TECHNICAL SERVICES DEPARTMENT

Installation of EcoWorx[®] Broadloom and EcoWorx Performance Broadloom **NOTICE:** Failure to follow these guidelines can result in voiding the carpet warranty.

LOOK BEFORE YOU CUT.....

Contact your Sales Representative or the Financial Services Department if a visible manufacturing defect exists. If such a defect is installed, Shaw is not liable for the installation.

INSTALLATION GUIDELINES

The following instructions shall be reviewed prior to installation. Shaw will not be responsible for improper installation.

SITE TESTING AND CONDITIONING

Maintain the temperature of the installation site, carpet, adhesive and seam sealer between 65° F and 95° F for 24 hours before installation. Do not begin the installation if the room or subfloor temperature is below 65° F. The adhesive and seam sealer will not function properly when applied over an extremely cold surface. The ambient Relative Humidity should not exceed 65%. These conditions must be maintained for 24 hours prior to, during and permanently afterwards.

Test the concrete slab for alkalinity prior to beginning the installation. Check the concrete for surface pH at several locations. A reading below 5.0 or above 9.0 requires corrective measures. Specific information on the correct method of neutralizing extremely low or high pH is available from the Shaw Field Technical Services Department.

Test the concrete slab for moisture prior to beginning the installation using the anhydrous calcium chloride or (ASTM 1869) test method. The moisture transmission rate of the concrete slab must not exceed 5.0 lbs. per 1000 sq. ft. per 24 hours.

When testing the concrete slab for Relative Humidity (RH) prior to beginning the installation using the Relative Humidity or (ASTM F-2170) test method. The Relative Humidity of the concrete slab should be less than 85%.

NOTE: When performing both tests, the Relative Humidity RH test results will be the qualifying standard. Other moisture testing methods are not as reliable. If the moisture in the concrete slab exceeds these requirements, contact the general contractor or building owner for a decision on whether to begin.

Shaw is not responsible for any moisture related installation failures if these guidelines are not strictly followed.

The subfloor must be structurally sound, clean, level and dry. Remove all foreign substances such as wax, grease, dirt and any substance or chemical that would interfere with a good bond. Do not use sweeping compounds as they may leave an oily residue that can prevent adhesive from bonding to the sub floor.

Depressions and cracks must be filled with a liquid latex additive patching compound and all protrusions leveled. **NOTE:** Do not sand or scrape Vinyl-asbestos tile (VAT) without proper attention to asbestos abatement procedures and precautions in accordance with all state and local codes.

FLOOR POROSITY

Determine subfloor porosity by applying a droplet of water the size of a dime to the subfloor. The water should dissipate within 30 seconds. Please be aware that due to the high solids content of Shaw's recommended adhesives, porous floors will have a reduced adhesive set up time while non-porous floors will experience an increased adhesive set up time.

LOOSE ASBESTOS CONTAINING FLOORINGS ARE AFFECTED UPON REMOVAL OF CARPETING.

Concrete floors must be sealed if dusting or powdering exists. The following floor sealers are suggested for concrete: Shaw Contract 9050 Floor Sealer and Shaw 8550 Level Primer.

ADHESIVES

Shaw recommends the use of Shaw 3500. Shaw 3600 is recommended when a specification requires Antimicrobial coverage meeting AATCC 174 requirements. Contact Shaw for approved equivalent adhesives, which have been formulated with higher solids content, that will perform adequately with Ecoworx Broadloom Backings. Use of other adhesive could result in an installation failure.

Any claims resulting from installation failures due to non approved adhesives should be directed to the applicable adhesive manufacturer. For information regarding equivalent adhesives, please see Shaw's contact numbers listed below.

Recommended Application for Pattern Products - 1/8" x 1/8" x 1/8" "U" notch trowel providing a coverage rate of 5 - 7 yds. /gal with a container size 4 gallons, depending on the porosity of the substrate.

Recommended Application for Non – Pattern Products – 3/32 x 3/32 x 3/32 "U" notch trowel or equivalent that will provide a coverage rate of 8 – 9 yds./gal. with a container size 4 gallons, depending on the porosity of the substrate.

On extremely porous or floors with residual multi-purpose adhesive, more glue will be needed. Coverage rates should be closely monitored. Excessive rates may indicate a worn or improperly notched trowel.

Adhesive **open time** will vary depending on the temperature and humidity at the job site. The adhesive is ready for carpet installation when the entire ridge of glue becomes tacky. This can be checked by firmly placing a finger into the ridge of adhesive and pressing to the floor. Lift slowly and the

adhesive should stick to the floor and your finger and have leg or strings for one to two inches. Fans or air movers blowing across not on the adhesive will greatly reduce required open time.

Inadequate adhesive application or set up time may result in bubbles and/or peaked seams and repair will require more time and effort than proper initial installation.

JOB LAYOUT

Dry lay the entire area to be carpeted. Implement roll sequencing prior to cutting any textured, graphic product. Dry laying will minimize the normal variations encountered when pattern matching and reveal any bow or skew within the roll. Follow the roll numbers sequentially. If the roll information has been removed prior to the carpet arriving on the job site, the date and time is backstamped (in military time) on the carpet to assist in sequencing.

ROLLING

This backing should be rolled both widthwise, and length-wise with a 75 – 100 lb. roller to assure transfer of the adhesive between floor and carpet backing and to eliminate any trapped air. Failure to perform this could result in bubbling or unwanted air pockets.

CUTTING AND SEAMING

Seam edges shall be trimmed using tools and techniques best suited for the carpet. Trim edges far enough into the material, normally about 8-10 rows, to maintain the structural integrity of the carpet.

The cutting technique for this backing system is **row cut both edges**. Correct pattern matching, gaps and overlaid areas with use of a knee kicker, power stretcher, mini stretcher or deadman.

Patterned carpets must be cut by the row cut/row cut method and dry laid to ensure pattern match, also check for sidematch and any visual defects.

Use a screwdriver to separate rows of yarn and cut with a cushion back or loop pile cutter. After the adhesive has become tacky, place the first drop into the adhesive

second breadth pattern matching if necessary. Use of a power stretcher, mini stretcher or deadman to obtain proper match.

Cross seams can be made the same as side seams if the rows can be run across the width. If not, cut both sides of the carpeting on pattern and continue to pattern match the seam.

SEAM SEALING

All commercial broadloom products require the use of a latex seam sealer such as Shaw 4000 or a polymer sealer such as Shaw 8300 (providing a moisture impervious seam). Seam sealer must be applied to the edges trimmed for seaming, and cover the thickness of both the primary and secondary backing without contaminating the face yarn.

CAUTION: Seam edges **must** be sealed to prevent edge ravel, tuft loss, and delamination of the secondary backing in the seamed area.

STEAMING

In order to alleviate bubbles, creases, pile distortion and crushing, it is advised to steam the carpet. Shaw recommends the use of a wallpaper steamer that has a 12" plastic head. Wallpaper steamers can be obtained through any local hardware store and can also be rented for a minimal charge. A white cotton cloth should be placed under the head of the steamer to protect the carpet fiber.

Placing the steamer on the affected area for approximately 45 sec. – 1 min. will allow the carpet backing to become pliable and reactivate the adhesive in order to assist in removal of the bubbles, creases or pile distortion. When the carpet is properly steamed, the affected area should be rolled with a carpet tractor to create a bond between the carpet backing and adhesive. It may be necessary to repeat this process in order to alleviate an area displaying bubbles.

If steaming does not correct the bubbled areas, then an application of adhesive to the affected area may be necessary. Allowing

adequate adhesive tack time will insure proper adhesion.

Note – If the steamer is left for a prolonged period of time on the carpeting, it could potentially cause the carpet fiber to appear darker. As the carpeting dries and the moisture dissipates, the carpet will regain its original color.

TRANSITIONS

Where carpet meets other floor coverings, the edges must be adequately protected with an appropriate transition molding or strip that covers the carpet edge at least ½".

POST INSTALLATION CARE AND PROTECTION

- 1. Use plywood over the carpet when heavy objects are moved within 24 hours after installation.
- 2. Protective chair mats under chairs with casters are recommended. This will prevent excessive wear to the face of the carpeting.
- 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 could soil or stain it. Do not use plastic sheeting as it could trap moisture. The self sticking type can transfer adhesive residue to the carpet that will attract t soil.

These installation procedures are intended to assist in the installation and care of Shaw carpet under most job conditions. Specific questions regarding installation and maintenance not covered must be referred to the Shaw Technical Services Department at 1-800-471-7429. Any variance from these procedures will become the responsibility of the installer and not Shaw Inc

Shaw Technical Bulletins are updated as new information becomes available. To determine if this represents the most current information, call 1-800-471-7429 and ask for the current bulletin number and date. **SPD02-01/26/10**.

PHONE NUMBER - 1 800 471-7429

WEB SITES

Shaw Contract 1.877.502.7429 www.shawcontractgroup.com
Patcraft Designweave 1.800241.4101 www.patcraftdesignweave.com
Philadelphia – Queen Commercial 1.800.441.7429 www.shawfloors.com

BOW, SKEW, and PATTERN ELONGATION

Q: How do you install a patterned carpet if it has bow, skew, or pattern elongation that is within the set tolerances of 1½" for bow in 12', 1½" for skew in 12', and 1½" for pattern elongation in 12'?

A: First, dry lay all the carpet according to roll or pattern sequence. The sequence number on the roll tag determines installation sequence if a pattern sequence is not provided. Dry stretch the carpet to minimize alignment difficulties. For bow or skew, select the most prominent width wall, cut the carpet <u>exactly</u> on pattern across the width, then position the carpet along the wall.

If cut and positioned correctly, either the bowed or skewed edge(s) will be running up the wall. Fold the carpet back and spread the recommended adhesive using the proper trowel size. Allow the adhesive to properly tack to develop good adhesive legs.

Using the mini stretcher, pull the skewed or bowed edge down off the wall. Align the pattern along the wall. This will form a bubble that will need to be moved to the opposite end of the seam. A bowed carpet will form a bubble on both edges, a skew will bubble only on one side.

Align the pattern as the bubble is moved down the seam. It may be necessary to over stretch the carpet pattern with the mini stretcher and allow it to slide back to achieve proper alignment. Use a power stretcher and "deadman" to properly align the pattern along the opposite wall.

A "deadman" is constructed by nailing tack strip completely on one side of a 2"x12"x 4' long piece of lumber. If necessary, stay nails can be used to hold the pattern in place. Remove the nails after adhesive has set.

For pattern elongation, start at the center of the drop and match the pattern at the seam. Then, working both ways from the center out toward the opposite walls, use the mini stretcher or power stretcher to stretch and align pattern working towards each wall.