INSTALLATION INSTRUCTIONS

GERFLOR TECHNIC EL5 TILES

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

Product	Size	Installation direction	Seams Welded
Mipolam Technic EL 5 in tiles	Approx. 24'' x 24''	90°	CR 40
Welding Rod	4mm		CR 40

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

1. GENERAL INFORMATION

1.1. Gerflor ESD 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 ESD flooring products are not 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 the damaged material.

2. INSTALLATION OF TECHNIC EL5 ESD TILES

Note: Seams of conductive and static dissipative tiles must always be heat-welded.

3. COPPER STRIP LAYOUT FOR TECHNIC EL5 TIILES USING ESD ADHESIVE

NOTE: **THE INSTALLATION OF THE COPPER STRIP IS RELATED TO THE TYPE OF ADHESIVE USED FOR THE PROJECT. SEE RECOMMENDED ADHESIVE INSTRUCTIONS BELOW FOR MORE DETAILS.**

3.1. Copper strip come in rolls of 656 linear feet.

3.2. The copper strip is 3/8” wide and 0.003” thick.

3.3. Layout copper strip and coordinate grounding with a certified electrician.

3.4. **For rooms less than 400 sq. ft. use one copper strip 6’6” long. Allow extra copper at wall for proper grounding.**

NOTE: THE TILES MUST BE GROUNDED EVERY 400 SQ. FT. AND HAVE A MINIMUM 6’6” LONG

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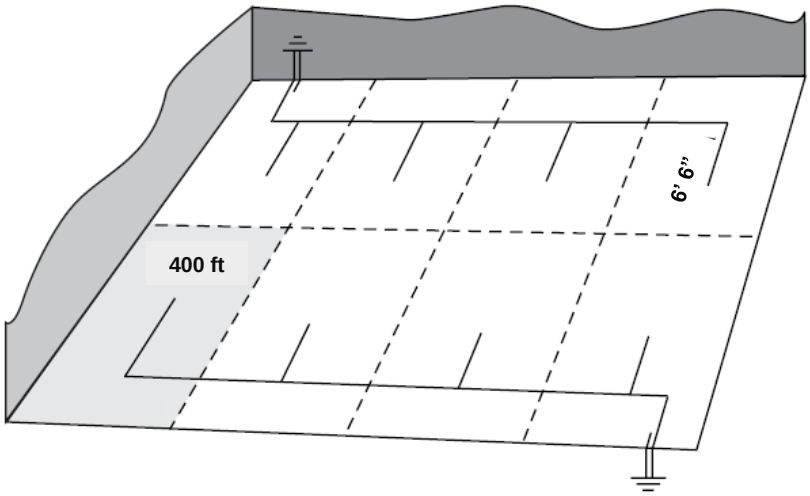
COPPER STRIP BENEATH.



3.5. Layout copper strip and coordinate grounding with a certified electrician.

3.6. For rooms ≤400 sq. ft., a piece of copper strip 6'6" long under the tiles and coming out along the wall to be grounded by a certified electrician.

3.7. For rooms >400 sq. ft., install a copper strip on the perimeter and a piece of 6'6" long for every 400 sq. ft.

3.8. The copper strips must be grounded by a certified electrician.

3.9. Install copper strip with the conductive adhesive.

NOTE: Install copper strip with the conductive adhesive before starting the installation of the flooring. Spread conductive adhesive in narrow strips to substrate according to copper strip layout and lay copper into wet adhesive. Immediately flat trowel, applying pressure to carefully smooth the copper and remove any excessive adhesive. Allow adhesive to dry before laying out tiles. When installing the tiles, spread adhesive on entire surface being careful not to damage the copper.

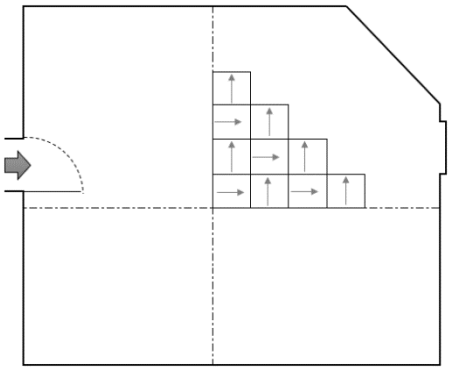
4. TILE LAYOUT

4.1. 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.

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

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

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



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

4.6. After the first tile is in place, begin laying tiles outward along both guidelines.

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

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

4.9. It is recommended to install the tiles in a checkerboard pattern.

5. INSTALLING ESD TILES USING ESD ADHESIVE

5.1. Always refer to the **ESD Adhesive Technical Data Sheet for proper application**

5.2. Recommended trowel size is 1/32" x 1/16" x 1/32", covering 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 one time.

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

5.5. Starting from the center line and working outward, apply the adhesive and install tiles when the adhesive is ready.

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

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

5.8. Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.

5.9. Do not stand, kneel, or walk on the flooring until the adhesive is fully cured. The use of kneeling board and walking board is mandatory to eliminate adhesive displacement.

5.10. There must be wet transfer of adhesive to the backing of the flooring. Use weights if needed for end seams or perimeters. If the adhesive skins over or dries it must be scraped up and new adhesive applied.

5.11. Using a 100-lbs sectional steel roller, roll the flooring to ensure adhesive transfer and to evacuate all air that can lead to bubbles. Optimally there should be an individual tasked solely with this responsibility

5.12. Heat welding can proceed 24 hours after installation

5.13. 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.

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6. COPPER STRIP LAYOUT FOR TECHNIC EL5 TIILES USING GERFIX LVT SPRAY - GERFIX TPS+

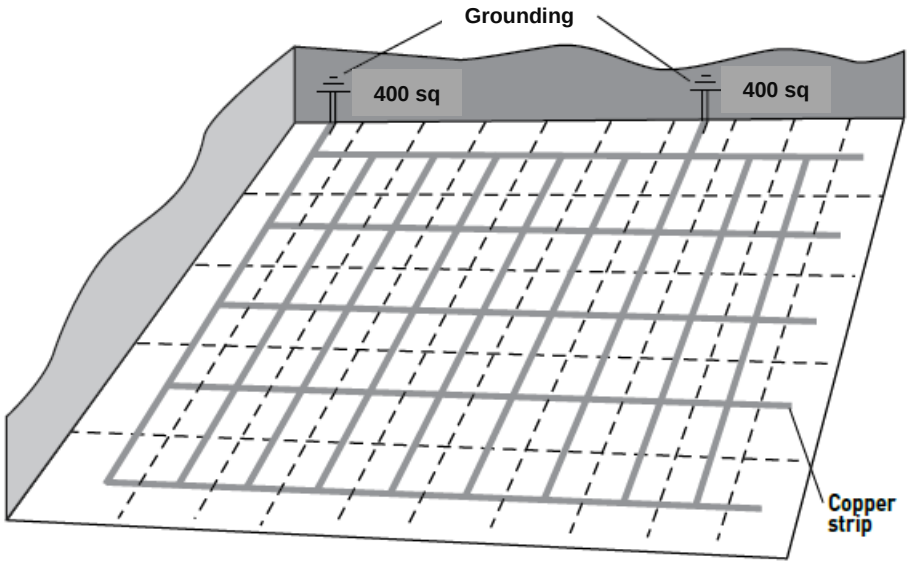
NOTE: THE INSTALLATION OF THE COPPER STRIP IS RELATED TO THE TYPE OF ADHESIVE USED FOR THE PROJECT. SEE RECOMMENDED ADHESIVE INSTRUCTIONS BELOW FOR MORE DETAILS.

6.1. Copper strip come in rolls of 656 linear feet.

6.2. The copper strip is 3/8” wide and 0.003” thick.

6.3. Layout copper strip and coordinate grounding with a certified electrician.

NOTE: THE TILES MUST BE GROUNDED EVERY 400 SQ. FT. AND HAVE A COPPER STRIP LAYING BENEATH THE CENTER OF EACH TILE IN BOTH DIRECTIONS. CONNECT STRIPS BY LAYING A PIECE OF COPPER AROUND THE PERIMETER AND PROVIDE FOR EXTRA AT WALLS FOR PROPER GROUNDUNG EVERY 400 SQ. FT.



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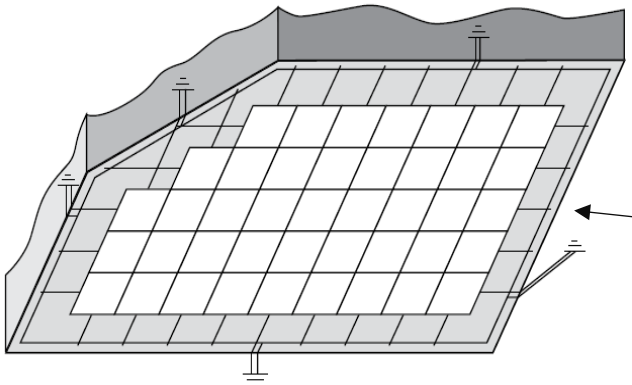
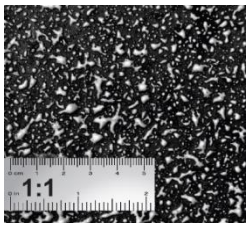


Tiles must be installed "centered" over copper strips laid beneath in both directions connected near the perimeters and grounded every 400 sq ft

7. INSTALLING ESD TILES USING GERFIX LVT SPRAY ADHESIVE



7.1. Always refer to the **Gerfix Spray Adhesive Technical Data Sheet**

7.2. Recommended spray pattern: (150 to 185 sq. ft. per can)

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

7.4. Wipe hand across surface to verify for dust.

7.5. If dust transfers, substrate is not clean.

7.6. Damp-mop substrate if dust is present.

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

7.8. Shake aerosol can well. Remove white cap.

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

7.10. 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.

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

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

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

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

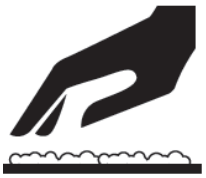
7.15. Avoid extremely heavy application.

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

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

7.18. **Install copper strip into the tacky adhesive just before installing the flooring into the adhesive. Make sure there is no adhesive on top of the copper strip.**

7.19. Once the adhesive is dry to the touch, immediately install the flooring. While open, ensure that adhesive is not contaminated by dust.



7.20. Starting from the center line and working outward, apply the adhesive and install tiles when the adhesive is ready.

7.21. Press tiles lightly against adjoining tiles and press into the adhesive.

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

7.23. Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.

7.24. Heat welding can proceed 1 hour after installation

7.25. **Floor is open to all traffic immediately after installation.**

8. INSTALLING ESD TILES USING GERFIX TPS+ ACRYLIC ADHESIVE

8.1. Always refer to the **Gerfix TPS+ Adhesive Technical data Sheet**

8.2. Recommended trowel size is 1/32” x 1/16” x 1/32”, covering from 170 to 220 sq. ft. per US gallon.

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

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

8.5. 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.**

8.6. “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 Characteristics over Porous Substrates (Non-Porous-see note below)		
	Open Time*	***Working Time*** **
Gerflor ESD Floorings	20 to 40 minutes (**to reach a tacky state*****)	Up to 1.5 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. Exceeding the working time will result in poor adhesion and could lead to peaking of tiles, or gaps.

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

Note: For *Non-Porous* 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 100lb. roller.

8.7. **Install copper strip into the tacky adhesive *just before installing the flooring* into the adhesive. Make sure there is no adhesive on top of the copper strip.**

8.8. Starting from the center line and working outward, apply the adhesive and install tiles when the adhesive is ready.

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

8.10. 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.

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

8.12. Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.

8.13. During the installation, with the lights on and off, always double check the flooring for bubbles with portable, ambient, and/or fixed lighting.

8.14. Heat welding can proceed 24 hours after installation

8.15. **Avoid adhesive displacement by prohibiting traffic for a period of 24 hours and 72 hours for rolling loads.**

9. 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.**

9.1. Always refer to the **Gerfix 196 Adhesive Technical Data Sheet.**

9.2. Follow the guidelines indicated on the Technical Data Sheet.

9.3. Recommended trowel size is 1/32" x 1/16" x 1/32", covering from 170 to 220 sq. ft. per US gallon.

9.4. Mix 2-part acrylic adhesive part A and part B as recommended by the adhesive manufacturer.

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

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

9.7. 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 Porous & Non-Porous Substrates		
	Open Time*	***Working Time*** **
Gerflor Modular Products	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: 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 install copper strip into the tacky adhesive into the adhesive making sure there is no adhesive on top of the copper strip, then install flooring and roll with a 100lb. roller.

9.8. Starting from the center line and working outward, apply the adhesive and install tiles when the adhesive is ready.

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

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

9.11. Always roll seams, at the walls, and under toe kicks with a hand roller to ensure 100% transfer of adhesive.

9.12. 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.

9.13. Heat welding can proceed after 24 **hours from time of installation**

9.14. **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.**

9.15. Use mineral spirits to remove fresh or dried adhesive from the surface of the flooring

9.16. 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.

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 are 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 USA Maintenance Instructions.**