

## ElectraLock® Interlocking ESD Tiles

Installation instructions for use over ANY hard surface substrate or thin pile glued down office grade carpet\*

Initial Release: 10.30.25\*

What's in the cartons: ElectraLock Interlocking Static Control Tiles are made from heat treated electrically conductive vinyl with teeth that are precision cut providing a near seamless appearance when locked together. The superb ESD control properties are achieved by providing a FULL SURFACE electrically conductive backing for the utmost in static decay and unparalleled electrical consistency. The top surface is hard and wear resistant, they handle ANY weight load when used over hard surface flooring, do not require adhesive or floor finish and are provided with a 20 year warranty. The way they work: Static electricity (typically generated as a by-product of movement) flows into the electrically conductive ESD tiles and is discharged into the ground system of the facility. Note: The following instructions shall be reviewed prior to installation.

**1. Basic Requirements**: All flooring must be installed at the final stage in any type of construction. Area lighting and HVAC must be running and fully functional.

# 2. Receiving, Inspection, Storage, Tile Preconditioning:

We ship all tile orders FLAT (rather than on their sides). Inspect the shipment and Insure that the cartons containing the tiles have been received flat. If the shipment has been damaged in any way take photos and report the damage to the driver or freight carrier immediately. Mark the damage on the bill of lading and contact United SCP's freight department at 719 676 3928 extension 7001.

- **2.1** Installers Responsibility: It is the installer's responsibility to verify the accuracy of the order and ensure the quantity on hand is sufficient for the install.
- **2.2 For problems with Delivery:** An authorized United Static Control Representative must be contacted and notified of any defects before the installation proceeds. United SCP is not responsible for the installation of the incorrect material, color or dye lot due to errors in fulfilling your order.
- **3. Storage**: Store the material FLAT, indoors and in a climate controlled environment. Do not store in direct sunlight. Do not pace other items on top of the cartons.
- **4. Preconditioning:** Place the material in the installation area and allow it to acclimatize to the room temperature for 48 hours prior to the installation.
- **5. Moisture Testing of Concrete Slab**: If concrete vapor emissions are suspected, prior to installation, test the concrete slab in accordance with ASTM

D4263. This test involves taping an 18" x 18" polyethylene sheet to the concrete subfloor, waiting at least 16 hours and then checking for visible condensation on the bottom of the sheet or darkening of the concrete. These issues would indicate excessive moisture that could form beneath the tile. Call United SCP prior to installing over high vapor emissions concrete at 719 676 3928 (option 2)

- **6. PREPARATION OF SUBSTRATES:** ElectraLock is very forgiving with deviations in the substrate. That said, over a period of time major deviations may "shadow through" the vinyl. As such, make sure the substrate is flat and free of major deviations such as holes, missing tiles, etc.
- **6. 1 Concrete:** Ensure substrate is clean and flat. For the best finished look, fill the expansion joints and holes in the concrete with SikaFlex Concrete Fix or similar concrete patch. Be sure to follow directions and level it out so it is flat with the concrete. Filling the joints eliminates any "telegraphing" (slight sinking of the vinyl) that may occur over time.
- **6.2 VCT, old well bonded tiles, epoxy, paint and other hard surface flooring:** Ensure substrate is clean, flat and free of major deviations such as deep holes and spaces between old floor coverings. Remove wall base if applicable.
- \*6.3 Thin pile direct glue down office grade carpeting. ElectraLock has been successfully used over this substrate with no reported cases of the tiles unlocking or deforming over time. Remove wall base if applicable.

Due to the multiple variances in carpet construction always pre-test a small area prior to full scale application.



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### 7. Install Ground Straps or optional ground cords:

The tiles are placed over these straps. Note: these may be placed on any evenly spaced location around the perimeter of the floor. They do not need to be positioned exactly as is shown in the following drawings. The following are minimum requirements. Additional ground straps may help the tile to tile connectivity.

#### 7.1. For installations that are less than 1,000 Square

<u>Feet</u>: Install 2 each electrical grounds straps or optional ground cords. **Example**:

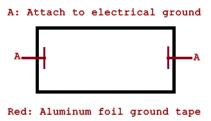


Figure 1

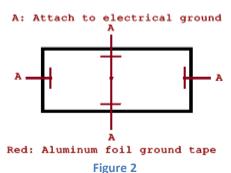
Attach the ground foil to AC Electrical or steel structural support columns as is shown here.

### 7.2. For installation that are 1,000 to 2,000 Square

<u>Feet</u>: Install 4 ground straps or optional ground cords. Then run a length of 2" wide aluminum foil ground tape full length in the middle of the substrate.

**Note:** Ground terminations may be placed on any evenly spaced locations around the perimeter of the floor. They do not need to be positioned exactly as is shown in the following drawings.

## Example:

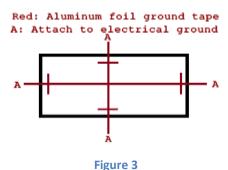


Attach the ground foil to AC Electrical or steel structural support columns <u>as is shown here.</u>

#### 7.3. For installations that are 2,000 to 5,000 Square

<u>Feet</u>: Install 4 ground straps and run a length of 2" wide aluminum foil ground tape full length perpendicular and diagonally across the substrate crossing each other in the middle of the substrate. Attach them to AC Electrical or steel structural support columns as is shown here.

#### Example:



## 7.4. For Installations that are over 5,000 square

**feet:** Install 4 ground straps and install runs of 2" wide aluminum foil ground tape full length (or width) every 20 feet. Join the perimeters of these runs with a full length runs of 2" wide tape aluminum foil tape. Attach them to AC Electrical or steel structural support columns as is shown here.

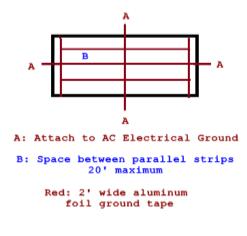


Figure 4



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Attach the ground foil to AC Electrical or steel structural support columns as is shown <u>here</u>.

For assistance please call United Static Control at 719 676 3928 (option 2).

**8. Install the tiles:** Start your install of the tiles in the center of the room. IF THE WALLS ARE PARALLEL: Locate the center of the room by measuring the length of adjacent parallel walls (divide the room in two). Mark this point with a pencil and snap a chalk line

Repeat this process on the opposite walls. Place a tile in each of the 4 quadrants (where the lines intersect). Align the teeth of the tiles and tap them together (get them started) using a non-marring dead blow hammer. Finish setting the tiles by rolling with a 100 pound vinyl roller as the installation proceeds.

**Note:** It's important to keep the hammer head and roller carbon free (the full surface backing contains carbon and when the tiles are tapped together slight carbon/vinyl burrs may occasionally form). Covering the heads of the dead blow mallets with pieces of microfiber towels works well (change them out if they become dirty).

**9.** Trim the tiles to the walls and encumbrances using a razor knife or tile cutter being sure to leave at least 1/4" to 3/8" space between the cut tile and the walls.

Tip: Using an L Square scribe a line with a razor knife. Bend the tile backwards and it will crack along the line. OR cut the tiles from the back side (as the top surface is hard and wear resistant).

This same process (scribe and crack) may be used to remove the teeth (square up the tiles).

Tip: Warm the tiles slightly with a heat gun when cutting around tight areas or into the corners of doorways etc. When warm, the tiles will cut easily.

For a clean finished look <u>Install transition strips</u> in doorways and along exposed edges in walkways and replace wall base if applicable.

**10. Move in Tips**: NOTE: Do not introduce water to any new ESD flooring for a period of at least 30 days after installation. Protect the floor during move in. Wear disposable shoe covers. Cover the flooring with Ram Board or Masonite sheet when moving in heavy items (especially with forklifts and man-lifts). Do not drag items such as benches and pallets across any type of ESD flooring.

Place carpeted "clean off mats" in the doorways of the ESD area to remove contaminants from footwear and carts. Use carpeted mat that are long enough to take at least three steps on it prior to entering the ESD control area.

- **11. Maintenance**: Dust mop daily, damp mop as needed. Please visit this page for full details
- **12. Testing**: ElectraLock is warranted to meet ANSI ESD S20.20-2021 (the latest standards for static control). Please test accordingly using TR-53 compliance testing.
- **13. Disclaimer**: Every effort has been made to provide accurate and reliable information in this document. However, United SCP cannot accept any responsibility for loss or damage that may result from the use of this information due to the possibility of variations of processing or working conditions and/or workmanship that is beyond our control.

### 14. Additional Resources

- How to install transition strips in doorways or along exposed doorways
- Specifications
- How to replace individual burned or damages ElectraLock Tiles

Revision History: Initial release: 10/30/2025, SRC