



INSTALLATION INSTRUCTIONS

GERFLOR MIPOLAM EL7

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

Product	Dimensions	Installation direction	Weld treatment
Mipolam EL 7	6'6"	Even	CR 40
Welding bead	4 mm		CR 40

Important note: Prior to installation, please consult the Gerflor Standards Manual for acclimatization, site conditions, substrate preparation and other general installation recommendations.

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 F1869-16 Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- ASTM F2170-16 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.
- ASTM F1482-15 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
- ASTM F2419-11 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring
- ASTM F2678-16 Standard Practice for Preparing Panel Underlayments, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayments, and Concrete Subfloors with Underlayment Patching Compound
- ASTM F2873-13 Standard Practice for the Installation of Self-Levelling Underlayment and the Preparation of Surface to Receive Resilient Flooring
- ASTM F3010-13 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings
- Recommended Work Practices for Removal of Resilient Floor Coverings of Resilient Floor Covering Institute (RFCI).

GENERAL INFORMATION

- 1.1. Gerflor ESD floor coverings are formulated to withstand high humidity conditions. To ensure proper performance, concrete must be properly prepared to create a contaminant-free, porous substrate.
- 1.2. Gerflor ESD floor coverings are not designed to withstand hydrostatic or osmotic pressure.
- 1.3. ***The guidelines provided in this document are not exhaustive. Installation should only be carried out by qualified, professional technicians with experience in resilient flooring.***
- 1.4. It is recommended to mechanically prepare the concrete by grinding or shot-blasting the surface to obtain a clean, porous substrate for CSP 1+.
- 1.5. Moisture and pH tests must be carried out in accordance with ASTM F710-17.
- 1.6. Adhesive bond tests are recommended to ensure adequate adhesion to the substrate.
- 1.7. Do not install material with visible defects or damage. A contractor who installs material with visible defects or damage assumes responsibility for the damaged material.

GERFLOR MIPOLAM EL7

2. STORAGE AND HANDLING

- 2.1. Store rolls on clean, flat, solid surfaces in a controlled environment. Avoid storing them outdoors.
- 2.2. Place the rollers in a vertical position, fixing them at a height of 6'6" to ensure a safe working environment.
- 2.3. Do not stack rolls. Handle all materials with care and safety. If materials are to be stored for long periods, check the condition of the skids and ensure that the rollers remain upright.
- 2.4. Shifting material on a skid or breaking a skid can damage the flooring.
- 2.5. Be vigilant and act accordingly.

3. PREPARING THE SUBFLOOR

- 3.1. The general contractor must provide a smooth, flat concrete finish, ready to receive the new resilient flooring, in accordance with the ACI 302.1R Guide for the Construction of Concrete Floors and Slabs, and the ACI 302.2R Guide for Concrete Slabs to Receive Moisture-Sensitive Materials.
- 3.2. The concrete floor must be cured for at least thirty (30) days.
- 3.3. The concrete slab must have a tolerance of 3/16" within a 10' radius.
- 3.4. Prepare the substrate in accordance with ASTM F710-11 "Standard Practice for the Preparation of Concrete Floors for Resilient Flooring".
- 3.5. The temperature of the concrete floor must be maintained at a minimum of 65°F for 48 hours before, during and 48 hours after installation.
- 3.6. Whether the concrete slab is new or old, it must be tested for moisture, and it is recommended that this be done by a recognized engineering firm. The ICRI (International Concrete Repair Institute) website provides a list of certified technicians for the USA: <http://www.icri.org/Certification/Find-CCSMTTs.asp>
- 3.7. Moisture tests should be performed in accordance with ASTM F1869-16 "Standard Test Method for Measuring the Moisture Evaporation Rate of Concrete Floors Using Anhydrous Calcium Chloride" and/or ASTM F2170-16 "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes."
- 3.8. Substrates must not exceed 5 lb/1000 ft² /24 hours as per ASTM F1869-16 and must not exceed 80% relative humidity (RH) as per ASTM F2170-16.
- 3.9. Before starting work, inspect the subfloor surface and report any visible defects, such as cracks, dents, rough spots or variations in uniformity, in writing to the project manager and general contractor.
- 3.10. Make sure the subfloor is free of grease, oil, paint, markers, spills, dust or any other contamination that could compromise the adhesion of the floor covering. Clean the subfloor according to existing conditions.
- 3.11. Keep other trades out of the installation area.
- 3.12. Sanding of the subfloor will be mandatory in many cases, especially where the subfloor has been contaminated by foreign products. It may be necessary to scarify or strip the concrete surface to remove adhesives, paint, concrete sealer or other surface-applied materials.
- 3.13. All curing compounds must be completely removed by sandblasting, scarifying or shotblasting. Self-dissipating curing compounds should be removed by the same methods.
- 3.14. The general contractor must patch and repair all cracks, voids and other imperfections in the concrete with high-strength Portland cement-based patching compounds, such as Mapei Ultraplan Feather Finish, Mapei Planipatch or equivalent, approved by the manufacturer. Do not use gypsum-based patching materials.
- 3.15. After sanding, patching and levelling, vacuum or sweep the entire concrete surface to remove dust and dirt before starting to lay the material.

GERFLOR MIPOLAM EL7

4. INSTALLATION OF CONDUCTIVE AND STATIC DISSIPATIVE TILES

- 4.1. Dry Lay installation of rolls
- 4.2. The temperature of the concrete floor must be maintained at a minimum of 65°F (18 degrees Celsius) for 48 hours before, during and 48 hours after installation.
- 4.3. Mark the starting line in the centre.
- 4.4. Unroll the first length of material along this chalk-drawn line, then gradually progress outwards, leaving a ¼" gap between sheets to allow the material to relax for at least 16 to 24 hours.
- 4.5. Joints should be kept to a minimum, and cross-joints avoided wherever possible. Place joints in areas exposed to the least traffic. Before applying the adhesive, pull the loose sheets together, leaving a 1/32" gap.
- 4.6. A 1/32" gap is required for the electric biscuit joiner guide.
- 4.7. This gap must be of constant width.

5. FLOOR INSPECTION

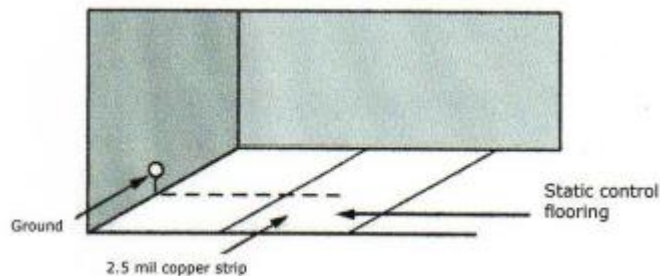
- 5.1. Thoroughly inspect all materials for correct colours, lot numbers, patterns, quality and quantities, and that they have been shipped as ordered. Do not install, cut or fit materials with visible defects. Materials with slightly damaged or distorted edges must be cut and removed before installing the sheets.
- 5.2. A contractor who installs a material with visible defects or damage without Gerflor's prior consent considers the product acceptable for installation and therefore accepts full responsibility for said material.

6. INSTALLATION OF ESD MIPOLAM EL7 ROLLS

Note: Welds on conductive floor coverings and static dissipators must always be hot-welded.

7. COPPER STRIP LAYOUT FOR MIPOLAM EL7 ROLLS WITH ESD ADHESIVE

NOTE: COPPER STRIP INSTALLATION DEPENDS ON THE TYPE OF ADHESIVE USED FOR THE PROJECT. SEE RECOMMENDED ADHESIVE INSTRUCTIONS BELOW FOR DETAILS.

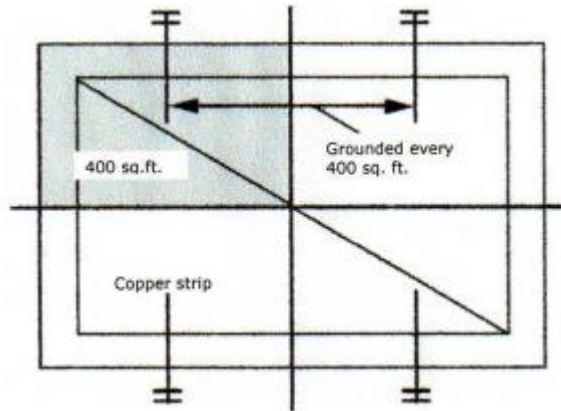


- 7.1. Copper strip is supplied in rolls of 656 linear feet.
- 7.2. The copper strip is 3/8" wide and 0.003" thick.
- 7.3. Lay out the copper strip and coordinate grounding with a certified electrician.
- 7.4. **For rooms less than 400 sq. ft., use a 6'6" long copper strip. Leave extra copper on the wall for proper grounding.**

INSTALLATION INSTRUCTIONS

GERFLOR MIPOLAM EL7

NOTE: THE COPPER STRIP MUST BE EARTHED EVERY 400 SQUARE FEET (AS SHOWN).



- 7.5. Lay out the copper strip and coordinate grounding with a certified electrician.
- 7.6. For rooms \leq 400 square feet, place a 6'6" long copper strip under the slabs, protruding along the wall to be grounded by a certified electrician.
- 7.7. For rooms $>$ 400 sq. ft., install a copper strip around the perimeter and a 6'6" long piece every 400 sq. ft.
- 7.8. Copper strips must be grounded by a certified electrician.
- 7.9. Install copper strip with conductive adhesive.

NOTE: Install the copper strip with the conductive adhesive before starting to install the floor covering. Spread the conductive adhesive in narrow strips on the substrate according to the layout of the copper strip and lay the copper into the wet adhesive. Immediately apply pressure to smooth the copper and remove any excess adhesive. Allow adhesive to dry before installing tiles. When installing the tiles, spread the adhesive over the entire surface, taking care not to damage the copper.

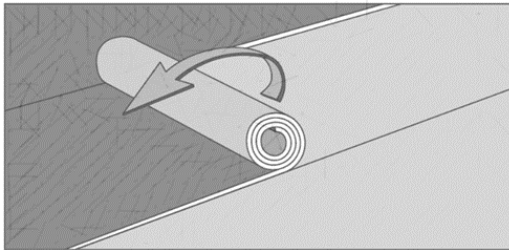
8. INSTALLATION METHOD FOR CONDUCTIVE ACRYLIC ADHESIVE

- 8.1. **Use only Gerfix ESD adhesive.**
- 8.2. Follow the instructions on the glue bucket carefully.
- 8.3. Recommended trowel size is 1/32" x 1/16" x 1/32," covering up to 245 square feet per U.S. gallon.
- 8.4. Starting from the centre line and working outwards, fold the sheets (widthwise) halfway and apply the adhesive to the subfloor.
- 8.5. The installer can also opt for the "roll back" method. In this case, do not pre-cut the material as if it were a final cut. Leave the material 2"-3" longer for cutting after installation.

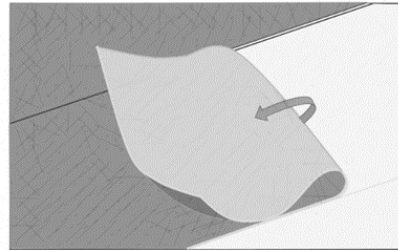
Note: The rollback and fold-back methods are preferable to the lengthwise folding method (used for carpet rolls). Some regions require lengthwise folding.

GERFLOR MIPOLAM EL7

Roll back" method



Fold back" method



- 8.6. To ensure even adhesion across the entire surface, apply a workable quantity of adhesive at a time.
- 8.7. Maintain an even spread rate. Replace the trowel (or trowel blade) each time a bucket is used.

<i>Application features on porous substrates</i>		
	<i>Opening time</i>	<i>Working time** (hours)</i>
Mipolam EL7	10 to 15 minutes (adhesive must remain wet for installation)	Up to 45 minutes

* **Open time:** is the waiting time before laying the floor covering.

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

- 8.8. Once the flooring has been placed in the adhesive, immediately roll it thoroughly with a 100-lb. roller in three sections in both directions.
- 8.9. Always roll joints, walls and under baseboards with a hand roller to ensure 100% adhesive transfer.
- 8.10. During installation, always ensure that the complete sheets are glued down at the end of the day.
- 8.11. To reduce the risk of bubbles, the rollback method is the most recommended installation method.
- 8.12. By keeping the roll tight and maintaining constant pressure while unwinding it in the adhesive, the risk of bubbles will be minimal.
- 8.13. Do not stand, kneel or walk on vinyl flooring.
- 8.14. The use of kneeling boards, such as a thin sheet of Masonite, is mandatory when working on freshly installed flooring.
- 8.15. There should be a wet transfer of adhesive to the flooring substrate. Use weights if necessary, for crooked joints or perimeters. If the adhesive forms a skin or dries out, it should be scraped off and new adhesive applied.
- 8.16. Using a 100-lb. sectional steel roller, roll first the width, then the length of the flooring to ensure adhesive transfer and evacuate any air that may cause bubbles. Ideally, one person should be specifically charged with this responsibility.





INSTALLATION INSTRUCTIONS

GERFLOR MIPOLAM EL7

- 8.17. Continuously check the flooring for bubbles. To check for bubbles, look up and down and across the flooring from standing and crouching position, with the lights on and off. The use of a light source at floor level can be useful for spotting pockets.

9. CROSS JOINTS

- 9.1. Where cross joints are to be made, follow the steps below to allow for any shrinkage that may occur in the length:
- 9.2. Cut off the end of the first sheet and square it using a straight edge.
- 9.3. Draw a pencil line at the end of the first sheet. Spread the adhesive up to the line and place the material (wipe off any excess adhesive with a flat trowel if necessary).
- 9.4. Roll the material in all directions with a 100 lb sectional roller
- 9.5. Always roll joints, walls and baseboards with a hand roller to ensure 100% adhesive transfer.
- 9.6. Overlap the second sheet at the transverse joint by about 1".
- 9.7. Glue and roll the second strip as described above, except for the last 18".
- 9.8. Allow time for shrinkage before working on the cross joint.
- 9.9. Spread the adhesive over the last 18 inches, place the material in the wet adhesive underscribe the seem to a net fit and roll in all directions with a 100 lb roller, adding weight if necessary.

10. HEAT WELDING - SEE THE DOCUMENT "HEAT WELDING OF GERFLOR VINYL PRODUCTS."

11. ONCE INSTALLATION IS COMPLETE

- 11.1. Carry out a visual inspection of the project.
- 11.2. Check each weld.
- 11.3. Fix every imperfection before you leave the project.
- 11.4. Make sure that any vertical obstructions, such as door frames, are tightly fitted and sealed with acrylic, silicone, or equivalent sealant.
- 11.5. To maximize the aesthetic appearance and functionality of your newly installed flooring, provide your customer with a copy of the **Gerflor Maintenance Guide**.