

INSTALLATION GUIDELINES FOR CUSHIONWORX



General Information

NOTICE: For best results review the following guidelines prior to installation. Shaw® will not be responsible for improper installation and failure to follow these guidelines may result in limiting warranty coverage.

These installation procedures are intended to assist in the installation of CushionWorx under most job conditions. See Philadelphia Commercial's Modular Installation Guidelines for specific questions regarding installation not covered within or refer to Shaw Technical Support at 1.800.471.7429. Any variance from these procedures will become the responsibility of the installer and not the manufacturer,

CushionWorx by Shaw, a premium polyethylene foam cushion underlayment for EcoWorx® carpet tile. CushionWorx withstands and performs in unison with Philadelphia Commercial EcoWorx carpet tile, providing added underfoot comfort and sound reduction in high-traffic environments including hospitality, corporate and healthcare.

1. CONDITION YOUR SITE AND TEST

A proper installation depends on the proper site conditions. The following conditions must be maintained for 24 hours prior to, during and permanently after installation.

- HVAC System: Must be operational maintaining the following conditions.
- Temperature: The installation site, carpet, underlayment and adhesive must be between 50°F and 95°F. The adhesive will not function properly when applied over an extremely cold surface. Do not begin the installation if the subfloor temperature is below 50°F.

- Humidity: The installation site's ambient humidity should not fall below 40%.
- Moisture: Conduct relative humidity testing. Results must be below 85% (ASTM F-2170), or the Anhydrous Calcium Chloride test must not exceed 5.0 lbs. per 1000 SF per 24 hours (ASTM F-1869 test). Shaw recognizes RH as the qualifying standard.
- pH: Conduct pH testing on the floor in several locations. A reading below 5.0 or above 9.0 (ASTM F-710) requires corrective measures.

Do not begin the installation if an unacceptable moisture level is detected. Contact Shaw Technical Support for additional recommendations. If excessive moisture is present, the general contractor or building owner must be advised and a decision made if the installation is to begin. Shaw Industries will not be responsible for any moisture related installation failures if these guidelines are not strictly followed.

2. PREPARE THE FLOOR

The substrate must be structurally sound, clean, level and dry. The substrate must be free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles and any other substance or condition that may prevent or reduce adhesion.

NOTE: Do not sand or scrape Vinyl Asbestos Tile (VAT) without proper attention to abatement procedures and precautions in accordance with all state and local codes. Shaw Industries makes no claims as to the acceptability of this procedure as a mitigation method in lieu of asbestos removal; and accepts no responsibility if any loose asbestos-containing floors are affected upon removal of a Shaw Industries CushionWorx or commercial carpet

tile.

Fill depressions or cracks with liquid latex additive Portland cement-based patching compound. Do not use oil-based (red) sweeping compounds; they leave oily deposits. You may use wax-based (green) sweeping compounds if you sweep and remove them immediately.

Concrete floors must be sealed with a latex primer such as Shaw 9050 if dusting or powdering exists.

3. SELECT YOUR ADHESIVE

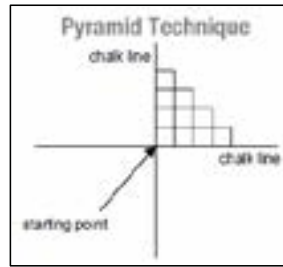
Adhesive such as Shaw 3800 Carpet Adhesive must be used between the floor and CushionWorx and Shaw 5000 or 5100 Carpet Adhesive is advised to be used between the CushionWorx and carpet tile.

NOTE: Shaw 5000 / 5100 must change color from cream to clear and tacky to touch with no transfer prior to the installation of Philadelphia Commercial's EcoWorx tile. The amount of open time needed may vary due to temperature and humidity. Air movers placed on the floor moving air directly across the adhesive surface will aid in the tack time of the adhesive.

4. INSTALL CUSHIONWORX

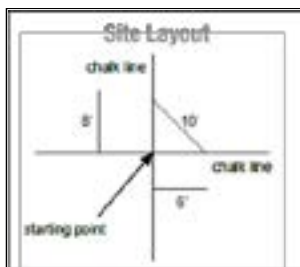
- Measure, cut and place CushionWorx.
- After the cushion is in place, fold it back and apply Shaw 3800 carpet adhesive with a 3/8" foam paint roller (14-16 yds. per gal.). Placing the cushion into the adhesive immediately.
- Assure 100% adhesive transfer to the cushion with the use of a 75 lb. roller, rolling the cushion in both directions.

- Apply the Shaw 5000 or 5100 adhesive with a 3/8" foam paint roller (35-40 yds. per gal.).
- Apply the adhesive in quadrants or full spread. Allow the adhesive to become thoroughly cured, tacky to the touch with no transfer prior to installing carpet tiles into the adhesive.



5. LAY OUT YOUR SITE

- Start the carpet tile installation as near to the center of the room as possible and position it to use the largest perimeter cut tile size.



- Snap a chalk line parallel to one major wall bisecting the starting point. It may be necessary to offset the center chalk line to assure perimeter tiles will be at least half size.
- Snap a second chalk line from the starting point at 90° to the first line. Use a 3-4-5, 6-8-10, or larger triangle depending on the room size. Meters or feet may be used to lay out the triangle in these proportions.

6. INSTALL YOUR TILE

Install each full carton and complete an entire pallet before starting another pallet to minimize product variation. Each tile has directional arrows on the back. These arrows allow for one-directional or multi-directional 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 quarter turned installation, please contact 1.877.502.7429. Numbers with the arrows are for manufacturing purposes and are not related to installation.

- Begin installation at the intersection of two chalk lines. Continue until you complete on quadrant. Proceed to an adjoining quadrant until all four quadrants are completed. Larger areas may require chalk lines bisecting the original four quadrants.
- Install modules using the pyramid technique. This gives you multiple alignment checks. If the edges do not align and the misalignment increases with progression of the installation, find and correct the source of the problem.
- Carpet tiles come in various sizes and shapes. All Philadelphia Commercial tiles have directional arrows on the back of the tile. This facilitates the installation method which is based on the requirements of the product, or the preference of the customer.
- Slide modules into position to prevent yarn from being trapped between the modules.
- Trapped yarn will adversely affect the appearance of the installation and will cause alignment problems.
- Modules must fit snugly, but not be compressed. Press the entire surface of the tile to ensure adhesion. Check for fit by measuring the length of ten full modules after installation.

- The measurement must not be less than, or exceed by more than 1/4 inch, the length of the modules being multiplied by ten. For example; if 24" x 24" modules are being installed, the measurement should be between 240 and 240 + inches.
- Roll the entire installation with a 75 lb. or greater roller to assure the proper adhesion to the substrate.

Flatwire Cable Systems

Flatwire cables should be installed on top of the adhesive and centered underneath the carpet tile for better seam quality.

7. CUT YOUR TILES

- Measure and cut tiles from the back using a straight edge. Be sure the arrows are pointing in the correct direction.
- Or let tiles cover up the wall and cut with a carpet knife, wall trimmer or similar tool. Do not compress.

8. POST INSTALLATION CARE AND PROTECTION

- Place plywood over the carpet when heavy objects are moved within 24 hours after installation.
- Use protective chair mats under chairs with casters. This will prevent excessive wear to the face of the carpet and possible transfer of the pressure sensitive adhesive to the back of the carpet.
- Place a non-staining building material paper over the carpet to protect it when additional construction activity is to take place. Do not use plastic sheeting as it will trap moisture.

For best results, temperatures should remain above 50°F and the ambient humidity should not fall below 40%.