 3.1 Unrolling the material 3.2 Laying the material 	3
4. ADHERING THE MATERIAL4.1 Use of acrylic adhesives.	
 5. FINISHING 5.1 On the perimeter 5.2 Flash coving system 	6
 6. HEAT WELDING. 6.1 Preparation 6.2 Grooving 6.3 Heat welding with Gerflor CR40 welding rod 6.4 Trimming the welding rod 	7 7 8
7. WORKSITE CLEAN-UP AND FLOORING PROTECTION	9
8. COMMISSIONING - TRAFFIC	9
9. CHECKS AND REPAIRS 9.1 Checks 9.2 Repair procedures	9
10 - 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 ${\sf GERFLOR}$ 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 01/09/2021 and may be amended at any time without prior notice.



Min: 18°C Max: 24°C

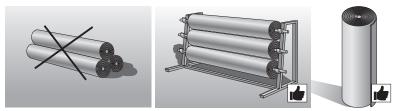


Subfloor temperature Min: 18°C Max: 24°C

This document has been referenced against BS8203 : 2017. In other countries, different local standards may apply.

1. STORAGE IN WAREHOUSE

When the goods are received, remove the selflocking plastic ties and then the rolls from the pallet even if shipped in an upright position. Streamo homogeneous floor coverings shall be stored in upright position. There are storage systems which allow rolls to be stored horizontally, without extra weight being placed on the materials. Laying down of the rolls should only be for short



periods when being transported. Rolls shall be stored in their packaging to prevent the materials from dust contamination. To keep their initial characteristics, Streamo homogeneous floor coverings shall be stored in the following conditions:

- Sheltered from the weather,
- In dry conditions

• At temperature kept between 5° and 32°C (40/90°F), without variance greater than 15°C (60°F) per 24 hour period. In these storage conditions, Streamo homogeneous floor coverings will keep their initial characteristics during one year. Storage for a longer period of time may significantly change the initial characteristics. Before laying, the rolls shall be conditioned at the workshop temperature.

2. SUBFLOORS

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 (using a BS8203 : 2017 compliant test). 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 onto metal subfloors.

Subfloor preparation has to be carried out according to the adhesive and/or levelling compound manufacturer's recommendations.

3. MATERIALS

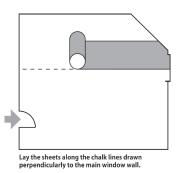
Streamo floorcoverings are suitable for use in interior areas only on board any type of vessel or off-shore platform.

3.1 - UNROLLING THE MATERIAL

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

The sheets must be left at room temperature for at least 24 hours before laying.

- The sheets are laid flat, edge to edge leaving 1 cm (0.4") between each sheet to allow the material to flatten properly.
- Where possible, and depending on the width of the rolls, seams between sheets should be placed in areas exposed to the least amount of traffic.
- Within rooms, the sheets should be laid at right angles to the main window wall or lengthwise.
- In corridors, we recommend laying the sheets lengthwise to the main traffic direction.



■ 3.2 - LAYING THE MATERIAL

- The sheets are positioned close together leaving 0.5 to 1 mm (0.02 to 0.04") between edges before starting to apply adhesive.
- Align the sheets on the longitudinal axis drawn beforehand.



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 can be turned on gradually, 24 hours after 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.

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 responsability. 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.

■4.1 USE OF ACRYLIC ADHESIVES

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

• The material has to be unrolled 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 an 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 responsability. Closely follow their instructions.

ADHESIVE APPLICATION:

- Fold the sheets half way back.
- Apply adhesive to an area no larger than can be covered within the adhesive's tack time.
- Gerflor recommends Gerflor Perm Adhesive for use on correctly prepared absorbent and non-absorbent subfloors. • Apply at specified spread rate.
- Remove any surplus adhesive.
- Observe tack time, which depends on ambient temperature, subfloor porosity, and adhesive spread rate.

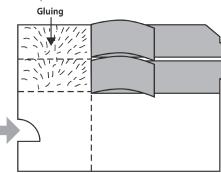


Tack time too short: bubbling. Tack time too long: incomplete adhesive transfer onto material.

- Apply the material carefully into the adhesive when tack time is complete.
- Proceed in the same way with the second halves of the sheets. Avoid overlapping with areas already glued.

When laying the sheets in place, ensure the gap at the joint is between 0.5 to 1 mm max.

• Remove fresh adhesive stains as work progresses using products recommended by the adhesive manufacturer.



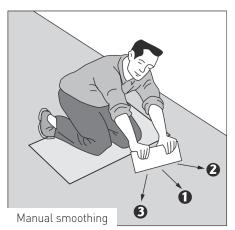
Fold the lengths half way back on themselves to adhere the sub⊠oor

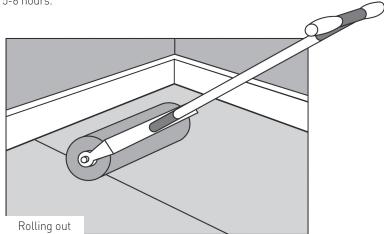
SM00THING

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:

- Moving on weight distribution boards under knees and feet, 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.
- Prevent any heavy traffic on recently laid sheets for 5-6 hours.





5. FINISHING

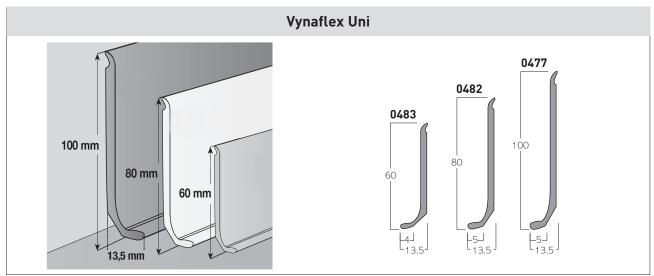
FINISHING TOOLS

NAME		GERFLOR PART N°
DOLPHIN KNIFE (LOOSE)	rest li	E6000001
STRAIGHT BLADES (100 BLADES)		E7510003
HOOKED BLADES (100 BLADES)	$(\circ \circ \circ \circ \circ)$	E7520001

5.1 - ON THE PERIMETER

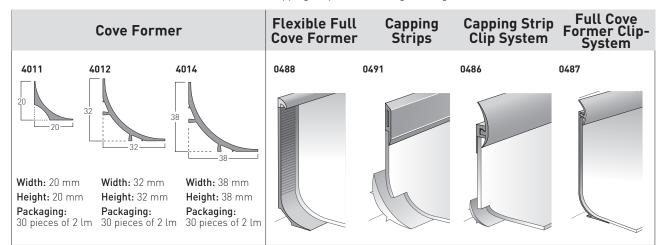
This method can be used with skirtings, for example Gerflor Vynaflex semi-rigid skirting. We recommend installing skirting after trimming to achieve a better finish and peripheral water tightness of rooms.

A specific skirting installation guide is available upon request.



5.2 - FLASH COVING SYSTEM

This method can be used with Gerflor cove formers + capping strips or full coving skirking solutions.



A specific flash coving installation guide is available upon request.

STREAMO ⁶

6. HEAT WELDING



TIP: Have a look at our STREAMO hot-welding video by scanning the QR code. <u>https://www.youtube.com/watch?v=f07nzbh28uc</u>

Heat welding should be performed 12 to 24 hours after gluing.

Heat welding is highly recommended between sheets of flooring material to:

- Ensure the watertightness of the floor
- Prevent from water ingress, leading to unbonding
- Ease the cleaning (no dirt between the sheets)

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.

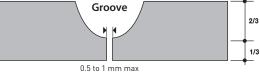
6.2 - GROOVING

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

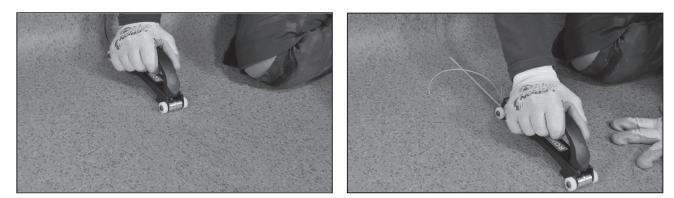
NAME	GERFLOR PART N°
LINEA GROOVER	E8060001
ELECTRIC GROOVER	E8050001 (230 V) E8050003 (110 V)

Streamo Homogeneous Flooring:

- 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.



0.5 to 1 mm max



■ 6.3 - HEAT WELDING WITH THE GERFLOR CR40 WELDING ROD

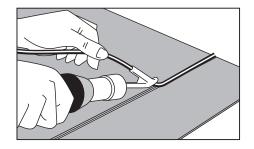
MANUAL WELDING

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

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

For Gerflor flooring featuring a photoreticulated surface treatment, 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

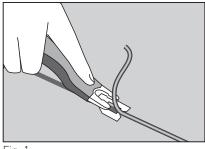
NAME	GERFLOR PART N°
TRIMMING TOOL MOZART	E8300002
SPARE PARTS (x5)	E8040001

Step 1:

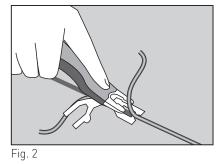
• Pre-trim using the 0.7 mm trimming guide under the MOZART knife blade (Fig. 1)

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)

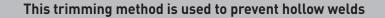


0.7 mm Trimming guide under the blade



Trimming guide turned 90°

Fig. 1





7. WORKSITE CLEAN-UP AND FLOORING PROTECTION

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 adhesive with solvents recommended by the adhesive manufacturer
- Wash the floor using an automatic scrubber or mop with alkaline detergent
- Leave to dry

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

8. COMMISSIONING – TRAFFIC

- Normal pedestrian traffic: 24 hours after laying
- 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. CHECKS AND REPAIRS

9.1 - CHECKS

Adhesive application checks

The appearance of air bubbles denotes a poor adhesive application of the material. It is necessary to remove the material and to provide for laying of a new covering.

Welding checks

A weld check is carried out at least once per year to avoid water infiltration of the flooring. For this: For welds with CR40, apply a roller (Cf. Ref. E6600001) over the cord to see whether the weld gives way under its pressure. Weld breakage, even occasional, must be immediately repaired to avoid irreparable deterioration of the floor.

9.2 - REPAIR PROCEDURES

Floor covering repair procedures

Poor adhesive application or an accidental deterioration of the covering may necessitate replacement of the covering on variable areas: **Replacement of the flooring from weld to weld**

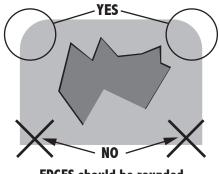
- Remove the cords as per the procedures proposed in the following item «Weld repair procedures»
- Remove the flooring
- Clean the subfloors.
- Prepare the floor by removing beforehand a dimension slightly more than 3 cm to the surface to be repaired
- Apply adhesive to the flooring.
- Lay one side leaving a 1 mm space and cut off the extra on the other sides.
- Chamfer and weld the floor covering as per the indications in the previous chapters.

Note: The edge of the old flooring should be cleaned with a small metallic brush and a thinning agent before welding.

Replacement of the flooring on a small area

- Mark out the area to be repaired.
- Cut a rectangle around the area to be replaced by smoothing the edges and remove it. DRAWING (OK, not OK)
- Clean, seal and sand the subfloor to provide for a new adhesive application.
- Use the piece to be replaced as a gauge for cutting the new floor covering by reducing it by 1mm around its edges.
- Bond, smooth, chamfer and weld the covering as per the indications provided in the previous chapters.

Note: The edge of the old flooring should be cleaned with a small metallic brush and a thinning agent before welding.



EDGES should be rounded

Weld repair procedures

Repair procedure of a CR40 weld cord

1st case: Repair on the entire welding length, when the gap is less than 2.5 mm in width

- Remove the cord, manually, or with a hooked blade (Ref. E6000001 and E7520001), by cutting the cord on each side, and using a ruler as required.
- Clean the joint by sucking up the dirt and by using a triangular scraper (Ref. E8000002), so as to remove all possible traces of adhesive.
- Weld with a welding gun equipped with a speed nozzle as per the indications provided in the previous chapters.

Note: The edge of the old flooring should be cleaned with a small metallic brush and a thinning agent before welding.

2^{nd} case: Occasional repair (in the middle of a weld) when the gap is less than 2.5 mm ± 0.5:

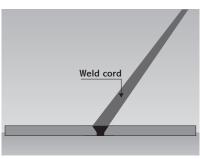
- Remove the cord on the area to be repaired as previously described.
- Clean the joint by sucking up the dirt and by using a triangular scraper.
- Weld with a welding gun equipped with a speed nozzle as per the indications provided in the previous chapters by starting with

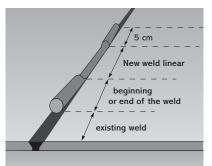
the already welded cord and ending with the same (approximately 5 cm).

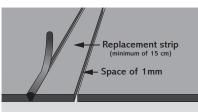
Note: The edge of the old flooring should be cleaned with a small metallic brush and a thinning agent before welding.

3^{rd} case: Total repair when the gap is more than 2.5 mm (± 0.5):

- In this case, cut the flooring on a minimum width of 15 cm (7.5 cm on either side of the weld) and replace it.
- After drying of the subfloor, as required, ensure that the edges of the current flooring are bonded.
- The replacement strip should be cut so as to leave a space of 1 mm on each side, to allow for performance of the weld.







INSTALLATION GUIDELINES FOR TILES AND PLANKS

10. TOOLS			
	GERFLOR PART N°		GERFLOR PART N°
IN	STALLATION	ļ	DHESIVES
real and a second	Dolphin knife (Loose)		Pressure roller (50 kg)
	E600001		E6320001
	Straight blades (100 units)		
	E7510003		
	Hooked blades (100 units)		WELDING
$\left(\begin{array}{c} \circ \circ \circ \circ \circ \\ \end{array} \right)$	E7520001		Linea Groover
	Expanding ruler 210 x 8 cm Flexible steel	0 0	E8060001
	E6150004		Mozart knife
ADHESIVES			E8300002
	Thriftline trowel		Spare blade (5 units)
	E6130001		E8040001
	Notch profile 28 cm - A1 (x10)		Welding gun Leister Triac's
A1	E6310001		E8090002 (230 V) E8090005 (110 V)
A2	Notch profile 28 cm - A2 (x10)		Ultra Rapid nozzle 4-5 mm
	E6310003		E8100002
A4	Notch profile 28 cm - A4 (x10)		
	E6310005		
	Cork press with rounded edges 300 x 120 x 25 mm		
	E6640001		



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



