Gerfior INSTALLATION INSTRUCTIONS GTI MAX CLEANTECH CLEANROOM

These instructions are specifically written for the installation of the following products:

Product	Size	Thickness	Installation direction	Seam treatment			
GTI Cleantech Cleanroom	23 5/8" x 23 5/8"	6mm	Same	CR 40			
GTI 4mm Underlayment	4' x 5' or 4" x 9'	4mm	N/A	N/A			
Mipolam (matching color)	6'6" wide	2mm	Same	CR 40			
Welding rod	4 mm	N/A	N/A	CR 40			

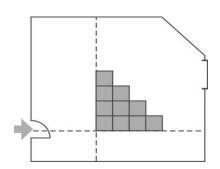
Important Note: Before installing, refer to Gerflor Installation Handbook for acclimation, job site conditions, subfloor prep, and other general installation recommendations.

1. GENERAL INFORMATION

- **1.1.** Gerflor flooring products are formulated to withstand high moisture conditions. To perform as designed, the concrete should be properly prepared to create a contaminate free and porous substrate.
- **1.2.** Gerflor flooring products are <u>not</u> designed to withstand hydrostatic or osmotic pressure.
- **1.3.** 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.
- **1.4.** It is recommended to mechanically prepare the concrete via grinding or bead blasting the surface to achieve a CSP 1+, clean and porous substrate.
- **1.5.** Moisture and pH testing must be performed in accordance with ASTM F710-22.
- **1.6.** Adhesive bond tests are recommended to ensure adequate bonding to the substrate.
- **1.7.** Do not install material that has visible defects or damage. A contractor that installs material that has visible defects or damage assumes responsibility for that material.

2. LAYOUT AND INSTALLATION

- NOTE: When installing GTI MAX Cleantech Tiles, DO NOT pull tiles tight to each other. Tiles installed too tightly will make the grooving process difficult. Do not leave a gap greater than 1/32-inch-wide between tiles.
- **2.1.** Use Gerfix TPS+, Gerfix Spray, or Gerfix 100 adhesive
- 2.2. DO NOT mix batches of tiles.
- **2.3.** Chalk the centre 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.
- **2.4.** Position centre lines to allow the perimeter tiles to be \geq to $\frac{1}{2}$ tiles.

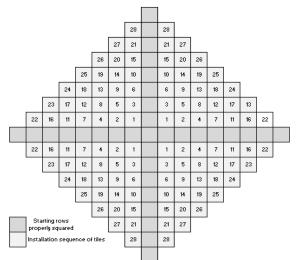


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- **2.5.** Before spreading adhesives, it is recommended to lay one or two rows of tiles along both centre lines to check for proper alignment.
- **2.6.** After the first tile is in place, begin laying tiles outward along both guidelines.
- 2.7. Install tiles in the same direction (see arrows on the back of the tiles).
- **2.8.** Press tiles **lightly** against adjoining tiles and press into the adhesive.
- **2.9.** Begin stair-stepping the tiles into the field area.

3. SEQUENCE OF TILES

3.1. Follow the installation sequence to avoid tile running off.



4. CUTTING AND FITTING

- **4.1.** For doorjambs or other irregular cuts, mark tiles with a pencil, heat with a hot air gun, and cut with a sharp utility blade. The tiles will cut easily when heated sufficiently.
- **4.1.** The perimeter cuts can be made with a table saw and fine-tooth blade.
- **4.2.** A Bullet PRO I-26 Magnum shears cutter is highly recommended for faster, precise perimeter cutting
- **4.3.** A WEN 12 Amp Speed Plunge Cut Circular saw is an economical tool that can also be used for cutting perimeters. (Guide rails are also available.)







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5. INSTALLING USING GERFIX TPS+ ACRYLIC ADHESIVE

- 5.1. Always refer to the Gerfix TPS+ Adhesive Technical data Sheet
- **5.2.** Recommended trowel size is 1/32" x 1/16" x 1/32", covering from 170 to 220 sq. ft. per US gallon.
- **5.3.** To ensure uniform adhesion of the entire surface, apply a workable amount of adhesive at once.
- 5.4. Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.
- 5.5. Immediately after trowelling 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.
- **5.6.** "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.

Application Characteristic	s over Porous Substrates (Non-Por	ous-see note below)
	Open Time*	Working Time**
Gerflor GTI Max Cleantech Tiles	20 to 40 minutes (to reach a tacky state***)	Up to 1.5 hours

* Open Time: is the wait time required before installing flooring into the adhesive.

**** Working time:** is the wait time required before installing flooring into the adhesive.

*** **Tacky:** When adhesive starts to become translucid and there is light transfer to the fingers when slightly touched resulting in transfer to the backing of the flooring.

Note: For <u>Non-Porous</u> substrates such as existing flooring or metal, let the adhesive dry completely, with NO transfer to the fingers when touched, then immediately install the flooring and roll with a 100 lb. roller.

- **5.7.** Starting from the centre line and working outward, apply the adhesive and install tiles when the adhesive is ready.
- **5.8.** Press tiles lightly against adjoining tiles and press into the adhesive.
- **5.9.** Periodically, lift the edge of a tile to confirm transfer of adhesive to the back of the flooring. There must be adhesive transfer for the tiles to be adequately secured to the substrate.
- **5.10.** Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 section 100 lbs roller in both directions.
- **5.11.** Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.
- **5.12.** During the installation, with the lights on and off, always double check the flooring for bubbles with portable, ambient, and/or fixed lighting.
- 5.13. Avoid adhesive displacement by prohibiting traffic for a period of 24 hours and 72 hours for rolling loads.

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6. INSTALLING USING GERFIX 196 HYBRID MULTI-PURPOSE ADHESIVE

- GERFIX 196 IS CHEMICALLY REACTIVE. ONCE MIXED, THE POT LIFE IN THE BUCKET IS 2 HOURS; AFTER SUCH TIME, DISCARD ANY REMAINING ADHESIVE
- Trowel the adhesive onto the substrate using a 1/32" x 1/16" x 1/32" U notched trowel. Coverage of 425 550 sq. ft. per Pail.
- It is imperative to use the proper trowel as well as maintaining the proper notch size over the course of the entire floor.
- Prepare concrete per ASTM F-710. Concrete should be mechanically prepared to a CSP 1+ to ensure a porous contaminate free substrate.
- Inadequate application of adhesive will void the warranty.
- Use mineral spirits to remove wet or dry adhesive.
- 6.1. Always refer to the Gerfix 196 Adhesive Technical Data Sheet.
- **6.2.** Follow the guidelines indicated on the Technical Data Sheet.
- **6.3.** Recommended trowel size is 1/32" x 1/16" x 1/32", covering from 170 to 220 sq. ft. per US gallon.



- **6.5.** To ensure uniform adhesion of the entire surface, apply a workable amount of adhesive at one time.
- 6.6. Maintain a uniform spread rate. Replace trowel (or trowel blade) with every pail used.
- **6.7.** 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.

Application Characteristics over Po	orous Substrates (Non-Porous – se	ee note below)
	Open Time*	Working Time**
Gerflor GTI Max Cleantech Tiles	20 to 30 minutes (to reach a tacky state ***)	1 to 3 hours

- * **Open Time:** is the wait time required before installing flooring inot the adhesive.
- ** Working time: is the wait time required before installing flooring inot the adhesive.

*** **Tacky:** When the adhesive starts to becomes translucid and there is light transfer to the fingers when slightly touched.

NOTE: For <u>*Non-Porous*</u> substrates such as metal, existing floorings, etc., allow the adhesive to transition from the wet stage to a tacky-dry stage (no transfer to fingers, when lightly touched) then immediately install the flooring and roll with a 100lb. roller.

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- **6.8.** Starting from the center line and working outward, apply the adhesive and install tiles when the adhesive is ready.
- **6.9.** Press tiles firmly against adjoining tiles and press into the adhesive.
- **6.10.** Once flooring is placed into the adhesive, immediately roll thoroughly with a 3 section 100-lbs steel roller in both directions.
- **6.11.** Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.
- **6.12.** Continually check the flooring for bubbles. To verify there are no bubbles, look down and across the flooring from both a standing and prone position with the lights on and off. The use of a light source at floor level can be helpful in finding any air pockets or bubbles.
- 6.13. Heat welding can proceed after 24 hours from time of installation
- 6.14. No heavy foot traffic for 6-12 hours after installation, no heavy rolling loads for 24 hours and no heavy point loads for 72 hours.
- 6.15. Use mineral spirits to remove fresh or dried adhesive from the surface of the flooring
- **6.16.** Following the above steps is of the utmost importance for a successful installation that will resist high moisture levels and be serviceable over the life of the floor.

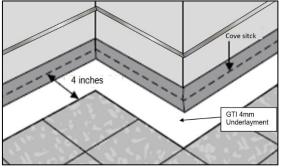
7. FLASHCOVING SHEET VINYL WITH GTI CLEANTECH CLEANROOM

- 7.1. Measure and cut GTI tiles 4 inches from all perimeter walls.
- **7.2.** If SPM wall panels are to be installed, the wall panels should be installed first and then the flooring. Eliminate the cove cap and underscribe the vinyl to the wall panels to ensure evenly spaced seams for welding.

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- **7.3.** On the 4" edge of the perimeter, install Gerflor 4 mm GTI Underlayment and then install the cove stick on top of it. (Use same adhesive as used to install the flooring.)
- 7.4. Measure height for cap metal and install.
- 7.5. Metal cap is preferred over vinyl.
- **7.6.** Cut the homogeneous sheet to the desired size to complete the flashcoving.



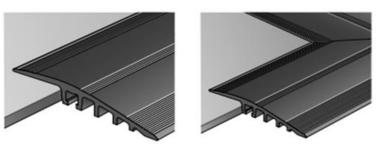
- **7.7.** Apply adhesives and install the pieces of homogeneous sheets to the floor and wall, being careful to ensure it is tight in the cove stick.
- **7.8.** Miter the inside and outside corner seams and cut the vinyl net with the walls vertically on the corners. This flashcoving method is sometimes called picture framing, or border coving.
- 7.9. Roll floor, cove radius, and walls with hand rollers to ensure proper bonding.
- 7.10. Weld all vertical and corner seams and trim with hand tools.

8. CLEAN CORNER INSTALLATION - REFER TO THE "CLEAN CORNER" DOCUMENT

- **8.1.** When installing the Clean Corner system, and to achieve the inside and outside corners, a minimum of 12" pieces of vinyl will need to be cut and used to fill in each corner.
- **8.2.** Fit pieces in the corner by butting up squarely to the GTI tiles. Heat with hot air guns, fold back and install per the Clean Corner Installation Document.
- **8.3.** After fitting the inside and outside corner pieces, measure distance of walls between each corner and install the appropriate size pieces of sheet vinyl. Make clean vertical seams between the inside and outside corner pieces.

9. DOORWAYS AND TERMINATIONS

9.1. ALUMINUM PROFILE



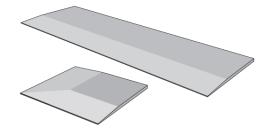
- **9.2.** For heavy traffic and can be used for GTI or Attraction tiles. (Premade corner pieces are also available.)
- **9.3.** 4 mm x 50 mm and 30 mm long nylon plugs are included in profile kit.

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- **9.4.** Cut tiles and lay metal at desire location.
- 9.5. Hold metal securely and use hammer to drill 3mm pilot holes through the centre of each hole.
- 9.6. Remove metal and finish holes with 6mm drill bit.
- **9.7.** Vacuum holes and insert nylon plugs
- 9.8. Realign metal and secure with 4 mm x 50 mm screws and Philipps screwdriver

9.9. GTI ACCESS AND CORNER PIECES

- **9.10.** For moderate traffic
- **9.11.** Must be glued down using T-111 adhesive
- **9.12.** Weight down until adhesive cures



10. HEAT WELDING - REFER TO THE "HEAT WELDING GERFLOR VINYL PRODUCTS" DOCUMENT

11. ONCE THE INSTALLATION IS COMPLETED

- **11.1.** Perform a visual inspection of the project.
- **11.2.** Verify every welded seam.
- **11.3.** Repair every imperfection before leaving the project.
- **11.4.** Make sure that every vertical obstacle such as doorframes is well trimmed and sealed with an acrylic, silicone, or equivalent sealant product.
- **11.5.** To maximize the aesthetic appearance and serviceability of the newly installed flooring, provide your customer with a copy of the **Gerflor Maintenance Instructions.**