
Broadloom Installation Instructions

Inspection: Pentz Commercial requires that the carpet be inspected prior to installation for proper style, color and potential defects. No claims will be honored if the carpet is installed with visible defects. Should there be a problem, call Pentz Technical Service at 866.706.9745 x8407.

Site Conditions: The building must be enclosed and the HVAC in continuous operation. The carpet must be conditioned to room temperature for 48 hours prior to installation. The ambient air relative humidity must be between 10%-65% with the floor and room temperature between 65-95 degrees Fahrenheit. These conditions must be maintained for a minimum of 48 hours prior to installation and at least 48 hours after completion of the installation.

Surface Preparation: All cracks 1/8" wide or wider must be filled with a Portland cement based patch reinforced with polymers. Floors must be sound, clean, dry, smooth and even. The floor must be free of dust, depressions, protrusions, existing adhesive, curing agents, parting compounds, oil, grease, paint, and any other contaminant that may prevent the required adhesion. Perform a bond test of the carpet to the floor.

OLD ADHESIVES – Must be mechanically scraped down to a bare residue flat with the concrete substrate or covered with a skim coat of Portland cement based patch reinforced with polymers.

CONCRETE MOISTURE TESTING AND pH TESTING – Substrate surfaces must be tested. It is the responsibility of the owner or owner's representative to perform moisture testing prior to starting the installation. ASTM F 2170-2 relative humidity probe moisture testing is required. Acceptable relative humidity probe testing results are up to 85% RH. Alkalinity tests should also be performed per ASTM F 710. The maximum acceptable pH is 9.0. Moisture/pH Readings above the recommended levels must be addressed prior to installing Pentz Commercial broadloom carpet. An intact moisture vapor barrier is required for on-grade or below-grade subfloors. RH probe type testing and pH testing is required prior to the installation start. These test results are to be recorded and saved. The results from testing must not exceed the manufacturer's published limits. Since both moisture and pH can increase over time, the manufacturer is not responsible for product failure as a result of changes to subfloor conditions, including increases in moisture or pH levels post installation.

Adhesives: Pentz Commercial requires the use of a Premium Broadloom Adhesive and Premium Carpet Seam Sealer. Any questions concerning the adhesive will need to be directed to the adhesive manufacturer.

Adhesive Application: The floor condition and carpet backing affect the amount of adhesive required. The floor adhesive must be applied uniformly with a trowel containing sufficient notching (1/8" wide x 1/8" deep x 1/8" spacing, U shaped notch) so as to achieve full and complete coverage of the substrate and 100% transfer of adhesive to the carpet backing, including penetration into the backing's deepest recesses. Adequate open time should be given to allow the adhesive to become tacky or "stringy" to the touch.

Seam Sealing: All Pentz Commercial broadloom carpet requires proper seam sealing. All carpet edges must be treated with a 1/8" bead of seam sealer applied along the carpet edge at the point where the face yarn enters the backing. Any sealer contaminating the face yarn must be cleaned immediately.

Seam Trimming of All Backing Systems:

1. Row cutting both seam sides is the preferred method.
2. A minimum of 1" (8-10 tufted rows) must be trimmed off all seam edges or cut at point of pattern match.
3. Do not trim seams with a slotted blade knife. Use seam trimming tools such as a cushion back cutter, loop pile cutter, etc. keeping the blade close to the seam side.
4. Establish a slight compression of seam edges; this will allow the seam to be made without a need to close the seam with a knee kicker.

Backing System Characteristics and Requirements PremierBac® Plus / iLoc®:

1. Use a minimum trowel notch 1/8" wide, 1/8" deep, 1/8" spacing U shaped notch.
2. These are the only backing systems that can be installed by the stretch-in method.
3. Seam sealer is required.

Patterned Carpet

1. Sequence patterned carpet by pattern size. Patterned carpet must be installed working from the longest pattern in the dye lot to the smallest pattern.
2. Check the pattern repeat variation (length) often referred to as "pattern run-off".
3. Measure the pattern repeat nearest the carpet edge. Measure from an exact match point of the pattern to the corresponding match point of the next pattern in the length direction.
4. Measure the distance covered by the selected number of patterns in numerous places throughout the dye lot.
5. Use these measurements to sequence cuts working from the largest pattern repeat gradually down to the shortest repeat.
6. Installation of patterned carpet requires more time and expertise. Patterned carpet installation requires the use of power stretchers, mini (crab) stretchers, dead man, dry lines, stay nails, plus additional time and staffing.
7. It is always best when possible to dry lay the carpet in the area for 24 hours under controlled conditions as directed by 11CRC Installation Standard A600. This will help facilitate adjustment for pattern variations and further refine pattern sequence.

Installation Tips for Seaming Tufted Patterned Carpet

ATTENTION: As a minimum check, measure the pattern repeat at the open end of each roll. Then sequence all cuts to minimize the labor to bring the pattern into register at the seams.

Pentz Commercial tufted patterns cover the spectrum from “economy match” patterns to critical patterns, which require more attention in their alignment. The more critical patterns will require more adjustment during installation. An exact match cannot be guaranteed.

Procedures for Installing Patterned Carpet

1. Strike a chalk line on the floor the total length of the seam nearest the center of the area to be covered. Ensure that this seam line is square with the area.
2. All Pentz Commercial tufted patterns follow tuft rows. Row-cutting both seam sides is necessary to maintain the pattern continuity at seams. Dry lay the area to be installed prior to spreading any adhesive.
3. Select the match point far enough in from the factory edges to obtain full face weight and good lamination of the backing system. Graphic patterns are to be row-cut so that when the trimmed carpet panels are seamed together the pattern will be complete. Trim at least 1” (8-10 tufted rows) inside the carpet edge or at pattern match point.
4. Row-cut the first seam side ensuring that the blade on the loop pile or cushion back cutter is close to the side to be seamed.
5. Row-cut the second seam side cutting close to the tuft row that will complete the pattern when joined to the first trimmed seam edge.
6. Align and match the pattern at the seam center. When working from the seam center, it may be necessary to power-stretch and stay-nail the short pattern seam side to maintain the pattern alignment along the seam length. By starting in the seam center, the pattern run-off is diminished by 50%. Substantial adjustment during the installation is possible and expected.
7. Should the pattern not match along the length of the seam, it will be necessary to power-stretch the short pattern seam edge into register with the long pattern seam side.
8. Turn back the seam side with the long pattern. Apply the adhesive to an area 4-6 feet wide the full length of the seam to the chalk line. Ensure that the trowel is supplying enough adhesive for the required full and complete coverage of the carpet back. (Too little adhesive will not allow the carpet to be moved into alignment.) Lay the first seam into the adhesive. Stretch and adjust so that the seam edge is aligned with chalk line.
9. Ensure that the second seam side is matched at the center of the seam. Turn back the second (short seam side) and apply the adhesive. Adequate open time should be given to allow adhesive to become tacky or “string” to the touch.
10. Apply seam sealer to the first seam side. Lay the second seam side into adhesive. Close the seam and use a power stretcher/mini stretcher to align pattern. Clean any seam sealer from the carpet face yarn before seam sealer dries.
11. Working from seam center, power-stretch, align pattern, check diagonals, adjust bow and skew. Stay nail to complete seam as needed.
12. Immediately following seam completion, slowly roll all carpet with a 75-100 lb. roller; roll North, South, East and West to obtain full and complete adhesive coverage of the carpet back.

Pattern Match Policy

Pentz Commercial DOES NOT GUARANTEE AN EXACT PATTERN MATCH ON ANY OF OUR PATTERNED CARPET. Carpet is a flexible textile material and some degree of shrinkage and/or stretch occurs during the manufacturing process. For this reason, an exact pattern match cannot be assured on patterned carpet. The installation of carpet with a pattern requires more time, expense, and expertise vs. installing non-patterned carpet.

PATTERN BOW – Maximum bow is 1 inch in 12 ft. width. To measure, stretch a string across the width of the carpet from the match point on one side to the corresponding match point on the opposite side. Measure the length of the greatest pattern separation from the string.

PATTERN SKEWING – Maximum skew is 1 ¼-inch in 12 ft. length. This is sometimes referred to as being on the bias. Square the carpet on one end. If the pattern on one side (a) is farther from the squared end than the pattern on the opposite side (b), then the pattern is skewed or on a bias.

PATTERN RUN OFF OR REPEAT VARIATION – Maximum length-wise repeat variation is 2 inches in 15 feet of carpet. For Example: Exactly match the pattern at one match point along the trimmed seam edges. If the pattern run off is 2 inches or less in 15 feet of carpet length from the previous matched point, the pattern repeat variation is within tolerance.

TRUENESS OF EDGE – Maximum variation is 1 inch in 15 feet of length. This is sometimes referred to as serpentine edge. This condition is most visual along the carpet edges, but will to a lesser degree be obvious into the body of the carpet. Do not attempt to correct trueness of edge by cutting the carpet to a straight line. The carpet edge must be nudged or stretched back into a straight line. The procedures listed above are our best recommendations for installing Pentz Commercial broadloom carpet.