Installation

EcoWorx® Broadloom, EcoWorx® Performance Broadloom

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. Inspect the carpet before it is installed. 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.

These installation procedures are intended to assist in the indoor installation of Shaw broadloom products under most job conditions. See Shaw Industries and CRI 104 Commercial 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.

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 and adhesive must be between 65°F and 95°F. The adhesive will not function properly when applied over an extremely cold surface. Do not begin the installation it the subfloor temperature 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 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 Product 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.

PREPARE THE FLOOR

The substrates 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. You may use wax-based (green) sweeping compounds if you sweep and remove them immediately.

Fill depressions or cracks with a cementitious patching / leveling compound

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that meet or exceed Shaw Industries maximum moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.

For cracks or saw cuts deeper than 1", follow the preparation and application instructions for Shaw QuikFill. QuikFill is a 2-part urethane treatment that prevents future damage from moisture penetrating to the surface of the slab that may damage or breakdown adhesives or unapproved patching compounds.

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 floorings are affected upon removal of a Shaw Industries product.

CAUTION: Do not allow cutback asphaltic adhesive or any other non-approved adhesive to come into contact with new adhesives. Installation failure could result. If this situation arises, contact Shaw Technical Support.

Dusting/Powdering/Porous Concrete/Lightweight Concrete: Prime with a latex primer such as Shaw 9050.

Patch/Leveler: Prime with a latex primer such as Shaw 9050.

VCT and VAT: All tiles must be secure to the subfloor. Strip any wax from the surface.

Wood Subfloors: Floors must be Wood Association Approved and primed with a latex primer such as Shaw 9050.

Determine Floor Porosity

To determine subfloor porosity, apply a droplet of water the size of a dime to the subfloor. The water should dissipate within 80 seconds. Porous floors will have a reduced adhesive set up time while non-porous floors will have an increased adhesive set up time, due to the high solids content of our recommended adhesives.

PREPARE THE EXISTING ADHESIVE

Existing Non Active Multipurpose Adhesive: Remove ridges, sweep or vacuum debris.

Existing Active Multipurpose Adhesive: Remove ridges then eliminate the adhesive tack with a product such as Shaw 6200.

Pressure Sensitive Adhesive Affected by Plasticizer Migration: If the previous carpet tile had a PVC backing and the plasticizer in the backing has transferred

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to the adhesive, you must thoroughly remove adhesive by wet scrapping. **Existing Pressure Sensitive Adhesive:** Remove ridges then eliminate the adhesive tack with a product such as Shaw 6200.

Active Cutback Adhesive: Wet scrape adhesive. reduce to a well—bonded residue and encapsulate with a product such as Shaw 9000.

Non Active Cutback Adhesive: Wet scrape adhesive and reduce to a well—bonded residue.

Do not use adhesive removers; they affect the bond and the new adhesive being applied.

SELECT YOUR ADHESIVE

- Typical Installations: Shaw 3800 or a Shaw approved alternative.
- For antimicrobial coverage; Shaw 3600 will meet AATCC 174.
- For elevated moisture, use Shaw 3800 when moisture is up to 8 lbs. Calcium Chloride or 90% Relative Humidity.
- Contact us at the number below for approved equivalent adhesives. EcoWorx Broadloom backings require a higher solids content. Use of other adhesives could result in an installation failure. Any claims resulting from installation failures due to non approved adhesives should be directed to the respective manufacturer.

Recommended application, depending upon the porosity of the substrate:

Shaw 3600 Pattern Products: Use $1/8" \times 1/8" \times 1/8" \times 1/8"$ "U" notch trowel or equivalent that will provide a coverage rate of 5 to 7 yds./gal.

Shaw 3600 Non-Pattern Products: Use a $3/32" \times 3/32" \times 3/32"$ "U" notch trowel or equivalent that will provide a coverage rate of 8 to 9 yds./gal.

Shaw 3800 Pattern and Non-Pattern Products: Use a 1/8"x1/8"x1/8"x1/8" "U" notch trowel or equivalent that will provide a coverage rate of 8-10 yds./gal.

Use more glue on extremely porous substrates or floors with residual multi—purpose adhesive. Monitor closely. Excessive adhesive rates may indicate a worn or improperly notched trowel.

*Coverages shown are for estimating purposes only. Actual jobsite coverage may vary according to skill of the installer, porosity/texture of the subfloor or type/angle of trowel used.

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. Check 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

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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.

LAY OUT YOUR JOB

Dry lay the entire area to be carpeted. Prior to cutting any textured, graphic product. implement roll sequencing. This will minimize the normal variations encountered when pattern matching and any bow, skew or pattern elongation between the rolls. Sequence numbers are provided on the bill of lading and invoice; they are located after the dye lot number. If this information is not available, the date and time is backstamped (in military time) on the carpet to assist in sequencing.

CUT AND SEAM

Trim the seam edges with tools and techniques best suited for carpet. Trim edges far enough into the material, normally about 8 to 10 rows, to maintain the structural integrity of the carpet. The cutting technique for this backing system is row out both edges. Correct pattern matching, gaps and overlaid areas with use of a knee kicker, power stretcher, mini stretcher or deadman. A "deadman" is constructed by nailing tack strip completely on one side of a 2"x12"x 4' long piece of lumber.

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

Use a screwdriver or row runner to separate rows of yarn and cut with a cushion back or loop pile cutter. After the adhesive has become tacky, place the first breadth into the adhesive and apply seam sealer, following with the second breadth pattern matching if necessary. Use 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, out both sides of the carpeting on pattern and continue to pattern match the seam.

SEAL THE SEAMS

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.

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ROLL YOUR CARPET

STEAM THE CARPET

Roll the carpet in both directions with a 75 to 100 lb. roller to assure transfer of the adhesive between floor and carpet backing to eliminate any trapped air. Failure to perform this could result in bubbling or unwanted air pockets.

In order to alleviate bubbles, creases, pile distortion and crushing, it is advised to use a wallpaper steamer with a 12" plastic head to steam the carpet. Contact your local hardware shore to purchase or rent a steamer for a minimal charge. Place a white cotton cloth under the head of the steamer to protect the carpet fiber.

Placing the steamer on the affected area for approximately 45 seconds to 1 minute 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. Allow adequate adhesive tack time to ensure 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.

PROTECT 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

- 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.
- 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.

Bow Skew and Pattern Elongation: See the following additional information and instructional video demonstrating how to adjust patterned carpet on our website.

Bow and Skew / Pattern Run Off Bowed carpet would be defined carpet where the pattern in the middle of the carpet is ahead or behind the pattern on the sides. Skewed carpet would be defined as carpet where the pattern on one side of the carpet is ahead of the pattern on the opposite side. Tolerances for bow and skewed carpet is 1 ½" for all commercial carpet widths.

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Pattern run-off tolerances are a maximum of 1" in the last 18" on side. Even with these tight tolerances, seams may be visible and, if installed in a room in which the walls are not square, the carpet pattern may appear to run off rather than run parallel with the wall or adjacent seam. Installers who are experienced in working with patterned carpet products may be able to improve the product's seam appearance. In order to maximize seam appearance, additional installation time will be necessary.

Pattern Distortion / Edge Deviation Linear pattern distortion / edge deviation, as illustrated below, is created when the pattern is contorted down the length of the carpet. The distortion could resemble a wiggle down the length of the carpet that may appear to move back and forth down the length of the carpet. This phenomenon typically occurs in products with a definite line running down the length of the carpet. Likewise, certain pattern and color combinations increase the potential for linear pattern distortion.

The normal tolerance is 1½" for all commercial carpet widths. If installed in a room in which the walls are not square, the carpet pattern may appear to run off rather than run parallel with the wall or adjacent seam. Installers who are experienced in working with patterned carpet products may be able to improve the product's seam appearance. In order to maximize seam appearance, additional installation time will be necessary The performance capabilities of the product will not be affected. These products are constructed to perform in commercial areas and are covered by all Shaw Industries' standard warranties (copies available upon request). Reference CQ-0002 – 2.8.2 (01022018)

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