

**INTERNATIONAL**



**CERTIFIED FLOORCOVERING INSTALLERS**

# FLOORING INSTALLATION!

The Great Adventure!

*Presented by*

**The CFI TEAM of INSTALLATION TRAINERS**

**INTERNATIONAL CERTIFIED FLOORCOVERING INSTALLERS ASSOCIATION**

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



## CFI Mission Statement.....

The International Certified Floorcovering Installers Association is an organization of flooring professionals whose purpose is to identify and certify Installers according to skill and knowledge who understand that the ultimate goal is

**CUSTOMER SATISFACTION!**

LOGO: PRIDE

*Professionalism, Responsibility, Integrity, Dependability, Education*

### 1) What individuals or entity would apply for CFI Certification?

Professional Flooring Installers who:

- Seek identification as professionals
- Are proud, professional, quality-minded individuals
- Desire education and updated information
- Seek access to tech service and problem solving assistance
- Are searching for achievement of economic self-sufficiency
- Desire a connection with multiple industry resources
- Seek advancement of the flooring installation trade
- Are willing to communicate to build commitment within the trade
- Seek professional development

### 2) Designations of Certification

#### *CARPET*

- Entry Level Skills and Knowledge – Minimum 2 yrs. exp. Residential-I Commercial-I
- Advanced Skills and Knowledge – Minimum 4 yrs. exp. Residential-II Commercial-II
- Master – Knowledgeable in all carpet applications - Minimum 10 yrs. experience
- Master-II – Updated Master Certification

#### *HARD SURFACE*

- Designed to promote the skills Hard Surface Installers
  - Craftsman – Minimum 2 yrs. Experience or Master Craftsman – Minimum 10 yrs. experience
- Presently accepting membership from
  - Armstrong Certified Installers with completion of Armstrong Certified Installer Program

### 3) Benefits of Certification

- Legitimizes the installation trade
- Professionalism and integrity
- Promotes Customer Confidence
- An incentive package to “sell” Customer
- Member of a network of like-minded individuals
- Education
- Tech-line and problem solving assistance
- Marketable to consumers, contractors, architects, designers, specifiers, etc.
- CFI Membership benefits – WFCA, Prepaid Legal, Clothing, Training, etc.
- Website [www.CFIInstallers.com](http://www.CFIInstallers.com) and Directory listing
- Advancement of Trade
- Connection with multiple resources
- Access to the Information highway

### 4) How does the Certification fit the Industry?

- Industry must endorse Certification / Identification of Installers/Contractors to achieve Customer Trust
- Makes Consumers aware of trade professionals
- Builds a bridge with the Retail Community
- Provides updated info, new technology, tools through “The CFI Professional”
- Builds effective relationships
- Improves Customer Satisfaction
- Improves performance and effectiveness as a group
- Strengthens the industry as a whole

**Motto:** If it is to be, it is up to me

**Slogan:** Together, we make a difference

# PATTERNED CARPET INSTALLATION

## SECTION ONE: PREPARATION

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Items that must be considered for the installation of patterned goods:

1. Visual Defects
2. Manufacturer's Installation Recommendations
3. "Real World" Acclimation that allows for ease of installation
  - Variables that DO NOT allow for acclimation include:
    - Other trades in the installation area
    - No designated areas for cutting the carpet
    - Potential for theft if materials are left on premises
    - Time constraints that do not allow the carpet to be dry laid
    - Other circumstances pertinent to the site

*NOTE:* These should be documented for future reference in the event that an installation-related problem should arise concerning any of these issues.

4. Detailed Diagram
5. Squaring up Carpet and Area
6. Carpet Type: Printed or Tufted Patterns
7. Carpet Backing
8. Pattern Types
9. Pattern Tolerances
10. Pattern Repeat
11. Pattern Count
12. Installation Methods
13. Cutting and Seaming Requirements
14. The correct installation tools
15. Ability to correct pattern distortion

## STAIRS

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1. Type of stair installation – waterfall / cap and band
2. Finishing of stair edges – wrapped/upholstered edges, rolled and tacked, binding/serging
3. Placement of pattern on stairs in conjunction with stair spacing – pattern on floor
4. Each pattern does not appear at the same location on each stair unless ample material is ordered
5. Runner stairs – pattern will not match if carpet is turned
6. Carpet "smiling" on staircase
7. Sell carpet that will wear on the staircase
8. Sell cushion that will perform on the staircase

## SECTION TWO: LOCATING THE PATTERN MATCH

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PRIOR to beginning the installation, measure and define the exact pattern match

*NOTE:* Roll sequence is important, but pattern count is equally important. Before making a cut, check the pattern count.

If the count is substantially off in sequence:

- Locate the counts that are closer
- Trim the selvage
- Place the close counts together in an attempt to eliminate additional work without creating a sidematch problem.

Seek **WRITTEN** permission from the Manufacturer before using this procedure.

## SECTION THREE: MANUFACTURER'S RECOMMENDATIONS

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Always follow the Manufacturer's recommendations in all areas of the installation, as well as guidelines concerning ventilation that are to be addressed **prior** to the installation.

Regarding the installation of all flooring materials, the individual Carpet Manufacturers reserve the right to provide specific installation instructions, which are the primary source of direction.

## SECTION FOUR: PATTERN TOLERANCES

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*Manufacturer's specifications* concerning patterns are **ALWAYS** the primary source of installation instructions.

Tolerance levels may relate to the manner in which the Manufacturers view their production ability in relation to quality products.

If information is not available, the following guidelines will be helpful:

**Do NOT cut or install** carpet IF a defect is visible OR if:

- Skew / Bias is greater than 1-1/2 inches in 12-foot width
- Bow is greater than 1-inch in 12-foot width
- Trueness of Edge is greater than 1/2-inch in 12-foot length
- Pattern Elongation in length is more than 1" in 10-feet

## SECTION FIVE: BASIC PATTERN MATCH TYPES

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Basic design repeats itself throughout length and width.

**DROP MATCH AND SET MATCH:** Pattern match designates the arrangement and dimensions of repeating units that create design of patterned carpet.

Types of pattern matches:

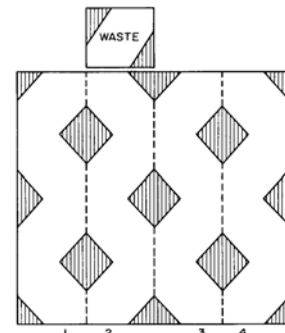
### 1. Set Match

Set match refers to a pattern in a carpet that continues straight across the breadth at a right angle to the selvage edge. When connecting lines to each pattern repeat, squares or rectangles are visible.



### 2. Drop Match

Every other repeat is dropped down one-half the repeated design length. Generally, this produces a larger scale effect often enhancing a diagonal pattern alignment across the width.



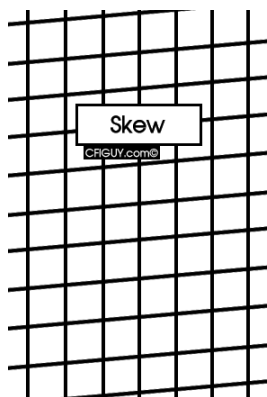
### NOTE

This is not to suggest that a SET MATCH does not produce a diagonal effect because both types often do. The visual presence of a diagonal is not an accurate method of determining whether a pattern is a SET or DROP MATCH.

## SECTION SIX: DETERMINE THE TOLERANCE

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### 1. Skew



**Skew or Bias** – Condition exists when the carpet face yarn is set on secondary backing in such a way that the face yarn is not square with that backing. Distortion is noticeable when the pattern on one side is slightly ahead of pattern on opposite side.

**Recommended tolerance is no more  
1-1/2 inches in 12-feet**

If the skew is no more than 1-1/2 inches in 12-feet, the following procedures should correct the problem when implemented by a qualified Installation Contractor who is paid according to the work and time involved.

### **POWERSTRETCHER and DEADMAN**

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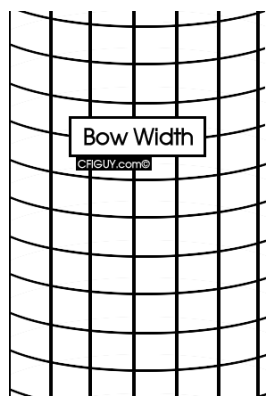
The use of a powerstretcher and deadman are **mandatory** for installation of patterns in all types of applications. If a direct-glue installation is involved, stay nails may also be necessary.

Check for Skew

Recommended tolerance is 1-1/2 inches in 12 feet. Some patterned carpets display 4-5 patterns – length, width and multi-diagonals.

Often the length, width and one diagonal will match, but the other diagonal (or two) may be off.

### 2. Bow Width

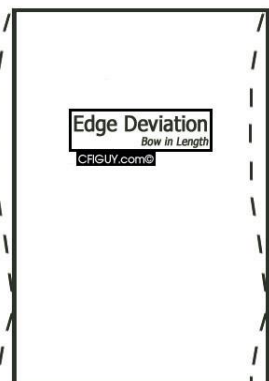


#### **Bow**

When viewed across the width, the distortion is visible as wavy or crooked lines that occur in the width of either patterned or plain carpet, usually occurs when carpet is not perfectly straight as it is being manufactured.

The recommended tolerance is  
1-inch in 12-feet

### 3. Edge Deviation



Trueness of Edge  
Bow in Length

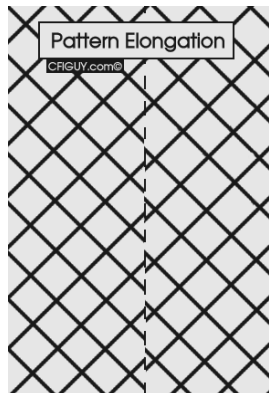
#### **Lengthwise Pattern Bow**

Does not appear in length as a straight line. May be caused because the pattern is not aligned on the tenter hooks during the application of backing or the sizing process.

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

Recommended tolerance 1/2-inch in 12 feet

## 4. Pattern Elongation



### **Pattern Elongation - Pattern Run-off**

Variation of patterns from one breadth of carpet to the next. This condition accounts for the pattern growing along a seam.

Usually caused by lack of equal tension across the range during manufacturing or as the secondary backing is applied.

Recommended tolerance  
1-inch in 10 feet

**The use of these guidelines should avoid problems that turn a profitable installation into one that loses money and Customers!**

### Disclaimer

The International Certified Floorcovering Installers Association assumes no liability for the application of the principles or techniques contained in the Pattern Resource Manual.

## BERBER SEAMING – SEAM PEAKING

by Michael Hetts, CFI Master Installer #30 reprinted with permission from FLOOR COVERING INSTALLER MAGAZINE

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 been using this technique since 1980 and teaching it around the country since 1990 when I started working for Roberts as one of their Tech Managers. 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 (available from Crain or Taylor). Make the hole smaller by putting a carpet-sewing needle or a large safety pin, in the opening for a spacer and pinching 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 ½ to ¾ 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 ¼-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 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!

## **The CFI Mission Statement.....**

To identify and certify according to skill and knowledge, professional Floorcovering Installers who will 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 over 30,000 trained and certified prior to 2008.. A minimum of 65 CFI Training and Certification events are conducted annually. 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](http://www.CFIinstallers.com) and through membership, the CFI Annual Directory is available.

The CFI offers to 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.