INSTALLATION INSTRUCTIONS FOR GERFLOR CREATION TILES AND PLANKS & SAGA²

This document refers to the following products:

<table>
<thead>
<tr>
<th>Product</th>
<th>Size</th>
<th>Thickness</th>
<th>Installation direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation Exclusive Edition</td>
<td>See product TDS</td>
<td>2mm</td>
<td>90°</td>
</tr>
<tr>
<td>Your Creation our Warranty</td>
<td>See product TDS</td>
<td>2mm</td>
<td>Same</td>
</tr>
<tr>
<td>Creation Living</td>
<td>See product TDS</td>
<td>2mm</td>
<td>Same</td>
</tr>
<tr>
<td>Creation 55</td>
<td>See product TDS</td>
<td>2.5mm</td>
<td>Same</td>
</tr>
<tr>
<td>Saga²</td>
<td>19” x 19”</td>
<td>4.6mm</td>
<td>90°</td>
</tr>
</tbody>
</table>

1. STANDARDS: The guidelines detailed in this document are based upon industry accepted installation recommendations and reference the following standards:

1.1. ACI 302.1R Guide for Concrete Floor and Slab Construction.
1.2. ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials
1.3. ASTM F710-17 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
1.4. ASTM F1869-16 Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
1.5. ASTM F2170-16 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes.
1.7. ASTM F1482-15 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
1.8. ASTM F2419-11 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayment and Preparation of the Surface to Receive Resilient Flooring
1.9. ASTM F2678-16 Standard Practice for Preparing Panel Underlayment, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayment, and Concrete Subfloors with Underlayment Patching Compound
1.10. ASTM F2873-13 Standard Practice for the Installation of Self-Leveling Underlayment and the Preparation of Surface to Receive Resilient Flooring
1.11. ASTM F3010-13 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings
1.12. F3191-16 Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring

2. GENERAL INFORMATION

2.1. Gerflor Saga2 – Creation Tiles and Planks products are formulated to withstand high moisture conditions. To perform as designed, the concrete must be properly prepared to create a contaminate free and porous substrate.
2.2. **Gerflor Saga2 – Creation Tiles and Planks products are not designed to withstand hydrostatic or osmotic pressure.**

2.3. The guidelines offered within this document are not intended to be all inclusive. Only qualified, professional flooring technicians experienced in the field of resilient flooring should proceed with this installation system.

2.4. It is recommended to mechanically prepare the concrete via grinding or bead blasting the surface to achieve a clean and porous substrate.

2.5. Moisture and pH testing must be performed in accordance with ASTM F710-17.

2.6. Where patching is required to correct minor subfloor deviations/deficiencies use only GerPatch.

2.7. If a self-leveling material is required to achieve a flat, smooth and/or level surface, the use of a moisture tolerant, cementitious product that meets ASTM F2873-13 is required.

2.8. **Do not install material that has visible defects or damage. A contractor that installs material that has visible defects or damage assumes responsibility for the damaged material.**

3. **STORAGE AND HANDLING**

3.1. Stack boxes of planks not higher than 36” with the edges of the boxes flush to one another. Overhanging edges may curl the tiles. Handle all materials carefully and safely.

3.2. Displaced material on a skid or a broken skid will damage the planks and could leave marks and dents in the material that won’t be repairable.

3.3. If the LVT is stored for an extended period, remove the boxes from the skids.

3.4. **Work safe and always follow the relevant safety protocols for the activity you are engaged in.**

3.5. **Do not store any material outdoor.**

4. **JOB SITE CONDITIONS**

4.1. The LVT planks or tiles and the adhesive must be acclimated in the installation area for 24 hours prior to installation. Allow additional acclimation time if the flooring has been exposed to excessive cold or hot temperatures for an extended period.

4.2. The concrete floor temperature shall be a minimum of 65°F before installing the material.

4.3. Areas to receive flooring must be fully enclosed with the permanent HVAC system operational and set to a minimum of 65°F or a maximum of 85°F for a minimum of 48 hours prior to, during, and then maintained after the installation.

4.4. Prepare substrate in accordance with ASTM F710-17 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. Floors should be smooth, permanently dry, clean and free of all foreign materials such as dust, wax, solvents, paint, grease, oils, old adhesive residue, curing compounds and sealers.

4.5. Areas to receive flooring should have adequate lighting during all phases of the installation.

4.6. Installation should not begin until all trades; painting, ductwork, drywall, etc. are complete. Once the installation begins, the area must be secured from all other trades and foot traffic.
5. SUBFLOORS – CONCRETE

5.1. The concrete must have been placed 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.

5.2. Allow concrete to cure for a minimum of twenty-eight (28) days.

5.3. The slab flatness will have a tolerance of 1/8” in a 10’ maximum plane variation.

5.4. 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 flatness.

5.5. Check the subfloor for grease, oil, paint, marker, spills, dust or any contamination that may adversely affect the adhesion of the flooring. Mechanically clean the subfloor per the existing conditions. Petroleum products such as cutting oils and hydraulic fluid will penetrate the concrete and become a bond breaker. Areas affected by these oils must be bead-blasted to remove all contaminated concrete.

5.6. Mechanically remove any existing adhesive residues, paint over spray, sweeping compounds, dirt, debris or anything that may act as a bond breaker from the surface of the concrete. Where concrete sealers or curing compounds are present they must be completely, mechanically removed via grinding, bead-blasting, Diamabrush [http://www.diamabrush.com/] or similar. Sanding is not sufficient to completely remove curing compounds.

5.7. 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]

5.8. The moisture tests must be performed as per ASTM F1869-16 “Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” and/or ASTM F2170-16 “Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes”.

5.9. Where the concrete has been hard-troweled to create a burnished finish, porosity should be determined through the water drop test as detailed in ASTM F3191-16 Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring.

5.10. To minimize the potential for telegraphing, all dormant or non-moving cracks should be repaired with a rigid, two-component, polyurethane crack injection product. Moving joints such as expansion or isolation joints must be honored up through the installation in accordance with ASTM F 710-17.

5.11. Substrate moisture and pH levels shall not exceed:

<table>
<thead>
<tr>
<th></th>
<th>Concrete slab with an effective moisture vapor barrier</th>
<th>Concrete slab with radiant heating system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerfix Spray Adhesive</td>
<td>pH 6 to 11 / 8-lbs / 95% RH</td>
<td>pH 6 to 11 / 8-lbs / 95% RH</td>
</tr>
<tr>
<td>Gerfix TPS+ Adhesive</td>
<td>pH 6 to 11 / 10-lbs / 95% RH</td>
<td>pH 6 to 11 / 8-lbs / 90% RH</td>
</tr>
<tr>
<td>Gerflor T-111 P.U. Adhesive</td>
<td>pH 6 to 11 / 8-lbs / 85% RH</td>
<td>pH 6 to 11 / 5-lbs / 80% RH</td>
</tr>
<tr>
<td>Styccobond F49 Adhesive</td>
<td>pH 6 to 11 / 10-lbs 90% RH</td>
<td>pH 6 to 11 / 10-lbs 90% RH</td>
</tr>
</tbody>
</table>

5.12. Sweep and vacuum the area following mechanical preparation to remove all dust and debris.
5.13. Where patching is required to correct minor subfloor deviations/deficiencies use only GerPatch and allow to cure from 4 to 24 hours depending on the type of adhesive used. Sand if necessary to smooth. If the use of a moisture tolerant, cementitious self-leveler is required, it must meet ASTM F2873-13.

5.14. Refer to ASTM F710-17 for additional considerations on concrete substrates that are to receive resilient floor coverings.

6. SUBFLOORS – CONCRETE WITH RADIANT HEATING SYSTEMS

6.1. Gerflor floorings can be installed over subfloors with radiant heating systems.

6.2. To ensure proper installation and enable proper adhesion, respect the following conditions:

6.3. In all cases, it is necessary to respect the curing time of the concrete slab.

6.4. Before the installation, the radiant heating system must have been turned on for at least 4 weeks to stabilize the moisture content of the concrete slab and to avoid any moisture peak when the system will be in service after the installation of the flooring.

6.5. A certified technician should turn on the system as per the manufacturer recommendation.

6.6. The temperature must be kept at its maximum (85°F) for 8 days prior to the installation of the floor covering.

6.7. At all time, the maximum temperature will not exceed 85°F.

6.8. To install on a subfloor with a radiant heating system, the system must be turned off 48 hours before, during and 72 hours after the installation. Always verify that the room temperature is not less than 65°F during that period.

6.9. The heating system should be turned on gradually only 72 hours after the installation.

6.10. Turning on the heat gradually will allow the substrate and the flooring to adapt to the temperature change together.

6.11. A sudden temperature change could result in adhesion problems.

6.12. Setting the radiant heating system prior and during the installation:

<table>
<thead>
<tr>
<th></th>
<th>10 days to 2 days prior at 85°F</th>
<th>48 hours prior to the installation turned-off</th>
<th>Turned-off during the installation</th>
<th>72 hours after installation the system remains turned-off</th>
<th>Gradually turn on the system</th>
</tr>
</thead>
</table>

6.13. WARNING: NEVER COVER THE FLOORING WITH RUGS, MATS, RUNNERS, ETC. THESE WILL AFFECT THE HEAT TRANSFER OF THE RADIANT SYSTEM AND COULD DAMAGE THE FLOORING.

6.14. During the drying period of the concrete slab, moisture tests shall be performed per the conditions stated in ASTM F1869-16, ASTM F2170-16 standards and substrate conditions will meet ASTM F710-11 standard.

6.15. When using Gerfix TPS+, moisture tests for subfloors with Radiant Heating Systems shall not exceed 8-lbs/ 1000 sq. ft./24hrs per ASTM F1869-16, 90% RH per ASTM F2170-16 and pH tests to range from 6 to 11.

6.16. When using Gerfix Spray, moisture tests for subfloors with Radiant Heating Systems shall not exceed 8-lbs/ 1000 sq. ft./24hrs per ASTM F1869-16, 95% RH per ASTM F2170-16 and pH tests to range from 6 to 11.
6.17. When using Gerflor T-111, moisture tests for subfloors with Radiant Heating Systems shall not exceed 5-lbs/ 1000 sq. ft./24hrs per ASTM F1869-16 and 80% RH per ASTM F2170-16 and pH tests to range from 6 to 11.

6.18. When using Styccobond F49, moisture tests for subfloors with Radiant Heating Systems shall not exceed 8-lbs/ 1000 sq. ft./24hrs per ASTM F1869-16 and 90% RH per ASTM F2170-16 and pH tests to range from 6 to 11.

7. SUBFLOORS – GYPSUM BASE SUBSTRATE

7.1. Prohibit circulation of other trades in the installation area.

7.2. The General Contractor shall patch and repair all cracks, voids and other imperfections of the gypsum base subfloor with high strength gypsum base patching compounds compatible with the gypsum base product.

7.3. After completion of patching and leveling, vacuum or sweep entire surface of the gypsum base subfloor to remove loose dust and dirt.

7.4. Apply an acrylic base primer per the manufacturer’s instructions.

7.5. Once the Primer has set, install the flooring following the installation instructions.

7.6. Do not use Gerflor T-111 polyurethane adhesive over this type of substrate. Refer to Gerflor Technical Service for further instructions.

8. SUBFLOORS – WOOD

8.1. Do not install over OSB, particle board, chipboard, lauan or composite type underlayments.

8.2. Wood subfloors must have a minimum of 18” of cross-ventilation space between the bottom of the joist and the ground.

8.3. Any exposed earth crawl space must be sealed with a polyethylene moisture barrier.

8.4. Wood subfloors must meet local and national building codes, trade associations (e.g. The APA – The Engineered Wood Association) that offer guidelines to meet the building codes.

8.5. Always refer to ASTM F1482-15 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring.

8.6. Any subfloor that has a single layer must be covered with a ¼” or more of APA approved underlayment plywood to achieve a total thickness of 1 inch minimum.

9. SUBFLOOR PREPARATION

9.1. 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.

9.2. The concrete subfloor will be cured for a minimum of at least thirty (30) days.

9.3. The slab flatness will have a tolerance of 1/8” in a 10’ maximum plane variation.

9.4. Prepare substrate as per ASTM F710-17 “Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring”.

9.5. The concrete floor temperature must be maintained at a minimum of 65°F for 48 hours prior, during, and 48 hours after the installation.

9.6. 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](http://www.icri.org/Certification/Find-CCSMTTs.asp)

9.7. The moisture tests must be performed as per ASTM F1869-16 “Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” and/or ASTM F2170-16 “Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes”.

9.8. Substrate moisture levels shall not exceed:

<table>
<thead>
<tr>
<th>Adhesive</th>
<th>Concrete slab with an effective moisture vapor barrier</th>
<th>Concrete slab with radiant heating system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerfix Plank &amp; Tile Spray Adhesive</td>
<td>pH 6 to 11 / 8-lbs / 95% RH</td>
<td>pH 6 to 11 / 8-lbs / 95% RH</td>
</tr>
<tr>
<td>Gerfix TPS+ Adhesive</td>
<td>pH 6 to 11 / 10-lbs / 95% RH</td>
<td>pH 6 to 11 / 8-lbs / 90% RH</td>
</tr>
<tr>
<td>Gerflor T-111 P.U. Adhesive</td>
<td>pH 6 to 11 / 8-lbs / 85% RH</td>
<td>pH 6 to 11 / 5-lbs / 80% RH</td>
</tr>
<tr>
<td>Styccobond F49 Adhesive</td>
<td>pH 6 to 11 / 10-lbs 90% RH</td>
<td>pH 6 to 11 / 10-lbs 90% RH</td>
</tr>
</tbody>
</table>

9.9. Prohibit circulation of other trades in the installation area.

9.10. 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.

9.11. 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 per the existing conditions.


9.13. 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.

9.14. Curing compounds of all types must be completely removed by means of sanding, scarification or bead-blasting. Self-dissipative curing compounds must be removed using the same methods.

9.15. The General Contractor shall patch and repair all cracks, voids and other imperfections of concrete with GerPatch patching compound. **Do not use gypsum-based patching materials.**

9.16. 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.

10. ACCLIMATION

10.1. The boxes of planks, tiles and adhesive must be acclimated in the installation area for 24 hours prior to installation. Allow additional acclimation time if the flooring has been exposed to excessive cold or hot temperatures for an extended period.

10.2. The concrete floor temperature shall be a minimum of 65°F before laying out tiles.

10.3. Areas to receive flooring must be fully enclosed with the permanent HVAC system operational and set to a minimum of 65°F or a maximum of 85°F for a minimum of 48 hours prior to, during, and then maintained after the installation.

10.4. Keep the identification tags of each boxes and verify that planks and tiles are from the same lot.
10.5. Tiles must be installed in a checkerboard pattern (90°).

10.6. Follow the lot numbers of the boxes of planks and tiles.

10.7. To achieve a more homogeneous look, mix tiles from different boxes.

10.8. Mark a control/starting line. Dry lay the first rows along this line.

10.9. Dry lay successive rows of planks and tiles.

10.10. Allow material to relax overnight before proceeding with the installation.

11. INSTALLATION OF TILES

11.1. Per the previous section 10 – Acclimation, the material must acclimate and properly relax prior to installation.

11.2. Boxes are clearly marked with batch numbers and the product should be checked for match before installing.

11.3. Inspect all materials 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.

11.4. 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.

Note: Tiles have directional arrows and should be installed by alternating the arrows 90° forming a “checkerboard” pattern. Should the tiles be installed in the same direction, the seams will then be more visible, this is an observable fact inherent to the product. Remove tiles from the cartons 16-24 hours prior to installation.

11.5. Chalk the center lines of the work area in both directions so that one line is parallel to the length of the room and that the second line is on a 90° angle to the first line.

11.6. Position center lines to allow the perimeter tiles to be ≥ to ½ tile.

11.7. Before spreading adhesive, it is recommended to lay one or two rows of tiles along both center lines to check for proper alignment.

11.8. Mix tiles from different boxes to obtain a consistent layout.

11.9. Be certain this tile is installed on the lines to fit the 90° angle.

11.10. After the first tile is in place, begin laying tiles outward along both guide lines.

11.11. Press tiles firmly against adjoining tiles and press into the adhesive.

11.12. Begin stair-stepping the tiles into the field area.

11.13. Tiles **must** be installed in a checkerboard pattern (90°).
12. PLANKS LAYOUT

12.1. Chalk the center lines of the work area so that the line is parallel to the length of the room.

12.2. Before spreading adhesive, it is recommended to lay one or two rows of planks along center line to check for proper alignment.

12.3. Mix planks from different boxes to obtain a consistent layout.

12.4. Be certain the planks are installed right on the center lines.

12.5. After the first row of planks is in place, begin laying planks outward.

12.6. Press planks firmly against adjoining planks and press into the adhesive.

12.7. Begin stair-stepping the planks into the field area.

13. RECOMMENDED ADHESIVES

13.1. Gerfix LVT & Planks Spray Adhesive:

13.1.1. Can be used on most substrate. See instruction below

13.2. Gerfix TPS+:

13.2.1. Can be used on most substrate. See instruction below

13.3. Gerflor T-111 P.U. Adhesive:

13.3.1. Recommended for any areas subject to be wet such as around drains of refrigerators in stores.

13.4. Styccobond F49 2-part Acrylic adhesive

13.4.1. Can be used on all type of substrate.

13.4.2. The only adhesive recommended close to bay windows where sun heat will hit the flooring directly. The adhesive will keep the flooring from expanding and contracting when the temperature after the adhesive is fully cured remains between 5°F and 140°F.

14. HERRINGBONE RECOMMENDED LAYOUT

Herringbone only or suggested Herringbone mixed with regular planks
15. GERFIX SPRAY LVT & PLANK ADHESIVE INSTALLATION METHOD

15.1. Per the previous section 10 – Acclimation, the material must acclimate and properly relax prior to installation.

15.2. Use only Gerflor’s Gerfix LVT & Plank Spray adhesive.

15.3. Always refer to the Gerfix Spray LVT & Plank Adhesive Technical Data Sheet.

15.4. Follow the guidelines indicated on the container of adhesive.

15.5. Recommended spray pattern:

15.6. Coverage up to 185 sq. ft. per can.

15.7. Ensure substrate, flooring and surrounding areas are clean and dust free.

15.8. Damp-mop substrate if dust is present.

15.9. Only use GerPatch patching compounds.

15.10. Wipe hand across surface to verify for dust.

15.11. If dust transfers, substrate is not clean.

15.12. Protect from overspray with a spray shield, drop cloths or paper with masking tape.

15.13. Starting from the center lines and working outward, apply the adhesive to the subfloor.

15.14. Shake aerosol can well. Remove white cap.

15.15. To ensure uniform adhesion of the entire surface, spray a workable amount of adhesive at one time.

15.16. Stand straight up to spray. Hold can upside down, approximately 20-30 inches horizontally from the substrate, aim at floor and press tip with finger.

15.17. Walk right to left smoothly to achieve results as seen on photo.

15.18. Adhesive should spray out in a wide mist and fall like snow.

15.19. Spraying in a sweeping motion may result in an inconsistent spray pattern.

15.20. Excess buildup or inconsistent spray pattern on substrate may cause telegraphing.

15.21. Avoid extremely heavy application.

15.22. To ensure optimal spray pattern, remove any adhesive build up that may occur during the application process.

15.23. If overspray occurs, it may be removed with a damp cloth while the adhesive is still wet.

15.24. Allow adhesive to dry until there is no adhesive transfer when lightly touched. (10-20 min)

15.25. High humidity and/or low temperature increases tack time.
15.26. Open time after application is 3 hours. While open, ensure that adhesive is not contaminated by dust.

15.27. Roll flooring with a 3 section 100-lbs roller within 1 hour after installation to complete the bonding process.

15.28. Floor is open to all traffic immediately after installation.

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

16. GERFIX TPS+ ACRYLIC ADHESIVE INSTALLATION METHOD FOR TILES AND PLANKS

16.1. Per the previous section 10 – Acclimation, the material must acclimate and properly relax prior to installation.

16.2. Always refer to the Gerfix TPS+ Technical Data Sheet.

16.3. Follow the guidelines indicated on the pail of adhesive.

16.4. Only use GerPatch patching compounds.

16.5. Recommended trowel size is 1/32” x 1/16” x 1/32”, covering up to 245 sq. ft. per U.S. gallon.

16.6. Starting from the center lines and working outward, apply the adhesive to the subfloor.

16.7. To ensure uniform adhesion of the entire surface, apply a workable amount of adhesive at one time.

16.8. Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.

16.9. Immediately after troweling the adhesive onto the concrete use a medium napped paint roller saturated with adhesive to flatten out visible trowel marks and even out the adhesive. **A double arm roller frame is recommended to ensure an even coat of adhesive.**

16.10. Open time is the combination of flash time and working time.

16.11. “Open time” of the adhesive is dependent upon porosity of the substrate, temperature, and humidity. It is important that the installers familiarize themselves with the adhesive before starting the installations. Insufficient open time for acrylic adhesive will cause bubbling. An insufficient open time will result in poor adhesion.

<table>
<thead>
<tr>
<th>Application Characteristics over Porous Substrates</th>
<th>Flash Time*</th>
<th>Working Time**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saga2 – Creation plank &amp; tile</td>
<td>20 to 40 minutes (to reach a tacky state)</td>
<td>40 to 90 minutes</td>
</tr>
</tbody>
</table>

* Flash Time is the waiting time required before installing flooring.

** Working time is the window of time for the adhesive to accept flooring.

*** Wet tacky: When parts of the adhesive show withish areas but still has some tackiness.
Note: Flash time and working time may vary based on temperature, humidity, substrate porosity, trowel size and jobsite conditions.

16.12. Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 sectional 100-lbs steel roller in both directions.

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


16.15. During the installation, always double check the flooring for bubbles with the lights on and off.

16.16. Avoid adhesive displacement by prohibiting traffic for a period of 48 hours and 72 hours for rolling loads.

17. GERFLOR T-111 POLYURETHANE ADHESIVE (To be used only when recommended by Technical Department only)

17.1. Per the previous section 10 – Acclimation, the material must acclimate and properly relax prior to installation.

17.2. Use only a Gerflor T-111 Polyurethane adhesive.

17.3. Always refer to the Gerflor T-111 Polyurethane Adhesive Technical Data Sheet.

17.4. Respect the guidelines indicated on the pail of adhesive.

17.5. Only use GerPatch patching compounds.

17.6. Recommended trowel size is 1/32” x 1/16” x 1/32”, covering up to 245 sq. ft. per US gallon.

17.7. Mix polyurethane adhesive part A and part B as recommended by the adhesive manufacturer.

17.8. Installers must be familiar with the use of polyurethane adhesives.

17.9. Starting from the center line and working outward, apply an amount of adhesive that will remain wet until the tiles or planks are installed.

17.10. To ensure uniform adhesion of the entire surface, apply a workable amount of adhesive at one time.

17.11. Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.

17.12. There is no ‘open time’ with this type of adhesive, therefore once the adhesive is applied, immediately install the flooring into the wet adhesive.

17.13. Never work on top of the freshly installed planks or tiles.

17.14. Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 section 100-lbs steel roller in both directions.

Note: Rolling and pushing the air out are critical with this type of adhesive. Gerflor T-111 two-part polyurethane adhesive will never emit gases while setting; therefore, any bubble that will appear is caused by entrapped air under the flooring, a direct cause of improper rolling.

Note: In addition to rolling the flooring in both directions with a 3 section 100-lbs roller, use a 14” to 16” cork board or a piece of 2” x 4” wrapped with a piece of carpet to remove air bubbles.
17.15. Avoid adhesive displacement by prohibiting traffic for a period of 48 hours and 72 hours for rolling loads.

17.16. The use of knee boards and walking boards are mandatory to protect from adhesive displacement during installation.

18. STYCCOBOND F49 ADHESIVE INSTALLATION METHOD

18.1. Per the previous section 10 – Acclimation, the material must acclimate and properly relax prior to installation.

18.2. F. Ball Stycobond F49 Adhesive is the only approved adhesive for use with the Gerflor planks and tiles. Any other adhesive will void the adhesion warranty.

18.3. Follow the guidelines indicated on the Technical Data Sheet of adhesive.

18.3.1. F. Ball Stycobond F49 is a 2-part acrylic adhesive that has a 90 minutes pot life once mixed and 2 hours working time once the adhesive has tack-up and does not transfer to the touch. Adhesive open time and working time will vary based upon site condition.

18.3.2. The use of fans is acceptable to speed up the drying time. Be sure to not let debris get into the adhesive.

18.4. Trowel the adhesive onto the substrate using a 1/32" x 1/16" x 5/64", 'U' notched trowel covering from 500 to 600 sq. ft. per pail. Proper adhesive coverage is required to effectively bond the material. As such, it is imperative to use the proper trowel as well as maintaining the proper notch size over the course of the entire floor. Replace trowel blades often. Inadequate application of adhesive will void the warranty.

Note: It is important to let the adhesive dry to the point there is no transfer to the touch before installing.

18.5. Apply the Stycobond F49 adhesive to the subfloor. Always start gluing from the center line out. Do not apply too much adhesive. Always figure enough time to install the tiles while the adhesive is still tacky.

18.6. To ensure uniform adhesion of the entire surface, apply a workable amount of adhesive at one time.

18.7. Avoid overlapping adhesive or creating a buildup at all start and stop points. Excess adhesive can leave a ridge that will telegraph into the finished floor. Glue and roll the entire area (wall to wall) before proceeding to the next run of material. Use a wet-soapy rag or denatured alcohol to immediately clean up any fresh adhesive that gets on the vinyl surface. Clean any dried adhesive with denatured alcohol.

18.8. Immediately after troweling the adhesive onto the concrete use a medium napped paint roller saturated with adhesive to flatten out visible trowel marks and even out the adhesive. A double arm roller frame is recommended to ensure an even coat of adhesive.

18.9. Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.

18.10. Open time is the combination of flash time and working time.

18.11. “Open time” of the adhesive is dependent upon porosity of the substrate, temperature, and humidity. It is important that the installers familiarize themselves with the adhesive before starting the installations. Insufficient open time for acrylic adhesive will cause bubbling. An insufficient open time will result in poor adhesion.

18.12. Application Characteristics over Porous Substrates:
### Application Characteristics over Porous Substrates

<table>
<thead>
<tr>
<th></th>
<th>Flash Time*</th>
<th>Working Time**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerflor Homogeneous Tiles</td>
<td>15 to 30 minutes (to reach a tacky*** state)</td>
<td>120 minutes</td>
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</table>

* Flash Time: It is the waiting time required before installing flooring.

** Working time: It is the window of time for the adhesive to accept flooring.

*** Tacky: When the adhesive is clear sticky and does not transfer to the touch.

Note: Flash time and working time may vary based on temperature, humidity, substrate porosity, trowel size and jobsite conditions.

18.13. Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 section 100-lbs roller in both directions rolling sideways first.

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.

18.14. During the installation, always double check the flooring for bubbles with the lights on and off.

18.15. Avoid adhesive displacement by prohibiting traffic for a period of 48 hours and 72 hours for rolling loads.

19. **ONCE THE INSTALLATION IS COMPLETED**

19.1. Perform a visual inspection of the project.

19.2. Repair every imperfection before leaving the project.

19.3. Make sure that every vertical obstacle such as door frames 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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