

## COMMERCIAL BROADLOOM PRODUCTS (EXCEPT ECOWORX BROADLOOM)

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**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.

### 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 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 if 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 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 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.

Fill depressions or cracks with a cementitious patching/leveling compound 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. You may use wax-based (green) sweeping compounds if you sweep and remove them immediately.

**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.

If dusting or powdering exists, seal the floor with a latex primer such as Shaw 9050.

### 3. PREPARE EXISTING ADHESIVE

- Pre-existing adhesive ridges must be reduced to a smooth, level, well-bonded residue.
- If you are unsure of the type of preexisting adhesive or active cutback adhesive, use an encapsulation product such as Shaw 9000.
- For multi-purpose adhesive, after reduction of ridges, thoroughly sweep and vacuum any remaining debris.
- For pressure sensitive adhesive, after reduction of ridges, eliminate the adhesive tack with a product such as Shaw 6200.
- Do not use adhesive removers; they affect the bond and the new adhesive being applied.

### 4. SELECT YOUR ADHESIVE

- Use a multi-purpose adhesive such as Shaw 1000 or Shaw 1200.
- For antimicrobial protection, use Shaw 1036 (passes AATCC 174 test).
- For excessive moisture, use Shaw 3800 (8 lbs/90% RH).

Apply the adhesive with a 1/8" X 1/8" X 1/8" "U" notch trowel that will give a spread rate of 8 to 10 square yards per gallon or 32 to 40 square yards per 4-gallon pail (based on prime subfloor conditions). On extremely porous or rough floors with residual multi-purpose adhesive, more adhesive will be needed. Spread rate should never exceed 40 square yards per 4 gallons or an installation failure may occur. This indicates 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.

The adhesive must have adequate open time to become very tacky prior to installation. The open time will vary depending on 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 adhesive and lifting slowly. The glue should have legs or strings and not be wet at the floor surface to ensure a full transfer of adhesive. Fans or air movers will reduce required open time. Inadequate adhesive application will result in bubbles and/or peaked seams and repair will require more time and effort than proper initial installation.

### 5. 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.

## 6. 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 cut both edges. (Exception – Unitary-backed products are cut using the row cut/trace cut method.) Broadloom products containing a white marker yarn on one side of the salvage approximately 1" from the salvage edge should be removed first. The opposite side should then be cut in order to achieve proper pattern match. Correct pattern matching, gaps and overlaid areas with use of a knee kicker, power stretcher, mini stretcher, stay nails 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, stay nails or deadman to obtain proper match. Remove stay nails after the adhesive sets up approximately 12 to 24 hours after installation.

Cross seams can be made the same as side seams if the rows can be run across the width. If not, straight edge from the face on the side with the pile lay toward the seam. Run the cushion back cutter along the straight edge with the blade retracted to achieve better seam quality. This will preserve more yarn by pushing it out of the way. This cut edge is then used as a guide to trace cut the second side of the seam.

## 7. SEAL THE SEAMS

All commercial broadloom products require the use of a latex seam sealer such as Shaw 4000. 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.

## 8. ROLL YOUR 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.

## 9. 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".

## 10. 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**

Q: How do you install a patterned carpet if it has bow, skew or pattern elongation but is still 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 sequence. The sequence number is provided on the bill of lading invoice or backstamped on the carpet in military time. Dry stretch the carpet to minimize alignment difficulties. For bow or skew, select the most prominent width wall. Cut the carpet exactly on pattern across the width, and then position the carpet along the wall. If cut and positioned correctly, either the bowed or skewed edge will be running up the wall. Fold the carpet back and spread the adhesive using a 1/8" U notch trowel. Allow the adhesive to properly tack to develop 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; move the bubble 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. If necessary, stay nails maybe used to hold the pattern in place. Remove the nails after adhesive has set.

For pattern elongation, start on one end of the breadth matching the pattern at the seam. Working towards the opposite wall, use the mini stretcher or power stretcher to stretch and align the pattern.