INSTALLATION INSTRUCTIONS FOR TARAFLEX® ECO-FIT SYSTEM

This document refers to the following products:

Product	Width	Width Ft.	Installation direction	Seams treatment
Taraflex Multi-Use 6.2	1.5 Meter	Approximately 4' 11"	Same	Heat Welded
Taraflex Sport M Plus	1.5 Meter	Approximately 4' 11''	Same	Heat Welded
Taraflex Sport M Performance	1.5 Meter	Approximately 4' 11''	Same	Heat Welded

Note: This document refers to the following standards:

- ACI 302.1R Guide for Concrete Floor and Slab Construction.
- ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials
- ASTM F710-11 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
- ASTM F1869-11 Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- ASTM F2170-11 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes.
- ASTM F1516-13 Standard Practice for Sealing Seams of Resilient Flooring by the Heat Weld Method.
- Recommended Work Practices for Removal of Resilient Floor Coverings of Resilient Floor Covering Institute (RFCI).

1. STORAGE AND HANDLING

Store rolls on clean, flat, and solid surfaces in a controlled environment. Do not store outside. Place rolls in an upright position and secure the rolls to ensure a safe working environment. Do not stack rolls on top of each other. Handle all materials carefully and safely. Should the material be stored for a long period of time, inspect the skids for any damages and make sure that the rolls are well positioned in an upright position. Displaced material on a skid or a broken skid will damage the flooring. Be aware and act consequently.

2. SUBFLOOR PREPARATION

- The General Contractor will supply a smooth, flat concrete finish ready to receive the new resilient sheet flooring in accordance with ACI 302.1R Guide for Concrete Floor and Slab Construction and ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.
- The concrete subfloor will be cured for a minimum of at least thirty (30) days.
- The slab will have a tolerance of 1/8" (3mm) in a 10' (3.05 m) radius.
- Prepare substrate as per ASTM F710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring".
- The concrete floor temperature will have to be maintained at a minimum of 65°F (18°C) for 48 hours prior, during, and 48 hours after the installation.
- **The concrete slab, new or old, must be tested for moisture. We recommend having the tests performed by a recognized engineering firm. The ICRI website (International Concrete Repair Institute) has a list of certified technicians for the USA: http://www.icri.org/Certification/Find-CCSMTTs.asp**

- The moisture tests must be performed as per ASTM F1869-11 “Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” and/or ASTM F2170-11 “Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes”.
- **Substrate shall not exceed 510bs/1000 sq ft/24 hrs (4.52 kg/92.9 m^2/24 hrs) per ASTM F1869-11 and not to exceed 92% RH per ASTM F2170-11.**
- Before proceeding with any work, inspect the subfloor surface and report in writing to the Project Manager and the General Contractor any visible defects on the surface such as cracks, bumps, rough areas or variations in evenness.
- Check the subfloor for grease, oil, paint, marker, spills, dust or any contamination that may adversely affect the adhesion of the flooring. Clean the subfloor according to the existing conditions.
- Prohibit circulation of other trades in the installation area.
- Sanding of the subfloor will be mandatory in many cases; especially in areas where the subfloor has been contaminated with foreign products. It may be necessary to scarify or bead-blast concrete surface to remove existing adhesives, paint, concrete sealers or other surface applied materials.
- **Curing compounds** of any types have to be completely removed by means of sanding, scarification or bead-blasting. Self-dissipative curing compounds must be removed using the same methods.
- The General Contractor shall patch and repair all cracks, voids and other imperfections of concrete with high strength Portland cement based patching compounds such as Mapei Ultraplan, Ardex K-15, Ardex Feather Finish, Mapei Planipatch or equal, approved by the manufacturer. **Do not use gypsum based patching materials.**
- After completion of sanding, patching and leveling, vacuum or sweep entire surface of concrete to remove loose dust and dirt before starting the installation of material.
- For installation where a **Gypsum Concrete** has been poured, contact Gerflor Technical Services.

2.1. SUBFLOORS WITH RADIANT HEATING SYSTEMS

Do not use the ECO-FIT SYSTEM on a radiant heating subfloor.

3. DRY LAY OF SHEETGOODS

- The concrete floor temperature will be maintained at a minimum of 65°F (18°C) for 48 hours prior, during, and 48 hours after the installation.
- Mark the center starting line.
- Unroll the first length of material along this chalk line and then work progressively outward, leaving a ¼” (4mm) gap between the sheets to allow the material to relax for at least 16-24 hours.
- Seaming should be kept to a minimum and avoid cross seams as much as possible. Place seams in areas exposed to the least amount of traffic.
- Before applying the adhesive, bring the loose sheets close together leaving a gap of 1/32” (1mm).
- The 1/32” (1 mm) gap is the space needed for the guide of the electric groover.
- This gap has to be constant in width.

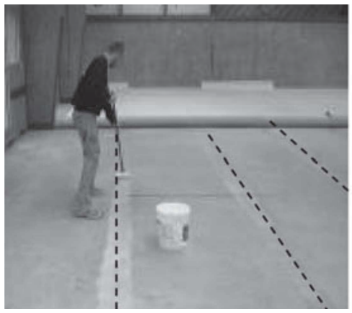
4. FLOORING INSPECTION

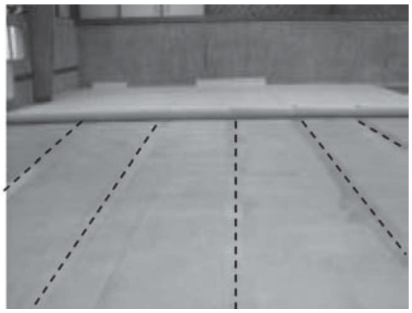
- Inspect all the flooring carefully to verify that correct colors, lot number, patterns, quality and quantities have been shipped as ordered. Do not install, cut, or fit any material that has visible defects. Material that

may have minor edge damage or distortion must be trimmed and removed prior to installation of the sheets.

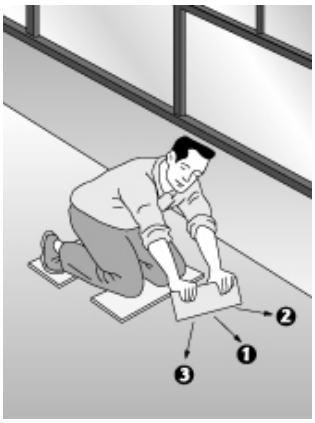
- **A contractor that installs material that has visible defects or damage without prior consent of Gerflor deems the product acceptable for installation and therefore accepts full responsibility for said material.**

5. GERFIX TPS+ ACRYLIC ADHESIVE INSTALLATION METHOD





- Use only Gerflor's Gerfix TPS+ adhesive.
- Follow the guidelines indicated on the pail of adhesive.
- Starting from the center line and working outward, fold back the sheets (width) halfway and apply the adhesive 4" to 6" wide on each side of the seams.
- Use a short nap paint roller to apply the adhesive.



- Never pre-cut material to final trim until it is applied into the adhesive. Leave material 2"-3" (5-7 cm) longer for trimming after placement.
- Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.
- Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 sectional 100-lbs (45 kg) steel roller in both directions.

Note: Use a 14'' to 16'' cork board or a piece of 2'' x 4'' wrapped with a piece of carpet to remove air bubbles.

- Continue laying sheets by keeping the edges spaced 1/32" (1 mm), trimming each side with a straight edge or scribing when needed. The goal is to produce a uniform 1/32" (1 mm) spaced seam for welding.
- The width of the gap has to be even and may be less than 1/32" depending on the guide of the groover used.
- **Leaving a wider gap to weld directly into the gap without grooving is not recommended and will lead to a welded seam failure**
- Avoid adhesive displacement by prohibiting traffic for a period of 48 hours and 72 hours for rolling loads.

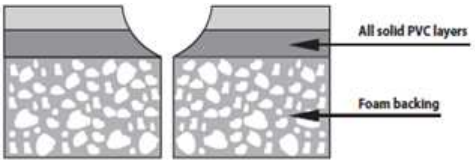
6. HEAT WELDING (Refer to our document: Verification of Heat Welded Seams)

6.1. ROUTING:

- Use an electric routing machine for major installation such as Leister or equal, approved by manufacturer.
- The Master Turbo Sport Groover is a great tool and is highly recommended to groove our products. http://turboheatweldingtools.com/shop/
- The Pico groover is a great tool to groove our products.

- The use of a straight edge and hand groover will provide good results for smaller installations.

- Maintain a uniform width and depth of groove for a uniform welded seam.
- **Rout the solid PVC layers of the Recreation Sport flooring. Do not rout into the foam layer.**



6.2. MANUAL WELD:

Note: Always practice on a scrap piece of material first to assure proper temperature and speed. Welding tests and adjustment of welder must be done every day there is welding to be done on the job site. Doing so will prevent failures.

Turbo Precision Nozzle # 22-3 Romus Rapid Nozzle 95027

- Groove only 16-24 hours after the installation.
- This must be done with a heat welding gun with variable temperature control and a speed weld nozzle by Leister or equal, approved by manufacturer.
- Turbo Precision Nozzle # 22-3 is highly recommended as well for proper welding.
http://turboheatweldingtools.com/shop/turbo-precision-nozzle-45mm/
- Nozzle size is 5mm as the Romus Rapid Nozzle 95027.
- The use of a non-recommended tip will jeopardize proper welding and could damage the flooring.
- Always keep the tip clean.

6.3. WELDING ROBOT (REQUIRED ON LARGE PROJECT)

Note: Always practice on a scrap piece of material first to assure proper temperature and speed. This should be done every day there is welding to do on the job site. Doing so will prevent failures.

- Do not let the robot operate without surveillance.
- Turbo Welding Gun #25 is the recommended welding robot as it comes with the right welding tip.
http://turboheatweldingtools.com/shop/chiquita/

Note: Should another type of welding robot be used, such as Leister robot, care must be taken in the choice of tip as for most cases the opening of the tip is more than 2mm. This could damage the flooring and lead to a seam failure.

- The recommended tip for the Leister Robot is Romus 95253 2mm.

WARNING: Do not weld the flooring using the Leister robot without the proper tip.

- Verify not to reduce the power with electrical cords that are too long.
- Frequently verify the weld.
- The ambient temperature, open windows and doors and other electrical equipment plugged in the same electrical outlet may influence proper welding.

Notes:

- For any type of installation, do not heat weld resilient flooring for a minimum of 16 to 24 hours after the material has been placed into the adhesive.
- Refer to ASTM F1516-13 "Standard Practice for Sealing Seams of Resilient Flooring by the Heat Weld Method".

6.4. TRIMMING WELDED ROD

Note: Trimming is done once the welding rod and material have completely cooled.

- Trimming must be done in two passes.
- The Turbo Plane tool is recommended and will trim in one pass.
  http://turboheatweldingtools.com/shop/
- Use trimming tools sharpen in the middle only, such as the Mozart trimmer.
- This type of trimmer will not damage the flooring.
- The first trim has to be done with the thickness guide.
- The second trim has to be done with the trimmer only.

Turbo Plane tool Mozart tool

- Always verify the trimmed weld to ensure that the welding rod is bonded properly and is flush with the top wear layer.

7. ONCE THE INSTALLATION IS COMPLETED

- Do a visual inspection of the project.
- Verify every welded seam.
- Repair every imperfection before leaving the project.
- Make sure that every vertical obstacle such as doorframes is well trimmed and sealed with a silicone sealer or an equivalent product.

For any information, please refer to Gerflor Technical Services.

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