



# CYP, Definity, Pattern Perfect & PDI

## INSTALLATION INSTRUCTIONS

### CARPET INSTALLATION CHECK OFF LIST

1. Newly poured concrete floors generally take 30 days per inch to cure. Moisture should not exceed 5 lbs/ 1000sf per 24 hours or 80% relative humidity as determined by current ASTM standards. If the results are more than 5 lbs. or higher than 80% RH, do not proceed with the installation. Gypcrete or substrates with excessive dust must be cleaned, and then primed with an approved primer, such as a latex milk additive.
2. The alkalinity or pH in a concrete slab should be between 5 and 9 for a glue-down installation.
3. The floor and room temperature must be acclimated by maintaining the temperature at 65° F and 95° F, and the humidity between 30% and 65%, for at least 48 hours before and during installation. In addition, the carpet and adhesive should be stored under these conditions for at least 24 hours before installation. The installation site must be acclimated with HVAC in operation.
4. When the installation is complete, the job site must be maintained at normal service temperature and humidity.
5. Existing adhesive must be properly prepared prior to any installation of Mohawk Group's broadloom carpet. See note #1.
6. Mechanically remove all wax, dirt, grease or paint. DO NOT use chemical solvents to clean the floor or remove existing adhesives. DO NOT use oil based sweeping compounds. Fill cracks more than 1/16" wide with a Portland or cement based patching compound. The floor must be flat to within 1/8" in 10 feet. Use leveling compound when required. Patched areas may need to be primed (consult patch manufacturer for requirements) with an approved primer. DO NOT install over resin- or silicate-based curing compounds.
7. Inspect all carpet prior to cutting, and contact your sales representative before installing the carpet if you discover any problems. No claims will be allowed for visible defects after the carpet has been cut and installed.
8. Carpet should only be bent when absolutely necessary for transporting purposes and must be unrolled immediately. Carpet should be rolled out and allowed to relax for at least 24 hours prior to installation.
9. Never cut carpet over carpet as this can result in over penetration of the blade and cutting loops on the lower carpet.
10. Carpet should be protected from heavy traffic and construction dust with a non-staining building material paper. Never use plastic sheeting as it will trap moisture and prevent proper curing of the adhesive. Plastic may also leave residues that can result in rapid soiling after removal.
11. Furniture placement and heavy traffic should be avoided for at least 24 hours after a direct glue installation. Furniture and heavy equipment, concentrated pressure, and movement over unprotected carpet can cause adhesive breakdown. This can result in buckling and/or wrinkling. It is strongly recommended that plywood or masonite boards be placed over the carpet during the move-in phase to spread the concentrated weight of furniture and heavy equipment.
12. If any of the above conditions are not attainable, contact Mohawk Group Technical Services at 800-833-6954.

**Please Note:**

1. Asbestos-containing floor tiles, any adhesive possibly containing asbestos, or other asbestos- containing floor coverings require special preparation, handling, and removal procedures. Consult the appropriate local or state authorities or the Resilient Floor Covering Institute before disturbing any suspected asbestos-containing material.
2. Installation of Mohawk Group's broadloom carpet on a floor outside the scope of the guidelines in this document will void all applicable warranties.
3. The Mohawk Group is not responsible for any product failure due to improper floor preparation and/or installation procedures. The required adhesives are Mohawk Group's family of adhesives.

## GENERAL INFORMATION

### Roll Identification for Sure-Fit And Spectra-Fit

Each roll of carpet you receive will be identified on the roll and plastic as follows:

- Order number
- Roll number
- Size of the roll
- Pattern number
- Contents of the roll

A set of installation instructions will be enclosed in the roll, which is wrapped in RED PLASTIC, with 'INSTALLATION INSTRUCTIONS ENCLOSED' printed on the outside of the roll. The installation instructions include the seaming diagram and the roll layout. The seaming diagram will indicate the placement of each rug and the location of the seams. In some cases, it may be necessary for mill seams and additional field seams. All known seams will be indicated on the seaming diagram.

### Roll Sequence for Broadloom

**Print**

Sequence numbers are placed on each roll. These numbers are in the order in which they are printed. Mohawk Group recommends following these sequence numbers, however, if the rolls need to be arranged differently in order to ensure a better pattern match, this is an option.

**CYP, Definity & Pattern Perfect**

A sequence report will be enclosed in the roll wrapped in RED PLASTIC with 'INSTALLATION INSTRUCTIONS ENCLOSED' printed on the outside of the roll. Rolls will be sequenced according to pattern repeat lengths, from longest to shortest.

### Proper Seam Characteristics

With any seaming method, a properly constructed seam:



- has cleanly trimmed edges properly secured with seam sealer
- has tightly abutted edges without gaps or overlaps
- maintains reasonable pattern match where applicable
- will not be totally invisible

## Seam Preparation

If the installation requires more than one breadth, select the best location for the first seam and strike a chalk line on the floor square with the walls for seam placement. No seam is invisible therefore, when possible, place seams in areas of least traffic, away from the direct lighting, and perpendicular to side lighting, such as windows.

## Adhesives

NuBroadlok Premium Multi-Purpose Adhesive is the only adhesive approved for Mohawk Group carpets. If NuBroadlok Premium Multi-Purpose Adhesive is not used, our warranties are voided.

### For Direct Glue Down Installations

Backing	Adhesive	Trowel Size	Spread Rate	Seam Sealer
All Backings	NuBroadlok Premium Multi-Purpose Adhesive	1/8" x 1/8" x 1/8" U-Notch 1/8" x 1/8" x 1/16" V-Notch	8-10 sq yards per gallon	NuBroadlok Seam Sealer

### For Double Glue Down Installations

Location	Adhesive	Trowel Size	Spread Rate	Seam Sealer
Between Floor & Cushion	EnPress	1/16" x 1/16" x 1/16" Square-Notch	16-22 sq yards per gallon	
Between Cushion & Carpet	NuBroadlok Premium Multi-Purpose Adhesive	1/8" x 1/8" x 1/16" U-Notch	3-5 sq yards per gallon (Synthetic Fiber Pad) 5-7 sq yards per gallon (Solid Rubber or Urethane Pad)	NuBroadlok Edge Sealer

## Spectra-Fit Corridors Direct Glue

### All Backings

After the designated carpet has been located, dry lay the entire corridor, centering the carpet in the corridor with equal bleed out on each side. In some cases, it will be necessary to change the amount of bleed out on each end of the corridors and/or between the rugs due to shrinkage and stretching of the carpet.

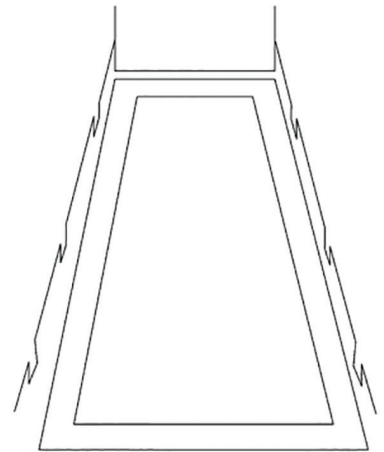
Use a dry line or laser to ensure the carpet is running straight down the corridor.



At this point the square-ness of the carpet should be checked. When the carpet is positioned properly, windows may be cut in both sides to make sure the carpet does not shift during the installation process. (See figure to right).

Fold back half of the carpet across the width of the corridor. Apply NuBroadlok Premium Multi-Purpose Adhesive using a 1/8" x 1/8" x 1/8" U-notched trowel or 1/8" x 1/8" x 1/16" V-notched trowel. Open time will vary depending upon the environmental conditions.

Lay the folded half back into the adhesive being careful not to shift the carpet out of position. With the use of a dry line, make sure the patterns are straight. If bowing or skewing occurs, power or crab stretchers may be needed. Repeat the other half as the first. Make sure all seams are properly sealed with a seam sealer. Any voids may result in the loss of face yarn or delamination. Roll carpet using a roller weighing 75-100 pounds.



## **WELDLOK ONLY – DOUBLE-STICK**

A cushion such as a flat rubber or urethane foam padding should not exceed 3/8 inch in thickness and must have a minimum density of 16 pounds.

Felted underlays (Synthetic fiber cushion) such as Durkan's EcoComfort Step, or hair and jute underlays should be at least 28 oz. in weight and should not exceed 3/8" in thickness.

Adhesive can either be NuBroadlok Premium Multi-Purpose Adhesive or EnPress between the floor or cushion using a 1/16" square notched trowel. NuBroadlok Multi-Purpose Adhesive must be used between the cushion and the carpet. The cushion should be installed in the longest continuous lengths possible with consideration given to the traffic pattern and seam placement of the carpet. The cushion seams should be at a right angle to carpet seams or offset at least six inches to either side.

When applying the adhesive between cushion and carpet, a 1/8" x 1/8" x 1/16" U-notched trowel should be used. In a double-stick installation, strict attention must be given to the open time. Adhesives should be tacky, but wet enough so that any bowing or skewing can be dealt with using power or crab stretchers.

Use the same methods utilized for direct-glue down when cutting and stretching the carpet. Make sure all seams are properly sealed with NuBroadlok Seam Sealer.

When constructing hot-melt seams, use only tape specifically designed for double-glue installations.

Do not use a roller exceeding 50 pounds on this type of installation. Heavy traffic should be avoided for at least 24 hours to allow proper adhesive cure.

Now, lay the end cap over the edge of the body until a match is obtained. Then lay the straight edge over the match line and cut the body on both ends.

Next, measure the body to get the proper length so that the other cap can be placed. Repeat above procedure to achieve a proper match on both ends.

The caps must be edge sealed, then seamed with a hot melt iron on a stretch-in installation. On a direct glue-down installation, all of the seams must be properly sealed.



The caps must be straight edged across the width at the proper match point. There are two separate caps printed, one for the top and the other for the bottom. This assures the pile will be going in the same direction. (See diagrams below).

## WELDLOK ONLY—STRETCH-IN INSTALLATION

Commercial or architectural tackless strips must be used.

The proper type of padding plays a key role in achieving satisfactory results and prolonging the life of the carpet. A proper cushion is firm and uniform in thickness. Flat rubber or urethane foam padding should not exceed 3/8 inch in thickness and must have a minimum density of 16 pounds. A 1/4-inch pad is more desirable if it meets the density requirement.

Felted underlays (synthetic fiber cushion), such Durkan's EcoComfort Step, or hair and jute underlays should be at least 28 oz. in weight and should not exceed 3/8" in thickness.

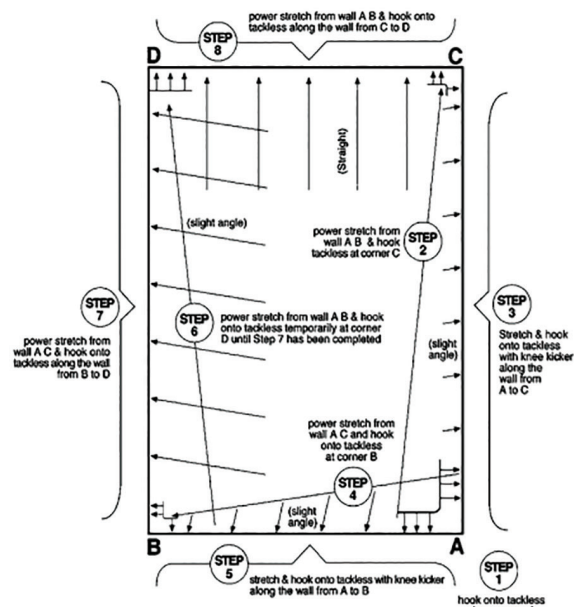
**Please Note:** Underlays that are too soft or have an uneven or non-uniform density (including pads that contain deep bubbles, ripples, or have a high profile, such as waffle pads) are not recommended for commercial carpet as they are frequently the cause of re-stretch calls and seam splitting.

Before starting the stretching process, dry lay the entire corridor. Center the carpet in the corridor with equal bleedout on each side. In some cases, as in the glue-down installation, it will be necessary to change the amount of bleedout on each end of the corridors and/or between the rugs due to the shrinkage and the stretching of the carpet.

Use a dry line or laser to ensure the carpet is running straight down the corridors. Start in the center of the corridor and power stretch both ways. Stay nails may also be needed on long corridors to hold the stretch until the entire corridor is stretched.

**SEAMS MUST BE SEALED.** Apply edge sealer to both edges of the seam. Allow the edge sealer to dry before seaming. Neglecting to seal seams can cause delamination or loss of face yarns. The carpet is to be joined with a fabric seaming tape pre-coated with a thermoplastic adhesive such as Orcon's XU90, Capitol MegaLoc, Stixx S120, Seam Master OT90, Seam Master Kool Glide or a comparable premium tape. A double-headed power stretcher and deadman may be needed to get a proper match while the seam is being constructed. Stay nails may also be needed to align the pattern. After the seam has cooled, the carpet is ready to be stretched. **THE USE OF A POWER STRETCHER IS MANDATORY.**

The carpet should be stretched both length and width angling slightly towards the corners. (See figure on right).





## Body & Cap Corridors

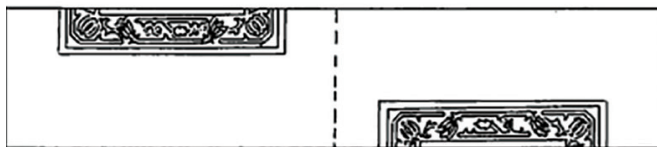
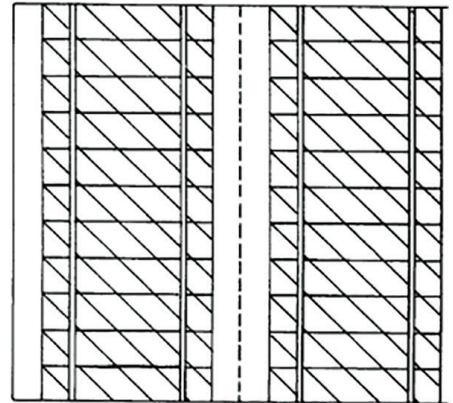
In corridor pattern widths of 7-1/2 feet or less, it will be necessary to split along the center of the width of the roll. This can best be accomplished by straight edging along the middle of the bleedout in both body and caps. (See diagram to right).

The caps must be straight edged across the width at the proper match point. There are two separate caps printed, one for the top and the other for the bottom. This assures the pile will be going in the same direction. (See diagrams below).

Now, lay the end cap over the edge of the body until a match is obtained. Then lay the straight edge over the match line and cut the body on both ends.

Next, measure the body to get the proper length so that the other cap can be placed. Repeat above procedure to achieve a proper match on both ends.

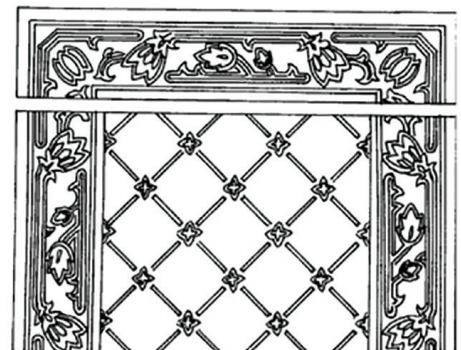
The caps must be edge sealed, then seamed with a hot melt iron on a stretch-in installation. On a direct glue-down installation, all of the seams must be properly sealed.



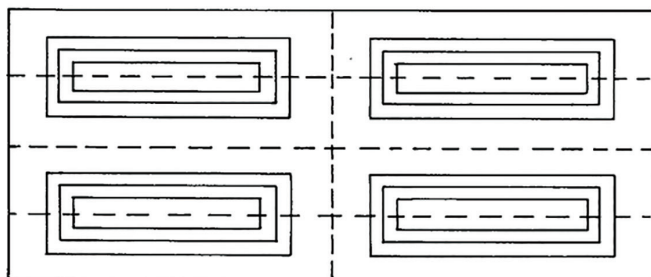
When properly cut the cap will align with the body.

**Please Note:** A double-headed or a power stretcher and deadman may have to be used to stretch either the cap or body for a proper match.

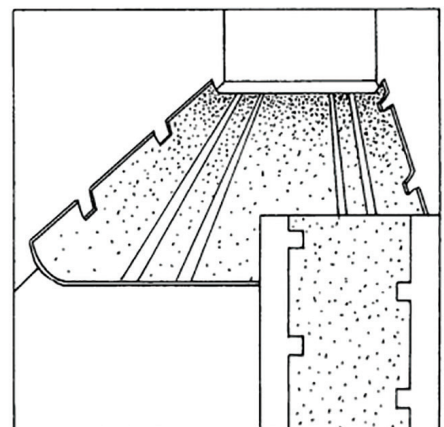
After the carpet is cut, center the carpet in the corridor with equal bleedout on both sides. A dry line or laser may be used to ensure the carpet is running straight in the corridor. When the carpet is positioned properly; windows may be cut in both sides to make sure the carpet does not shift during the installation process. (See diagram below).



When cutting and positioning is finished, carpet may be stretched in or glued down. Make sure all seams are sealed with the required seam/edge sealer.



Dashed lines indicate where the carpet is to be cut (example configuration of caps)







## Broadloom Guidelines

Locate an exact point in the pattern approximately 3/4" to 1" from the selvedge edge. Cut along complementary patterns using a cushion back cutter and straight edge from the face. Trim with the blade closest to the seam edge; hold the cutter slightly away from the seam edge at no more than a 5° angle, so as to cut slightly more backing material than face yarn. (See picture right).

These procedures should be followed on both sides of the seam. The pattern that is trimmed and removed from one side must be left on the other.

An alternate method would be to slit the carpet from the face along complementary pattern points and cut between slits from the back. These methods apply on both side to side and end to end seams.

Mohawk Group's printed carpet is tufted, the secondary backing is applied, and then the carpet is printed. Printed carpet does not follow tufting rows; therefore, running a row will not result in a pattern match.



## Pattern Elongation

Roll sequence numbers may be rearranged by measuring the pattern repeat to establish the correct roll sequence. The longest pattern must be installed first, then the next longest, etc. This allows the shorter pattern to be stretched to the longer pattern, and keeps the closest pattern repeats together. After the roll sequence is established, glue half the long pattern and half the shorter pattern lengthwise. Stretch the shorter pattern to match the longer pattern by starting in the center of the seam and stretching toward the ends. Stay nails will be needed to secure the pattern match as the adhesive sets.

## All Backings - Weldlok, Duralon, Attached Cushion for Direct Glue Installation

After the carpet has been placed in its designated areas and the seams trimmed, dry lay all breadths. The starting point will be the longest pattern repeat section gradually working down to the shortest pattern repeat section.

Align the patterns in the center of each breadth. Check the bow and skew. If the pattern run-off is more than one half inch in twelve feet, pre-stretch the carpet using a deadman and power stretchers. (See picture to the right).

This procedure should be performed before any adhesive is applied. Stretch in ten to twelve feet increments at a time. If the pattern needs stretching one half inch in twelve feet, stretch carpet one inch in twelve feet. After the stretchers are removed, some of the stretch will slip back, but not the entire stretch. At this time, the installer will be able to determine the amount of stretch the carpet will require to achieve the match after the adhesive has been applied.

After the pattern has been dry laid, make sure that each section of carpet lines up to the chalk lines on the floor.



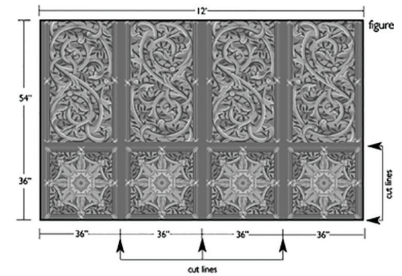


Position the carpet so that the patterns are matched in the middle of each breadth. Stay nails or pails of adhesives may be used to prevent shifting of the carpet.

## Guidelines for Borders & Corners

Borders and corner patterns require splitting the roll exactly at the cut lines using a straight edge and cushion back cutter. The patterns may have shifted from side to side slightly during the printing process; therefore, the tufted roll will not follow the patterns. Some corners print individually and some corners in groups of two, and groups of four.

The corners are printed inside the border roll usually in the middle the roll (See figure A).



## Types of Corners

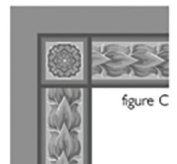
### 75 Matching Corners:

Are corners that match to the borders allowing a continuous flow of design around the borders (See figure B).



### Enclosed Corners:

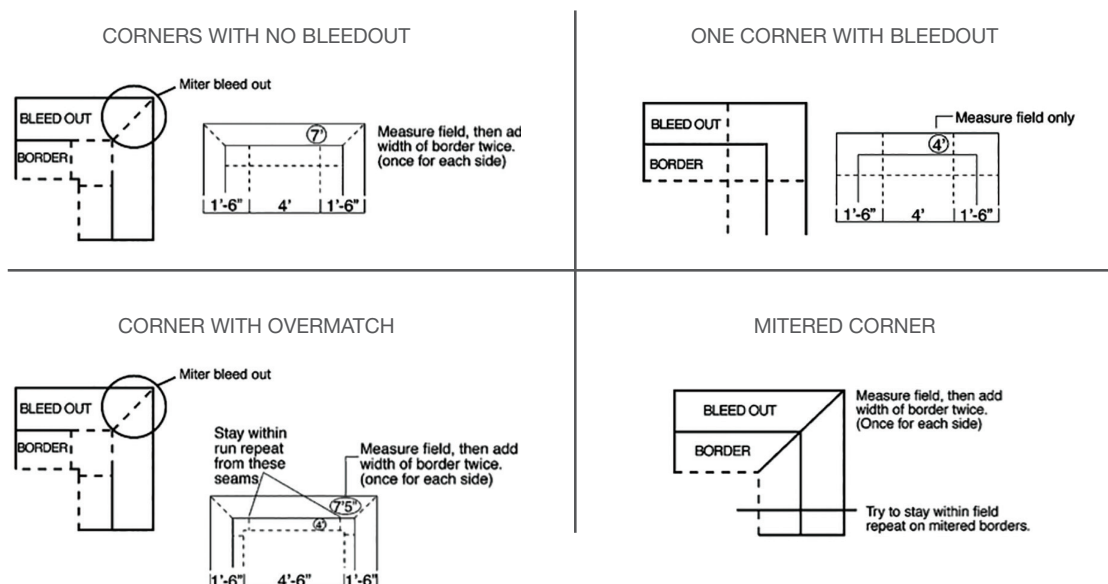
Are corners that are completely surrounded by solid stripes that separate the corners from the running border (See figure C).



## Seaming and Length Calculation for Different Types of Corners

Mitered Corners: Borders are overlapped and then cut at 45° angle (See figure D).

After the borders are split and the corners cut, the match is determined by moving a corner down a border section match point.







After the match is found, cut borders to the proper length.

Remember some of the corners are cut without the bleedout. In this case, the bleedout must be cut longer in or to miter bleedout from border around corner. (See figure E).

Due to the shape and size of room and the pattern repeat border; bleedout may not be consistent on all walls.

For example: two walls may have an 8" bleedout and the other two walls may have a 10" bleedout.

With the borders and corners cut, measure from the inside of the borders in each direction to determine the field dimensions. Strike a chalk line on the floor for border to field seam placement.

Install the field using the guidelines for broadloom. The field should be installed with the patterns centered up to the chalk line.

Position the borders and corners against the field. Fold back half of the border, and spread the adhesive on the floor. Before moving the border into place on the floor; apply seam sealer to the field and then lay the border into the adhesive.

Position the corner into place after applying seam sealer to one side of each of the seams. The mini-stretcher (crab) and the knee kicker should be used to move the border and corner into an exact pattern match. A tractor can be used to ensure a smooth and secure seam. Stay nails may have to be used to secure pattern match until the adhesive takes hold.

Mohawk Group patterned carpets are produced to the most exacting tolerances in the carpet industry. Patterned carpet is a synthetic textile product subject to variance in pattern repeats during the manufacturing process; however, a match should be achieved during the installation process.

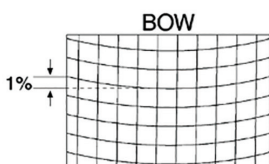
## Manufacturing Tolerances

A straight edge or chalk line is drawn across the full 12' width of the roll connecting the same pattern points in the design. At all pattern points across the width, the design should be approximately 1% of this line. Carpet is a textile product therefore multiple checks along the length of the roll should be performed and the average considered.

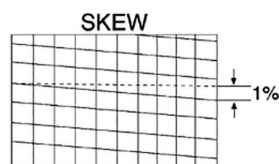
A straight edge or chalk line is drawn across the full 12' width of the roll perpendicular to the lengthwise edge of the pattern. At the opposite end of the starting point, the design should be approximately 1% of this line. This procedure can be checked using a sheet-rock square, 6' straightedge and chalk line. Carpet is a textile product therefore multiple checks along the length of the roll should be performed and the average considered.

To check pattern elongation, count and measure the same number of patterns on each cut.

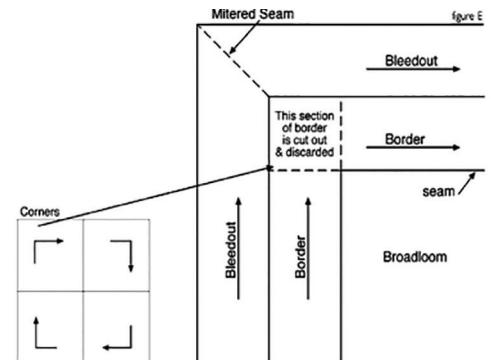
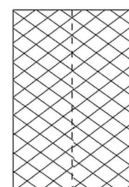
Bow 1% in width of carpet.



Skew with 1% in width of carpet.



Pattern Elongation 1%





## Very Important Steps to Remember

1. Dry-lay carpet before applying adhesive.
2. When needed, pre-stretch.
3. Always stretch the short side to align with the long side. This is a synthetic tufted carpet, which will not shrink, but it will stretch. Power stretchers and deadman are required.
4. Never glue the short side first.
5. Always use proper adhesives.
6. Always use the proper notched trowels.
7. Seam sealer is a must on all seams.
8. Dry line must be used to check straightness of patterns

**Please Note:** The use of Mohawk Group brand adhesives is required to ensure optimum results and are the only approved adhesives that the Mohawk Group will warrant. Failure to use Mohawk Group brand adhesives may result in warranties being null and void.

## Chair Pads

Chair pads are recommended for use under chairs with roller casters. Casters must be the flat round type with 5/8" to 1" width minimum. If chair pads are not used, the appearance of the carpet tile will decline. Maintenance and/or shifting of the modular tiles will be required more frequently when pads are not used.

*This information, offered as a customer service, is based on Mohawk Group's engineering tests and field experience. It is intended for installers with professional experience to be used at their discretion and risk. The Mohawk Group does not guarantee results and assumes no liability in connection with these installation instructions.*

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