



FLOORING INSTALLATION! **The Great Adventure!**

“If it doesn’t start right, it will NOT finish right!”

**The INTERNATIONAL
CERTIFIED FLOORCOVERING INSTALLERS ASSOCIATION**

Motto: If it is to be, it is up to me
Slogan: Together, we make a difference

CFI, The International Certified Floorcovering Installers Association

The Association for Professional Flooring Installers

Welcome to CFI!

CFI is the largest association representing flooring installers worldwide. It is the goal of the members to support and enhance the value of all types of flooring. To enhance the value of quality installation, this informational booklet is designed to assist you in the installation of carpet. Keep it in your toolbox or truck. It is an excellent guide to refer to if questions arise before, during or after the carpet installation. If you can't find the answer, call CFI Technical Resource Line at 816.23.4646 or email us at CFIquy@earthlink.net. Visit www.CFIinstallers.com for additional information and for a listing of current training events.

The CFI Mission Statement.....

To identify and certify according to skill and knowledge, professional floorcovering installers who provide customers with an installation of which they can be proud for many years.

The International Certified Floorcovering Installers Association, Inc. (CFI) was founded in November of 1993 and continues to grow at an unbelievable pace nationwide and in several foreign countries with a total membership of more than 25,000. CFI Chapters provide a source for continuing education, problem solving and the sharing of ideas between professional commercial and residential Installers. Information can be accessed through www.CFIinstallers.com and through membership; the CFI Annual Directory is also available.

CFI offers the commercial or residential customer who is purchasing new flooring, an opportunity to engage the services of an individual who is an Installation Specialist, who guarantees the work and leaves the home, office or business with the assurance of a worthwhile and lasting purchase. CFI Installers have signed an agreement that the installation will be performed in accordance with the CFI Standards, the Carpet and Rug Institute Guidelines and the Manufacturer's Specifications. If a problem should occur, the CFI Installer returns promptly to rectify the installation issue.

CFI Installers leave the home or business in a manner that showcases the beauty of the new flooring purchase. CFI recommends that this information be shared with those you represent; the dealer, retailer, contractor and others.

PREPARATION

Retailer / Salesperson / Estimator

The installers are to follow the directions listed on a detailed diagram provided by the dealer. This is a very important part of achieving customer satisfaction. Among other things, the diagram must indicate:

- Seam location, supply a cut list and pattern direction
 - Basic guideline - measure net and then add 3-inches to each length cut
 - If a pattern is involved, add a full pattern to the length and the width
 - Keep seams to a minimum - eliminate crossgrain seams whenever possible
 - Indicate pattern match, if applicable
- Edge treatments and moldings
- Types of substrate , necessary floor preparation
- Essential supplies
- Designated party responsible for removal of carpet, cushion, furniture and disposal of existing materials
- Oversized items to be removed
- Cushion should be installed that is recommended by manufacturer of the carpet.

SEAMS ARE NOT INVISIBLE! Some are less visible than others. It is recommended that the salesperson or estimator discuss seam appearance with the customers and involve them in the decision of seam location. Always be honest with the customer.

Installer

Your job is to provide the customer with a quality installation of which they will be proud for many years. Arrive prepared and project the skill and knowledge of a CFI CERTIFIED INSTALLER. Take time to inspect your tools and equipment and be sure they are clean and in good shape. Prior to cutting the carpet, unroll and check for visual defects and if a pattern is involved, check for tolerances. DO NOT cut or install the carpet if conditions exist that lead to an unsatisfactory installation.

Items of Importance for all carpet installations

- Carpet is never stapled to tackstrip
- Tackstrip is not to be placed in doorway openings
- Whenever possible, always acclimate carpet and cushion to room temperature 24-hours prior to the installation.
- Allowing the carpet to relax for 2-3 hours is better than none, contributes to the ease of installation and leads to a more successful installation.
- Temperature in a carpeted area can never fall below 50-degrees F.
- Recommended: Cut carpet sizes before going to customer's home or jobsite.

1. Tools

Powerstretcher - Cottonhead

Attachment used on a powerstretcher, designed to stretch loop-pile carpet to avoid sprouting or possible damage to the face pile.

Pattern Stretcher - Restretcher

This tool does NOT replace the powerstretcher. A double-headed tool with multiple uses that is much smaller and lighter than the powerstretcher. It is designed to match patterns and to restretch carpet.

Deadman

Designed to assist with pattern alignment and to protect the walls and base.

Dry Line – Straightedge - Square

Tools used to assist with pattern alignment.

2. Tackstrip

Use the correct tackstrip and attach the carpet securely. This prevents it from pulling away from the wall and avoids wrinkles and pattern distortion. For most tufted carpets, use C-type tackstrip that is 1-inch wide and ¼-inch thick. Architectural or double stripping with 1-inch wide tackstrip is required for:

- All areas over 30-feet
- Carpets with heavily-latexed backing
- Axminster and carpet backings such as Kara-Loc

When installing sisal-type or low-profile carpets, use shorter tackstrip pins; such as D or E- type tackstrip.

- If not available, use a material such as the secondary backing from a tufted carpet scrap, scribing felt, sheet rock or binding tape to shorten the height of the tackstrip pins. Position it on top of the tackstrip.
- Use a carpet tractor or roller to force the backing onto the tackstrip pins.
- This procedure shortens the height of the C-pins to avoid pulling loops from the carpet. It will also prevent injury to anyone who might step on tackstrip pins protruding through the carpet.

3. Gully

For the majority of installation when installing tackstrip, the gully is to be slightly less than the thickness of the carpet and not exceed 3/8".

4. Quarterround – Finished Edge

Whenever possible, remove the quarterround and place it on top of the carpet to achieve a finished edge. Sisal or low-profile type carpets should be treated in the same manner as a vinyl installation when finishing the edges.

5. Installation over Concrete

Backup the nails in the tackstrip by drilling guide holes in the concrete. Use a 3/4" concrete nail, slightly larger than the drilled hole to secure the tackstrip.

6. Radiant-heated Floors

CAUTION: Do not use nails. Secure the tackstrip with adhesive and allow it to set until bonded to the floor.

7. Cushion

Use the cushion that is recommended by the manufacturer. Remember, cushion seams are NEVER placed directly under carpet seams. If cushion is adhered to the substrate with adhesive, **always** maintain sufficient ventilation. The cushion must be properly secured to avoid movement during the powerstretching procedures.

Installation over an incorrect cushion will negatively affect the appearance, wear and durability of the carpet. Using an incorrect cushion that is not designed to support the carpet backing, is of insufficient density or outside the thickness requirements may cause the carpet to wear prematurely resulting in,

- Looseness, bubbles, wrinkles
- Separation (delamination) of the carpet backing and seams
- Furniture indentations
- Accelerated loss of appearance or retention
- Splitting and open seams
- Matting – Packing - Wrinkling – Buckling

Cushion density becomes more important in carpets of lower-pile weight or density.

Cushion surface should be smooth and of uniform density.

Cushion without scrim is not acceptable.

Cushion that is too soft will compress under heavy furniture and foot traffic.

FAILURE to follow the Manufacturer's CUSHION REQUIREMENTS may affect warranty protection.

8. Seam Location

- Seams should be constructed to run lengthwise in major areas parallel to the traffic flow.
- Main traffic patterns run ALONG, not ACROSS the seams.
- They should run into natural and artificial light sources.
- Seams should avoid major pivotal and traffic areas.
- And, never locate seams perpendicular to doorways or entrances.

9. Selling Seams

Installers, offer the dealer a visual selling tool. Consider asking your retail partner to display samples of seams in styles that require special techniques. It is too late to address seaming once the procedure begins.

Always consider the construction of the carpet **PRIOR** to cutting and seaming. **AVOID** crossgrain seams whenever possible. Be aware of the carpets in which crossgrain seams should not be constructed to achieve customer satisfaction.

10. Powerstretching, Trimming and Tucking the Carpet

Powerstretching is not a choice; **it is mandatory**, regardless of the size of the room. The kneekicker is used as a positioning tool **ONLY**. **Never** use a spike on any installation. This is not acceptable and voids the manufacturer warranty.

Properly stretched carpet is not loose and displays no holes or wrinkles. All woven carpets are to be stretched straight and not at an angle. The recommended stretch for most tufted carpets is 1 to 1-1/2% in both length and width. Understand the backing and carpet with which you are working because overstretching can result in seam peaking.

Use a wall trimmer to avoid damage to the wood and to properly trim and tuck the carpet into the gully.

CFI RECOMMENDED INSTALLATION TECHNIQUES

A. TUFTED Carpet

Seam Construction

1. Seams are to be cut and constructed on a hard surface; NOT on top of the cushion to ensure that the backings are even and to avoid ledging of the seam.
2. Seldom is a straightedge used in the construction of length seams.
3. The radio-wave seaming technology, KOOLGLIDE is an acceptable seaming system when the manufacturer's recommendations for use are followed.
4. The temperature setting of the grooved iron is determined by the carpet backing, the type of seaming tape and the maintenance of the tool. Excessive heat distorts the backing and may cause an unsightly seam.
5. Determine the grain. To do this, use a roller on a white piece of paper on top of the carpet. The paper will roll in the direction of the grain.
6. Use a row finder to separate the rows running the length of the carpet.

7. Start the cut by inserting the cushion-back or loop-pile cutter with the blade held against the carpet edge to be seamed.
8. Cut between the rows and be careful not to shear the face yarns.
9. After each section of carpet is properly cut for seaming, place them ¾-inch apart.
10. Insert a seaming board to seam on a hard surface. Never seam directly on a concrete substrate.
11. Center the tape under the two sections to be seamed.

Seam Sealer

1. Apply a continuous bead of latex seam sealer to both trimmed edges of carpet.
2. Using forefinger and thumb, press seam sealer into thickness of carpet backing.
3. It must be adequate to cover the primary backing, the yarn bundle, and the secondary backing.
4. Do not let the seam sealer come in contact with the base of the fibers. If this should occur, sealer wicks up the fiber, attracts soil and creates an unsightly line.
5. Do not get seam sealer on the carpet backing. If the seam sealer is wet, the thermoplastic and the sealer are not compatible. Before constructing the seam, the sealer must dry to become compatible with the thermoplastic.
6. It is acceptable to use a glue gun to apply thermoplastic for seam sealing.

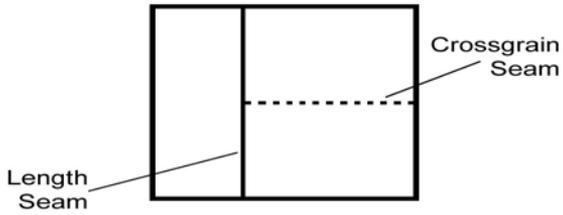
Seaming

1. Place the two sections together and seam with the pile direction on a hard surface, checking for gaps and overlaps.
2. Position yourself in front of the seaming iron and pull it toward you to avoid pulling the seam apart or causing indentations.
3. The thermoplastic is properly transferred to the backing of the carpet if a 6-inch roller is used behind the iron to ensure that the tape cools flat. To avoid distorting the fibers, never use starred rollers with heat.
4. After rolling, slide a non-heat conducting weight behind the iron to ensure that the tape cools flat. NEVER use a metal toolbox tray or any non-porous material behind the seaming iron.
5. Thermoplastic must properly melt to achieve the correct transfer. Taking the iron out before the thermoplastic is melted to the edge does not achieve the proper transfer. Allow the seam to completely cool before powerstretching.

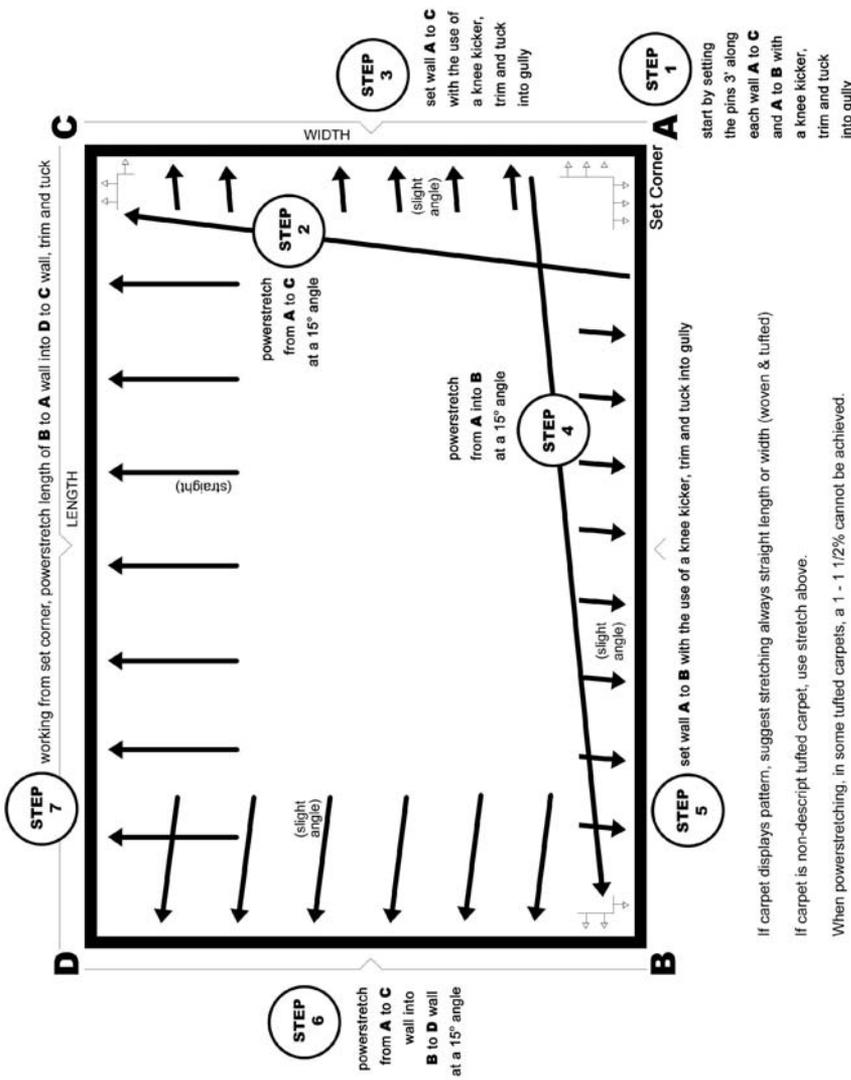
IMPORTANT: Many of the cutting and seaming techniques are similar for most carpet types. Be aware of the necessary manufacturer's requirements for specialized styles of carpet and backing.

Crossgrain Seams

Crossgrain seams are not recommended in certain styles of carpet to achieve customer satisfaction. CFI recommends that dealer inform the customer of the appearance of the seams at the time of the sale. Seams are never invisible. They will appear less visible in specific types of carpet construction, but should not be sold as invisible.



STRETCHING DIAGRAM for non-patterned ACTION-BAC tufted carpets



If carpet displays pattern, suggest stretching always straight length or width (woven & tufted)
 If carpet is non-descript tufted carpet, use stretch above.
 When powerstretching, in some tufted carpets, a 1 - 1 1/2% cannot be achieved.

F. PATTERNED CARPET GUIDELINES

If the patterns align, it is not necessary to prestretch the carpet. If they do not, prestretch along the seam line for a flat, square and pucker-free installation. After the seam tape is applied, only a minimal stretch can be obtained in this area. If the patterns do NOT align, start the seam construction by matching the pattern in the center of the room and work

toward the wall, using a powerstretcher and deadman.

When installing patterned carpets, YOU MUST KNOW!

- Pattern repeat
- Type of match
- Pattern count
- Pattern tolerance

ALL parties must realize that the installation requires additional time, cost and expertise to provide our clients with the finest of installations. If the installer possesses the skills and expertise, patterns can be installed in an acceptable manner for our customer if ample carpet is available with the manufacturer's recommended tolerances and pattern count.

1. Pattern Repeat

Information concerning pattern repeats and avoiding crossgrain seams in certain styles is available from the manufacturer and often from the dealer. Sufficient carpet must be ordered to achieve customer satisfaction by eliminating unnecessary seams. Crossgrain seams are not recommended in certain carpet styles.

Before STARTING the installation, check the manufacturer's listed width and length pattern repeat, by using a steel measuring tape to find the true pattern repeat. For patterns with decimal values, review the simplified conversion table.

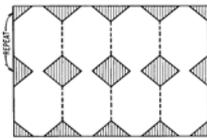
1/16 - .0625
1/8 - .1250
1/4 - .2500
3/8 - .3750

1/2 - .5000
5/8 - .6250
3/4 - .7500

Example: A carpet with a pattern repeat of 18.3750 = 18-3/8"

2. Basic Pattern Match Descriptions

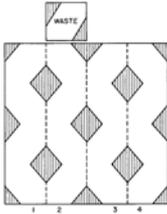
SET MATCH



A pattern that continues straight across the breadth of the carpet at a right angle to the selvage edge.

When connecting lines to each pattern repeat, squares or rectangles are visible.

DROP MATCH



Every other repeat is dropped down and over one-half of the repeated design length.

Generally, this produces a larger scale effect. It often enhances a diagonal pattern alignment across the width.

3. PATTERN COUNT

Determining the pattern count across the width is critical **BEFORE** the installation begins. This can affect the finished appearance if there is not sufficient carpet to properly complete the installation.

To figure an accurate pattern count,

- a. Installation problems often occur with short widths of patterned carpets.
- b. First check manufacturer's stated pattern size.
- c. Then measure the width of the carpet from selvage to selvage.
- d. Record the distance in inches and check width of the carpet for 144-inches.
- e. If measurement is under 144-inches, this could create a problem.
- f. Next, check the actual pattern. There must be enough carpet to trim for a pattern match.
- g. Divide the pattern repeat size into the recorded inches.
- h. If the total of inches is more than the exact number of the pattern count, trim the selvage. The pattern count is correct.
- i. All selvage edges must be cut from certain manufacturer's tufted products to construct acceptable seams. Please check.

EXAMPLE

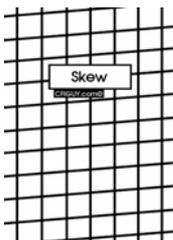
- a. The breadth of the 12' wide carpet measures 144".
- b. The pattern repeat is 18". Divide 144 by 18.
- c. This equals 8 repeats across the 12' width of the carpet.
- d. It is necessary to cut into the carpet to obtain one full pattern.
- e. If there are not enough inches to trim after dividing and checking the count, there is not sufficient carpet to complete the installation because one full pattern is lost in the width of the carpet.
- f. Contact the manufacturer for assistance.

EXAMPLE - A one-foot pattern repeat is present in the width of the 12' breadth that equals 12 full patterns. This is a pattern count that does not match the full breadth of the carpet.

- a. There must be sufficient selvage to trim for a clean-cut seam.
- b. The received carpet measures 11'-11" in width from selvage to selvage.
- c. One full pattern is lost and the seam is located at 11-feet.
- d. Even if the carpet displays 12 full pattern repeats, if the breadth is measured net at the 12' width, there is not sufficient selvage to construct the seam.

4. PATTERNED CARPET TOLERANCES when not stated by the manufacturer

A. SKEW TOLERANCE – 1-1/2 inches in 12-feet



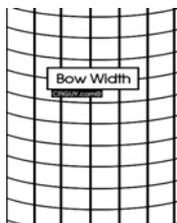
SKEW - also known as BIAS is present when the pattern on one side is slightly ahead of the pattern on the opposite side.

To check for SKEW

- a. Place square along selvage edge on a pattern of a straight row of tufts.
- b. Lay a straightedge at a 90-degree angle to the straight tufted rows on top of, or beside the square that is across the width of the carpet.
- c. Hold a dry line at the top of the square along the 6-foot straightedge.
- d. Extend the dry line 12-feet across width of the carpet from each side.
- e. Measure the pattern on one side up to the dry line.
- f. If the measurement is greater than 1-1/2 inches, contact manufacturer.

To correct SKEW, use the powerstretcher and deadman.

B. BOW TOLERANCE - 1- inch in 12-feet



BOW - The distortion appears as wavy or crooked lines when viewing across the carpet width.

To check for BOW

- a. Begin by locating a pattern on one side of carpet.
- b. Next, find the identical pattern on the opposite side.
- c. Drop dry line from one pattern to the identical pattern on the other side.
- d. From the dry line, measure any of the identical patterns.
- e. If the patterns are more than $\frac{3}{4}$ -inch off, contact the manufacturer
- f. If correction is needed, follow the same procedures used with SKEW.

C. EDGE DEVIATION - TRUENESS of EDGE - LENGTH BOW

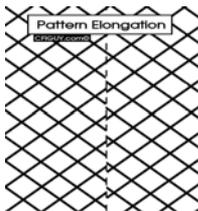


Recommended tolerance $\frac{1}{2}$ -inch in 12 feet

Pattern does not appear in length as a straight line.

This can be measured between common pattern points along carpet edge at or very close to edge to be trimmed for seaming.

D. PATTERN ELONGATION TOLERANCE - 1-inch in 10-feet



Pattern Elongation - Patterns vary from one breadth of carpet to the next and appear to be growing along the seam.

To check for PATTERN ELONGATION

- a. Measure the distance between the patterns at 2 designated points.
- b. Count the number of patterns in 5 feet. It must be accurate!
- c. Measure opposite section of the carpet and repeat same procedure.
- d. Measure 10-20 feet of the carpet and count the patterns to compare with the first count.
- e. There should be no more than $\frac{1}{2}$ - inch between the patterns.
- f. Continue measuring the entire length of the carpet.
- g. If the difference is greater than $\frac{1}{2}$ -inch in 5-feet, contact manufacturer.

To correct

- a. Work the patterns back and forth to achieve pattern alignment.
- b. Start in the center of a breadth of carpet to minimize stretching.
- c. Stretch in both directions, stretching the shortest pattern to the exact length of the longest pattern.
- d. Start with LARGEST pattern elongation and match all patterns to this.

G. STAIR UPHOLSTERY – Detailed techniques are shown in the DVD series.

- The staircase is one of the most predominate areas in the home to showcase installation skills. **It is recommended that the customer ALWAYS be involved in the selection of upholstery techniques.**
- The carpet can be installed from the bottom to the top or in the opposite direction, but NEVER with the grain running across the stair unless the pattern on the floor must match the pattern on the stairs.
- The choice of cushion is very important. Refer to the manufacturer's guidelines.
- It is recommended the duct tape be applied to the nosing of each step to enhance the life of the cushion. CFI recommends avoiding the use of staples that can also hold down the carpet fibers and result in an unsightly installation.

1. Cap-and-Band Stair

The carpet follows the contour of the stair. It extends across the tread and is wrapped under the bullnose and installed flat on the riser. **IMPORTANT:** The bullnose must be a minimum of ¾-inch to upholster in this manner.

2. Waterfall Stair

Carpet is installed across the tread and “falls over” the riser to the step below.

H. MANUFACTURED RUNNERS

At the TIME of the SALE, inform the customer that pattern will not match. If this is an issue, installing broadloom carpet that involves customized work and hand fitting can help to minimize this situation.

I. THE COMPLETED INSTALLATION

When the installation is complete, our customer has received a finished product that displays the skills and craftsmanship of a CFI installation professional.

- Pick up and dispose of the scraps.
- Vacuuming the carpet may save a recall. It is also the only way to show off a beautiful installation.
- If the diagram indicates, replace customer's furniture to its exact position.
- The installation should be reviewed with the customer.
- When the sale and installation are performed in the CFI professional manner, our customer returns to purchase more carpet in the future.

J. RESTRETCHING

If restretching should become necessary, the rooms are to be emptied of all furniture to achieve the proper stretch. Start the stretching procedure by placing the deadman in the corner of the room. Stretch one-half of the area, reposition the deadman and stretch in the opposite direction.

K. TECHNICAL ASSISTANCE

Before, during or after the installation, please contact CFI Technical Service at 1.816.231.4646.

CFI supports quality installation and also provides for your use, the

- CFI Certified Installer Training and Certification
- CFI Installation Resource Guide and Technical Manual
- CFI Certified Installer Decals
- CFI Certified Installer Shirts
- CFI Certified Installer Certificate
- CFI website for information – www.CFIinstallers.com
- CFI Installer Search Engine for customers to locate YOU!
- The “CFI Professional” News
- The CFI Directory – printed and online search
- Chatroom – www.CFIforums.com
- CFI Training Programs – Estimating, Installation Inspector, Patterned Carpet Workshop and many more

Valuable installation information is located at www.CFIinstallers.com in the Installer Resource Section.

BERBER SEAMING with a GLUE GUN – SEAM PEAKING -

by Michael Hetts, CFI Master Installer #30

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Berber seaming can be a problem. The distance a seam will peak or the tape will rise to get in line with the stretch, is equal to the thickness of the carpet backing. That's why Berbers peak so badly. Six-inch seaming tape and irons were invented to deal with that problem. They helped by spreading the rise of the tape over a larger area, reducing the visual impact, but did not eliminate the peaking.

I developed a technique to deal with Berber seam peaking in the early '80's. By the time six-inch tape had been invented, I had eliminated my Berber seam peaking problems, as well as that nasty fuzz line that appears on Berber cross seams.

It all started one day installing a piece of level-loop. I made a great seam, row cut; it was beautiful. Then after I stretched, the tape rose up, the seam peaked and the rows separated and there it was; the dreaded seam grin. I solved the problem by running a small bead of glue from my hot-glue gun down the seam, gluing the base of the rows together and closing the gap. While doing this, the thought occurred to me "Why not do this while making the seam and eliminate a step!" What was born was the following seaming technique. I have used this technique since 1980 and began teaching it nationwide in 1990 when I started working for Roberts as a Tech Manager. It's pretty simple and easy to master, just requiring a little practice to adjust your timing.

What you will need: Seaming iron, a hot-glue gun with an extension tip, an extension cord, and a multi-plug adapter

What you will achieve: Elimination of fuzz line on cross seams, elimination of row separation (smiling) on length seams and greatly reduced seam peaking

It's important for the extension tip to have a male-aperture opening to allow better glue control. Purchase a small aperture tip. Make the hole smaller by putting a carpet-sewing needle or a large safety pin in the opening for a spacer. Pinch it closed with a pair of pliers.

Cut your seam as usual by opening a row and row cutting from the face. After thoroughly melting the seam tape adhesive, move your iron forward (no more than an iron's length. I usually move mine $\frac{1}{2}$ to $\frac{3}{4}$ of an iron's length. Before pressing the two sections of carpet into the melted adhesive, apply a bead of hot glue on one side of the seam at the base of the yarn where it meets the carpet backing.

Using a glue gun with a small aperture extension nozzle, not only allows you to control the amount of glue, but also where and when it is applied. Put the seam together and force the bottom of the loops together by pressing sideways with your thumbs from about a $\frac{1}{4}$ -inch away from the seam edge.

Press up and down the seam length several times before using your seam roller. On some soft Berbers you may feel a hard line in the seam. This is really only noticeable if you are stand directly on the seam barefoot. If you apply too much glue, you will get a big ugly lump and when you remake the seam, you'll be more careful. That was another lesson for me from the "School of Hard Knocks."

Cross seams require a slight variation when it comes to the cut. I cut the cross seam from the back on an angle. Not, because you should cut a cross seam on an angle. Follow a row whenever possible, length or width. The uncut loops are a problem with Berber cross seams. When cut, they create a fuzz line at the seam. In some cases you might as well have a neon sign saying, "The seam is right here!"

What we want to do is eliminate that fuzz. Cut any uncut loops off at the base of the backing. Do this on both edges. The end result is two clean edges with virtually no fuzz, but a small problem of a gap where you cut away the uncut loops. Don't panic, this is solved by the same technique you used on the length seam.

I know it goes against everything you have ever thought or been taught about seams, "Don't cut fabric away from the seam edge!" I must admit, I cringed every time I did it for the first six months or so that I made Berber cross seams this way. But, the results are so outstanding. The seams resist opening under pressure.

One night an Installer at one of my clinics said, "Why do that? Customers are never going to bend the seam like that." I looked at him with astonishment and replied, "Of course not, this is to show if it resists this pressure, just imagine how it holds down the seam peaking." By using this technique, by the time six-inch tape was invented, I had eliminated my Berber seaming problems, both peaking and the cross seam fuzz line.

If you do the majority of your stretch in the width, you have guaranteed seam peaking. As for the rubber band analogy, have a friend help you with this. Ask the friend to pull the length of the rubber band and the sides will come in. Now, without him releasing the stretch on the length, you grasp the sides and return the rubber band to its original width. What do you think? Is the width stretched tight? You bet it is!

Carpet is made in rows that run the length with an empty space between the rows. If a carpet is going to wrinkle, where do you think this will happen? The path of least resistance is between the rows. Like a piece of seam tape, which way does it bend easier, with the rows or across them?

As for the stretching, I am a firm believer in power stretching. My rule of thumb of how large a room should be to use a power stretcher - "If it is bigger than a phone booth, power stretch it." I never state not to stretch the width. However, the majority of your stretch is in the length on angles. The length is where carpet stretches the most. The width is where you will achieve the least stretch. The techniques I outlined in this article are techniques that work for me. I do not have re-stretch problems.

A word of caution here regarding the glue-gun tips. You should use a heat shield on very soft or fine denier yarn cut piles. If you don't have one, make one out of cardboard. The heat shield will show down the reactivation of the hot glue on the edges, preventing fine yarns from getting trapped. This is what stopped me from using this Berber seaming technique on cut piles. It was too hard for me to control the glue gun. Don't let this stop you from using these sealing tips. It doesn't make them bad to use, you just need to exert the correct control. It's like fire, control it!

SEAM PEAKING - CORRECTIVE MEASURES

Seam peaking and seam elevation are inherent characteristics of all seams, occurring when the carpet is stretched. A hinging motion causes the seam to become elevated, which creates a peaking effect. This problem can be solved IF the cushion is acceptable.

THE CORRECTIVE PROCEDURE: This procedure will not correct the appearance of the seam, but it will correct seam peaking or seam elevation. It is important to note that the cushion will have an effect on the success of this procedure. It will NOT work over soft cushion that does not have a scrim. (urethane) The cushion must be dense *with a scrim*. The room must be empty.

1. Remove carpet *from tackstrip* and pull it back to where the seam tape is visible. If the seam was originally constructed improperly on top of cushion, the tape left an impression on the surface of the cushion. Move to the right or left of this impression six-inches and cut cushion. To identify seam location later if it was correctly constructed, place masking tape at each end of the seam on wallbase BEFORE removing the carpet.
2. Pull the cushion back and apply the *pressure-sensitive* adhesive using a 1/16" x 1/16" x 1/16" square-notched trowel. Apply adhesive under the impression left on the cushion approximately one-foot on both sides of where the cushion was cut. Allow the pressure sensitive adhesive to become "tacky" before positioning the cushion into the adhesive.
3. Do NOT take the seam apart. *Lightly, sand the back of the seaming tape* to remove the silicone as it is not compatible with the adhesive.
4. Apply a *double-glue or soft-set, multi-purpose adhesive* to the top of the cushion the width of a trowel (1/8" x 1/8" x 1/16" U-notched trowel), approximately 10-12 inches, directly over the impression of the tape.
5. Position the carpet in the adhesive while it is **wet**.
6. **Immediately**, reinstall the carpet using the powerstretcher. Stretch more on the length, if necessary, and less on the width. Stretch the carpet across the seam back to the original stretched position. **DO NOT OVERSTRETCH!**
7. After the carpet has been edged into the gully, stretch the length of the seam using the required pressure to obtain a flat seam.
8. **Roll the seam with a flat seam roller**, (not to exceed 35 pounds) to ensure that the adhesive has been transferred into the backing of the carpet.
9. A flat weight, such as a 2 x 10 or 2 x 12, should be positioned over the seam for approximately 45 minutes. This will allow time for the adhesive to become tacky and pull the seam down.
10. Advise the customer that the area is not to receive foot traffic for 24 hours.

This procedure will only work IF the cushion is manufactured with a *scrim and the density factor is sufficient*. The adhesive will migrate into the cushion causing the cushion to collapse. A cushion density of 6lbs. or heavier is recommended.

BEFORE, procedure is attempted, ALWAYS identify the cushion!