



# Joy Carpets, Inc.



## Installation Instructions for Modular Carpet With StayTac™

**Except where exceeded or modified by this instruction, Joy Carpets recognizes CRI document 104 as a minimum standard for installation.**

**NOTICE** – Installation contractor is responsible for reasonable inspection of the product prior to installation and for maintenance of dyelot integrity during installation. Joy Carpets will not be responsible for visible defects after carpet has been installed.

**GENERAL: Joy Modular Carpet with StayTac™ is designed to be installed with NO adhesive.** To be functional, this backing system requires very stringent floor preparation guidelines to be followed. This makes it even more important that a qualified installation contractor install this product.

As a first preference, Joy Carpets strongly recommends the use of a Certified Installation Contractor to install its products. As an alternate source, Floor Covering Installation Board (FCIB) certified contractors as well as companies that can document that they employ installers certified at the C-2 level or higher by the International Certified Floor Covering Installers Association (CFI) are also recognized as viable sources of quality installation.

**NOTE: SOME JOY CARPETS DESIGNS REQUIRE SPECIFIC INSTALLATION METHODS (QUARTER TURNED, ASHLAR OR THE LIKE) TO ACHIEVE THE DESIRED APPEARANCE.**

### FLOOR PREPARATION:

**Note: The following are guidelines. Financial responsibility for bringing any floor into conformance with these guidelines must be determined prior to beginning work. The installation contractor cannot be held responsible for structural problems with the subfloor.**

- Sub-floor must be structurally sound, clean, dust free, smooth and level. Cracks and holes in excess of 1/8" (3.2mm) should be filled with a Portland Cement based floor patching material such as W.W. Henry 547 Unipro™, DAP "Wecrete 98", Maipei "PlaniPatch", Ardex "Featherfinish" or similar. Gypsum based compounds are not recommended.
- Joy modular carpet backings are non-reactive and contain no P.V.C. or plasticizers. This greatly simplifies the floor preparation process and in the vast majority of cases eliminates the necessity of old adhesive removal. All Joy modular carpets carry the "Lifetime Floor Compatibility" warranty.
- No chemical incompatibility exists between Joy modular carpet with StayTac™ and any existing floor covering adhesive. This includes "cutback", asphalt emulsion, general-purpose adhesive, epoxy and any other commonly found flooring adhesives.
- The only physical requirement for existing adhesive films is that they be smooth, non tacky, and that residual trowel notches be reduced to 1/32"(0.8mm) or less. In most cases the removal of the existing floor covering accomplishes this. For StayTac™ to effectively prevent lateral movement, it is REQUIRED that ALL dust be removed from the floor.
- A thorough mopping is required prior to beginning installation of StayTac™
- In cases where modular carpet is removed prior to installing carpet with StayTac™, very little preparation is required. The existing film of pressure sensitive adhesive will not interfere with the StayTac™.
- If smoothing of the residual adhesive layer is required and the adhesive is black (cutback or asphalt emulsion) smoothing **must** be accomplished by applying a very thin layer of one of the above patching compounds.
- NEVER scrape, sand or mechanically abrade any exposed black adhesive or any existing resilient floor. These may contain asbestos.
- If residual adhesive is **not** black, scrape or sand until smooth and non-tacky as required above and follow with a through mopping as directed above.

- Protruding objects must be removed. Floor must be flat (not undulating) to within 1/4" in 12' (6.4mm across 3.66m) with no abrupt changes. This is very critical with StayTac™ since there can be no differential adjustment of corner alignment as is possible when a general coverage of adhesive is present.
- Carpet should be stored between 40°F and 100°F (4°C to 38°C) and must be conditioned to between 60°F and 90°F (15°C and 32°C) prior to and during installation.
- Floor temperature should be 60°F (15°C) minimum for proper performance of the StayTac™
- StayTac™ allows for installation with NO adhesive makes this system extremely forgiving in terms of both floor pH and vapor emission levels. This is particularly true on new installs where no existing adhesive is present. In those type of situations, StayTac™ will accept vapor emission levels of up to 10lbs/1000square feet/24 hour period with no failure. Floor pH should not exceed 10.0. Floor should be acid washed using a 50/50 vinegar and water or a 1/20 muriatic acid and water solution if pH is greater than 10.

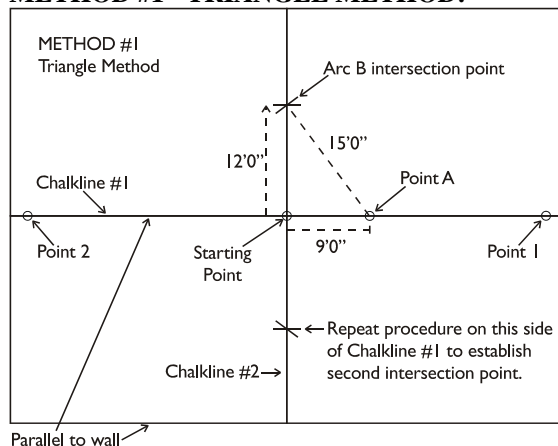
**NOTE:** If your subfloor is contaminated with an oily residue either from removal of “cutback” during asbestos abatement or from a previous end use such as metal fabrication, this residue **MUST** be totally removed or covered prior to applying modular adhesive and carpet. In addition, If residual adhesive – either “cutback” or general purpose - has been damaged/reactivated by previously installed PVC backed carpet, call Joy Carpets for guidance. **The “Lifetime Floor Compatibility” warranty does NOT apply in these situations.**

#### INSTALLATION INSTRUCTIONS:

**GENERAL:** The most important part of any modular installation occurs before the first module goes on the floor or any adhesive is applied. **Proper planning and layout is crucial to the success of all modular installations.**

**CHALKLINE APPLICATION:** Once floor preparation is completed and the floor is thoroughly mopped, two working chalklines must be applied to the floor to insure a straight, square, and properly aligned installation. These chalklines intersect at the starting point and are exactly 90° to each other. Following are two methods for applying chalklines:

#### METHOD #1 - TRIANGLE METHOD:



**Chalkline #1:** Regardless of method, chalkline one – also referred to as the “baseline” - is snapped roughly parallel to some architectural feature (outside wall, column line, etc.) and generally runs the longer dimension of the area. This is done by placing two and only two points on the floor as far apart as possible within the area at the same distance from the selected architectural feature. (See Point “1” and Point “2” on the diagram.) This distance is determined by the installer to optimize cut sizes and minimize waste.

**Starting point and Chalkline #2:** Select a starting point somewhere on Chalkline #1. Location of starting point is usually but not always close to the true center of the area. It may be offset to optimize cut sizes. Using the largest possible multiple of a 3-4-5 triangle (6-8-10,9-12-15,12-16-20, 15-20-25, 18-24-30, 30-40-50 etc.) construct a chalkline through the starting point exactly 90° to chalkline #1 as follows:

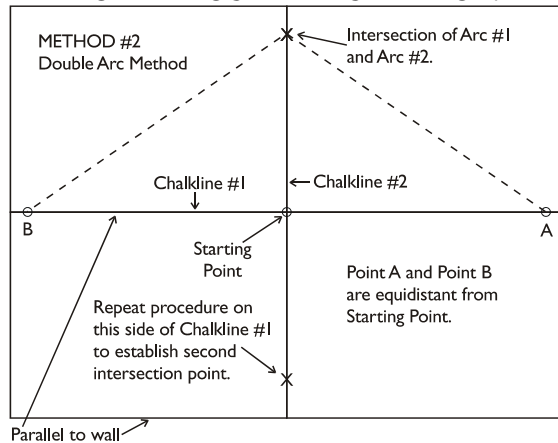
Note: in this example we will use a 9-12-15 triangle measured in feet and inches, however, units of measure used do not affect the validity of the procedure.

#### Construct Chalkline #2 as follows:

1. Measure exactly 9'0" from the starting point along chalkline #1.

2. Measure exactly 12'0" from the starting point approximately perpendicular to the line #1. Mark an arc (line) on the floor parallel to chalkline #1 four to five inches long as indicated by Arc "B".
3. Measure exactly 15'0" diagonally from point "A" to Arc "B" as indicated.
4. That point on Arc "B" exactly 15'0" from point "A" when connected with the starting point gives a line exactly 90° to chalkline #1. For maximum accuracy, this procedure should be repeated on the opposite side of chalkline #1. A chalkline or a dry line should be stretched between the two intersection points created. If measurements are accurate, the string will go directly across the starting point.

#### METHOD #2 - DOUBLE ARC METHOD:



**Chalkline #1** - same as in triangle method.

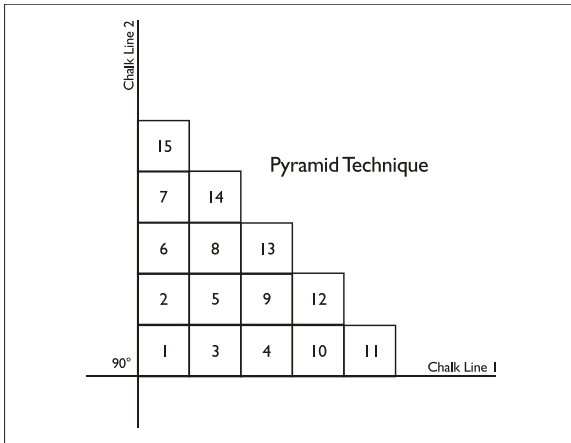
**Chalkline #2** - select starting point same as triangle method and proceed as follows:

1. From the starting point measure any convenient distance both directions along chalkline #1 and mark point A & B on the floor (see diagram). These points should be as close as possible to the end walls of the area and must be the same distance from the starting point.
2. From points A & B measure diagonally as indicated by the dotted lines allowing the tape measure to feed out until you are close to the side wall. Place a framing square or a carpet module at the starting point aligned with chalkline #1 to act as a visual guide to tell you when you are close to 90 degrees. Once you feel you are close pick a distance and remember it.
3. Strike an arc (Arc #1) measuring the distance determined above from point "A". Now working from point "B", measure diagonally using exactly the same distance used to strike Arc #1 and strike Arc #2. This intersection point connected to the starting point is a 90 degree angle to line #1.
4. As in the triangle method, this procedure should be repeated on the opposite side of line #1. Once accurate chalklines are applied, begin installation at the intersection point of the two chalklines.

When working with StayTac™ it is necessary to move across the newly placed modules very carefully until the installation can be locked in at the perimeter.

#### GENERAL:

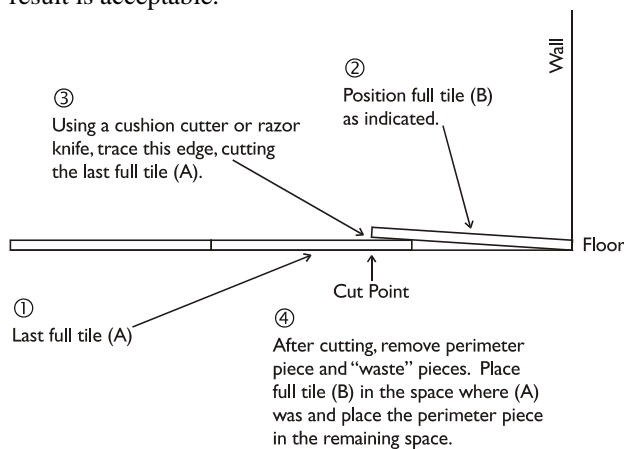
- The pyramid technique (see diagram) gives three alignment checkpoints on each tile placed and should be used on ALL products regardless of module size or backing. This technique also helps control spacing or "growth" and keeps the entire layout closely referenced to the chalklines. Strict attention should be paid to corner alignment. Tiles out of alignment by more than 1/16" (1.6mm) on 18" (457mm) product or 1/8" (3.2mm) on 36" (.91 m) product should not be installed. Some "wandering" of edges due to undulation in the floor is unavoidable. This will be gradual and tend to come and go randomly, however, if corners become misaligned and this misalignment continues to increase, this indicates an out of square condition. The problem should be immediately determined and corrected.



- Always **SLIDE** each module into position from the side to prevent trapped yarn. Set each module by firmly rubbing both joints. Should the StayTac™ become contaminated with dust, the back of the module should be wiped with a damp cloth to remove the contamination and restore the effectiveness of the StayTac™
- Modules should be tight but not compressed. Peaking will occur when modules are too tight. Too loose an installation will never achieve the best possible overall appearance and, can show gaps over time as the looseness accumulates in one area.
- Tightness or “growth” should be determined by measuring the distance covered by 11 full modules (10 joints). This measurement should be no more than 1/8" (3.2mm) over the calculated distance for eleven tiles. In some cases this distance may be less than calculated. This distance may also vary between the length and width of the product. Once this “growth” figure is determined it must be maintained throughout the installation.
- Directional arrows are applied to the back of each module indicating pile direction. This allows the customer/installation contractor to choose the method of installation preferred – Parquet (Quarter Turned), Monolithic (Corner to Corner or Ashlar), Random, 180 degree turned. Checkerboard, Mosaic or a mixture. Some designs REQUIRE that specific installation methods be used to achieve the desired visual.
- Whenever possible it is recommended that arrows be run parallel to major traffic lanes. Unless it is unavoidable, arrows should not run across hallways.

### CUTTING:

- The parallel or “scribe” cutting technique is one method of easily and accurately cutting modular carpet. (See diagram below) This method is valid regardless of backing system. This method yields a good vertical cut that is snug but not compressed. This is essential on StayTac™ to properly finish the locking in of the product. Any method that achieves this result is acceptable.



- Properly installed installations with StayTac™ can begin receiving foot and rolling traffic as soon as they are finished and locked into the perimeter of the area. Exposed edges should be protected when rolling heavy loads such as pallets of carpet across the installed portion. Plywood or masonite should be positioned on carpet when heavy furniture or supplies are moved.

- The recommended casters for desk chairs should have a tread width of 3/4" to 1" (19mm to 25mm), and a wheel diameter of 2" - 2 1/2" (5cm - 6cm) tapered. Hard polyolefin composition is recommended. For more detailed information, contact Joy Carpets Technical Services.

#### **TRANSITIONS AND STAIRS:**

- For the most attractive finish with its modular products Joy Carpets recommends the use of top set cove base after carpet installation is completed.
- Appropriate transition strips **MUST** be installed wherever there is a potential for an edge to be exposed or where carpets finishes to another flooring type. The total thickness of Joy backed products requires a transition treatment capable of accepting the carpet without the necessity of modifying or adapting the edge. Johnsonite's EG-XX-W edge guard and CRS-XX-D reducer have proven successful for edge protection for Joy backed products. Equivalent products from other manufacturers are also acceptable.
- For best long term performance on stairs, a double undercut nosing such as Johnsonite part SVCD-XX-A or equal should be applied to each step with modules cut to fit on both the tread and the riser. This method of installation on stairs protects the carpet from receiving the impact present at the nose and helps in holding the riser carpet in place. Generally a Cove Base type adhesive is also used to adhere the riser piece to insure that the carpet stays in place.
- It is possible to install Joy backed modules on stairs without the use of a separate nosing. This requires modifying and/or removing the backing and results in placing a structurally compromised product directly on the nose of the stair with no protection from the severe impact and abrasion that will occur. This is not recommended.
- Johnsonite transition treatments, stair nosings and similar products from other manufacturers are sold through distributors. For the location of the nearest Johnsonite distributor, call 800-899-8916. When obtaining transition/nosing treatments from other manufacturers, always be sure to specify the total thickness of the carpet product being installed to insure the correct transition product is used.

USE OF IMPROPER AND/OR INADEQUATELY INSTALLED TRANSITION TREATMENTS WILL RESULT IN EDGE FAILURE. SELECTION AND INSTALLATION OF THESE PRODUCTS IS THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR.

**This information is supplied by Joy Carpets, Inc.**

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The above instructions represent the best available data and are deemed to be correct and complete.

However, Joy Carpets assumes no liability for installation related problems.