

ShadowFX ESD Carpet Tile Installation Guidelines



STEP 1: BEFORE YOU START/NON-ACCESS FLOOR INSTALLATION

PRE-INSTALLATION GUIDELINES

All tiles should be carefully checked before installation. 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. Installation guidelines as stated herein should be reviewed prior to installation. StaticWorx 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 subfloor conditions. The results must meet our test guidelines as stated below. StaticWorx will not be held liable for installation failures if these guidelines are not strictly adhered to.

SITE TESTING AND CONDITIONING

1. **TEMPERATURE** — The floor temperature and adhesive must be maintained at a minimum of 65°F for 48 hours before the installation and remain at this temperature and/or not rise above 90°F at any time during installation and 24 hours after the installation.
2. **SURFACE pH** — The concrete must be tested for surface pH at several random points throughout the floor. The pH range necessary is 5 - 9. Otherwise, corrective action is required.
3. **MOISTURE** — The site must be tested for moisture randomly throughout the floor. The proper test procedure to measure moisture transmission is the Anhydrous Calcium Chloride Test run quantitatively. The maximum allowable amount of moisture transmission must not exceed 3.0 lbs./1,000 sq. ft. in 24 hours. This maximum threshold must hold true throughout the life of the product. Otherwise, corrective action is required.



Figure 1: Installing ShadowFX with TacTiles in a 24/7 mission-critical environment.

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.



**MADE IN THE
UNITED STATES
OF AMERICA**



StaticWorx®

P.O. Box 1556,
Williston, VT 05495

617-923-2000 fax: 617-467-5871

staticworx.com

We Keep You Grounded

SPECIFIC FLOOR PREPARATION

Concrete: New concrete must be clean, dry and cured for a minimum of 90 days and free of parting agents. Patch cracks and holes. 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. Strict attention must be paid to the open time for adhesive to become permanently tacky.

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.

Do not install Staticworx carpet tile with adhesive over sheet vinyl. Staticworx carpet tile can be installed over sheet vinyl using TacTiles connectors. The sheet vinyl must be secure to the sub floor and you must sand or strip the top coat.

WARNING: 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: Homogenous 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, pain 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, loose or broken boards repaired, 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.



Figure 2: Adhesive installation

STEP 2: INSTALLATION

BEFORE INSTALLING ESD CARPET, PLEASE READ AND ADHERE TO PRE-INSTALLATION GUIDELINES AS OUTLINED IN STEP 1.

Installation — Non-Access Floor applications.

Apply Adhesive: Use only StaticWorx 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: StaticWorx recommends using a 1/16" x 1-16" U notch trowel. If applying Black adhesive, use a 1/32" x 1/32" U notch trowel (**figure A**). Floor should have full coverage of adhesive for proper bonding of carpet tiles. DO NOT USE A ROLLER ON CONCRETE FLOOR INSTALLATIONS.

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.)



Figure A

QUICK STEP GUIDE

Read pre-install
Check your order
Test site for: Temp, Moisture and pH
Clean floor
Apply adhesive
Install grounding strip or wire
Snap chalk lines and figure starting point
Lay tiles using the pyramid technique
Connect ground wire or strap

Install Grounding Strips: To properly ground the flooring, place a 2" x 24" copper grounding strip on top of the adhesive (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.

StaticWorx 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.

Installing Carpet Tiles: 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. 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 B**). Using the chalk lines as your guide, begin laying the carpet tiles using the pyramid technique (**figure C**). Install one quadrant at a time following the numerical sequence. 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.

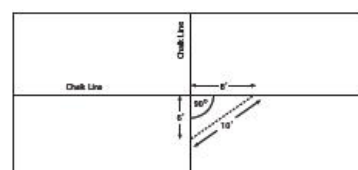


Figure B

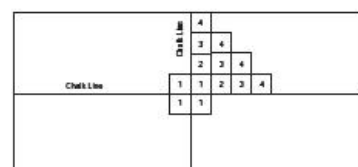


Figure C

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 (**figure D**).



Figure D

STATICWORX™ ESD CARPET ELECTRICAL PROPERTIES



Staticworx™ ESD Carpet has been designed to provide an efficient conductive path-to-ground for static electricity occurring on the surface of the floor (**figure E**). The electrical resistance range should be $1.0 \times 10^6 - 1.0 \times 10^9$ Ohms based on ESD/STM 7.1



Figure E