

## STATICSMART ESD MODULAR CARPET TILE MISSION CRITICAL AND COMPUTILE LAN SERIES

### INSTALLATION GUIDE

**Note:** The following instructions should be reviewed prior to installation. Every effort has been made to provide accurate and reliable information in this guideline. This is only intended as a guide for our customer's use with our recommended tools and materials. Julie Industries can not 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 beyond our control. End user customers are advised to conduct their own tests for a particular application. We strongly recommend using a licensed and experienced flooring installer to ensure satisfactory results.

#### PRE-INSTALLATION PREPARATION:

Check the quantity, color and lot numbers of the tiles before beginning the job. **DO NOT MIX M.O. numbers (dye lots).** Install by M.O. number sequence as indicated on the box. All claims for damages or deficiencies must be made prior to installation.

#### GENERAL GUIDELINES:

1. The following installation guidelines as stated herein should be reviewed prior to installation. Julie Industries will not be held liable for product failure due to improper installation.
2. All other contractors should be finished with their work prior to installation. If work will be occurring simultaneously, take the necessary precautions to ensure a trouble-free installation.
3. The flooring contractor, general contractor or building owner must have the slab or concrete floor tested for the following: surface pH, moisture transmission rate, and sub-floor conditions. The results must meet our test guidelines as stated below. Julie Industries will not be held liable for installation failures if these guidelines are not strictly adhered to.

#### SITE TESTING AND CONDITIONING:

The following conditions must be maintained **24 hours prior to, during and after installation:**

**HVAC System:** Must be operational maintaining the following conditions:

**Temperature:** The installation site, carpet and adhesive must be between 65°F and 90°F. Do not begin installation if the subfloor is below 50°F.

**Humidity:** The installation site's ambient relative humidity must not exceed 65%.

**Moisture:** Conduct relative humidity testing. Results must be below 80% (ASTM F-2710) or the Anhydrous Calcium Chloride test must not exceed 5.0 pounds per square foot per 24 hours (ASTM F-1869). If excessive moisture is present, the general contractor or building owner must be advised and a decision made if the installation is to begin. Julie Industries will not be responsible for any moisture related installation failures if these guidelines are not strictly followed. This maximum threshold must hold true throughout the life of the product. Otherwise, corrective action is required.

**Alkalinity:** Conduct PH testing on the floor in several locations. A reading below 5.0 or above 9.0 (ASTM F-710) requires corrective measures.

#### GENERAL FLOOR PREPARATION:

1. **Clean Floor** — The floor must be clean and free of all foreign matter: grease, oil, paint, wax, dirt, dust, old adhesives or any material that might interfere with the overall bond strength of the adhesive. The floor should be sound and level. All holes, cracks, depressions or protrusions must be filled with a compatible latex patching compound, and then sealed with a latex liquid and allowed to dry.
2. **Caution:** Cutback asphaltic adhesive must be completely and thoroughly removed. No traces can come in contact with the newly applied adhesive. Failure to do so will result in an installation failure.

#### SPECIFIC FLOOR PREPARATION:

**Concrete:** New concrete must be clean, dry and cured for a minimum of 90 days and free of parting agents. Old concrete should be checked for moisture. Dry, dusty, porous floors must be sealed. Note: Sealers will not correct a moisture problem.

**Ceramic Tile and Terrazzo Floors:** Ceramic tile floors can not be loose. Any loose tiles must be removed. Grout lines must be filled and leveled.

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**VCT, Vinyl Tile and VAT:** Damaged tiles should be filled or replaced, and loose tiles re-glued. Patching compounds should be used to level any floor irregularities and waxes should be fully eliminated to ensure a proper bond. VAT should never be sanded or scraped without proper safety and handling precautions. Special care and precautions in accordance with state and local codes must be taken for asbestos tile abatement.

**Other Resilient Flooring:** Homogeneous sheet vinyl and solid vinyl tile should be removed before installation.

**Old Carpet:** Remove old carpet and adhesive.

**Steel Flooring:** Steel trenches must be clean, level, dry and free from dust, paint or other extraneous materials.

**Wood:** Plywood, hardwood and particle board used as subflooring must be a flooring grade and installed to manufacturer's recommendations. Joints should be filled and any rough areas sanded smooth. Glossy surfaces need to be roughened prior to spreading the adhesive.

#### SITE CONDITIONS — ENVIRONMENT:

**Radiant heat:** Heat must be lowered before the installation to prevent floor adhesive from "setting" too fast.

**Sealers:** The use of sealers on floor surfaces is generally not necessary except for sanded, dusty, porous, and acoustical surfaces. Sealing cannot overcome moisture conditions and must not be used for that purpose. When used, sealers must be thin and fast drying. They should be compatible with adhesives, which should be applied only after sealer is dry.

**Apply Adhesive:** Use only Julie Industries Conductive ESD Releasable Adhesive. This is a conductive, pressure-sensitive carpet tile adhesive designed for flooring applications.

#### IMPORTANT — USE SUFFICIENT VENTILATION WHEN USING ADHESIVE.

**Trowel Notch Size:** Julie Industries recommends using a 1/16" x 1-16" square or "U" notch trowel. Floor should have full coverage of adhesive for proper bonding of carpet tiles. Allow adhesive to dry fully before moving to next step. Adhesive should be tacky when dry.  
(To make sure adhesive is fully dry/tacky, the adhesive should not transfer to your finger when touched.)

**Install Grounding Strips:** To properly ground the flooring, place a 2" x 24" copper grounding strip on top of the adhesive (figure #1), under the carpet and extend the strip up the wall at least 6" to 8". Be sure there is an accessible ground at the wall to tie into after the carpeting is installed. If there is no accessible ground, prior to installation a certified electrician can tap into the electrical circuitry and drop a wire (no smaller than #10 stranded copper wire) inside a wall and cut a small hole in the baseboard so the wire can emerge. Julie Industries recommends installing one copper grounding strip per 1,000 square feet throughout the installation.

A thin coating of releasable adhesive should be applied on top of grounding strip to ensure good contact with carpet tile.



Figure #1

**Installing Carpet Tiles:** Each tile has directional arrows on the backing. This allows for one-directional (monolithic) or multidirectional (quarter turn and/or random) installation. Some styles may be large scale or linear in design and require quarter turning. If you are unsure about whether or not your product requires a one-directional or multidirectional (quarter turned and/or random) installation, please contact Julie Industries at 800-225-6052

Measure the area to find the best starting point for a maximum size perimeter tile. Proper planning should avoid trimming perimeter tiles more than half their width. Next, divide the room into 4 quadrants by snapping chalk lines on the floor from the center of each opposing wall.

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The two center lines must bisect at right angles in the center of the room. To achieve a perfect right angle, which is essential for a proper install, form a triangle by measuring 6' x 8' x 10' (figure #2).

Using the chalk lines as your guide, begin laying the carpet tiles using the pyramid technique (figure #3). Install one quadrant at a time following the numerical sequence.

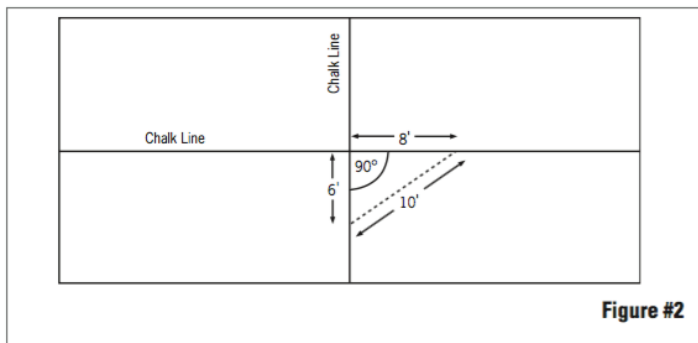


Figure #2

The corners of the tiles should lie flat with seams lightly touching. Do not jam carpet tiles, instead use a seam roller to blend carpet seams. Note: Loop pile tiles may have some yarn blossoming at the edges which may require trimming.

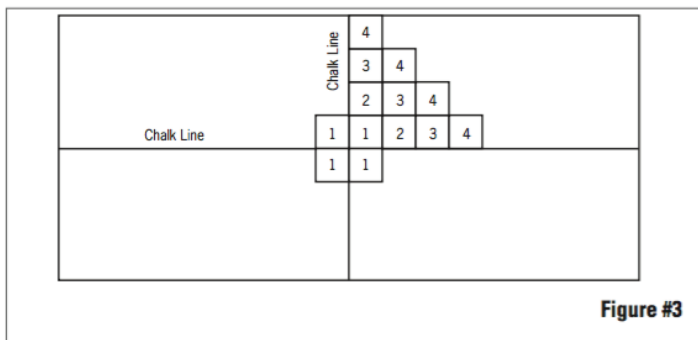


Figure #3

**Connect Grounding:** The foil or wire can be tapped into an exposed steel column or applicable building ground and secured using a screw and washer.

#### CUTTING TECHNIQUES

1. Carpet Tiles may be cut by measuring and cutting from the back using a straight edge. Care must be taken to assure the arrows are pointing in the correct direction.
2. Carpet Tiles may also be cut by letting them cove up the wall and cutting with a cushion back wall trimmer or similar tool. DO NOT COMPRESS!

#### POST INSTALLATION CARE

1. Roll the entire installation with a 75 lb roller once it is completed.
2. Use plywood over the carpet when heavy objects are moved within 24 hours after installation.
3. A non-staining building material paper must be placed over the carpet to protect it when additional construction activity is to take place that would soil or stain it. Do not use plastic sheeting as it will trap moisture.

#### StaticSmart™ ESD CARPET ELECTRICAL PROPERTIES:

StaticSmart™ ESD Carpet has been designed to provide an efficient conductive path-to-ground for static electricity occurring on the surface of the floor. The electrical resistance of 25,000 Ohms minimum,  $1 \times 10^9$  ohms maximum when tested according to modified NFPA 99 and ESD S7.1 test methodology.

These installation procedures are intended to assist in the installation and care of Julie Industries StaticSmart™ ESD carpet tile under most job conditions. Specific questions regarding installation and maintenance not covered within must be referred to the Julie Industries Technical Services Department at 1-800-225-6052.

Any variance from these procedures will become the responsibility of the installer and not the manufacturer.