

**INSTALLATION OF CARPET
USING THE
DOUBLE-GLUE METHOD**

Guidelines Prepared by the CFI

DOUBLE-GLUE INSTALLATION SPECIFICS

DO NOT CUT CORNERS!

PROFESSIONAL INSTALLATION

- Engage the services of only professionals who are knowledgeable concerning this type of installation and require proof of previous jobs.

KNOW YOUR COSTS!

- PRIOR to submitting a quote for the cost of a double-glue application, research ALL the costs associated with professional products and installation.

SPECIFIED CARPET

- PRIOR to purchasing carpet for a double-glue installation, make certain the manufacturer of the carpet states in writing that the carpet is approved for this type of installation.

SPECIFIED CUSHION

- Use only cushion that is specified by the manufacturer for this type of installation

SPECIFIED ADHESIVES

- Use only adhesives that are specified by the manufacturer for this type of installation

CONTRACT INSTALLATION

- The double-glue method of carpet installation is ideal for commercial, hospitality and patterned carpet applications

RESIDENTIAL INSTALLATION

- Using the double-glue method of installation allows the installation professional an advantage when installing borders

PATTERN TOLERANCES

- It is very important that the flooring contractor check for pattern tolerances prior to cutting the carpet. If the carpet is not within the manufacturer's stated tolerances, the time required for installation will be greatly increased.

PROPER SURFACE PREPARATION IS CRUCIAL!

FOLLOW THE RULES! FIVE KEYS TO A DOUBLE-GLUE INSTALLATION!

Installers might miss 1 and be successful, but if they miss 2 of the following keys; **the job will fail!**

1. Acclimation
2. Floor Prep
3. Use of proper adhesives and correct notched trowels
4. Rolling
5. Elimating the requirement of no traffic for 24/48 hours

DOUBLE-GLUE INSTALLATION SPECIFICATIONS

- A double-glue installation is a method of adhering a separate cushion to the floor with adhesive, followed by a total adhesive bonding of the carpet to the cushion.
- Prior to purchasing carpet for a double-glue installation, contact the manufacturer of the carpet for a written statement that the carpet is approved for this type of installation.
- The double-glue type of installation is recommended for commercial use in large areas where proper powerstretching is difficult to achieve and is also an ideal method if carpet receives unusual, excessive or rolling traffic. Using this method also provides the installation professional with an advantage when installing borders both in commercial and residential applications.
- Carpet performs better over cushion and protects the investment. The stability of the system by adhering cushion directly to the floor and adhering the carpet to the cushion eliminates seam peaking and the need for restretching.

SECTION ONE - PRODUCTS

A. CARPETS SUITABLE FOR DOUBLE-GLUE

1. Minimum of **10-pick** – **Polypropylene** ribbon secondary backing
 - Less contamination of fillers from SB latex will occur
 - Provides greater surface to which the adhesive can bond
2. Minimum of **8-pick** – **Staple** polypropylene secondary backing
 - Constructed of staple yarn
 - Texture of the staple yarn is compatible with adhesive bonding
3. Woven carpet with manufacturer-applied sizing is also acceptable
4. Unitary-backed carpet is not recommended

B. CARPET CONSTRUCTION RECOMMENDATIONS – CHECK WITH MANUFACTURER

1. Constructed of a straight-row stitch
2. Minimum ten-gauge yarn construction
3. CAUTION: Carpet constructed using the step-over-stitch is not recommended.

C. CUSHION RECOMMENDATIONS – CHECK WITH MANUFACTURER

Only cushions that are approved by the cushion manufacturer are suitable for this application

1. Slab Rubber – ¼" 68-ounce minimum
2. Urethane Foam blended and bonded
3. Synthetic Fiber 32-ounce minimum with plastic film fused to each side

D. ADHESIVE RECOMMENDATIONS – CHECK WITH MANUFACTURER

1. Use only adhesives that are recommended and designed by the manufacturer for a double glue application.
2. **Cushion-to-Floor Adhesives** - Pressure-sensitive adhesive is recommended, but a manufacturer-recommended multi-purpose is also acceptable.
3. **Cushion-to-Carpet Adhesives** – Premium multi-purpose that is high in solids and recommended by the adhesive manufacturer

E. TROWEL or SPRAY APPLICATION RECOMMENDATIONS

1. TROWEL (floor to cushion)
Recommended: 1/16" x 1/16" x 1/16" square-notched trowel

TROWEL (cushion to carpet)
Recommended: 1/8" x 1/8" x 1/16" U-notched trowel
2. SPRAY (floor to cushion)
Pressure sensitive or acrylic adhesive – manufacturer recommended

SPRAY (cushion to carpet) - Manufacturer-recommended adhesive
Completely cover the substrate and mist the backing of the carpet to achieve a total bonding of the two products
3. ROLLER – The application of adhesives with a roller is not recommended

F. TACKSTRIP RECOMMENDATIONS

1. Tackstrip can be used, but is not necessary. If tackstrip is not used, it is recommended that wallbase be installed. If vinyl or rubber wallbase is used, it must have toe.
2. If tackstrip is used, all edges of the carpet can be tucked into the gully and secured without the use of wallbase. This procedure positions and holds the carpet in place during the curing of the adhesive.

SECTION TWO

A. JOB SITE RECOMMENDATIONS

1. General Contractor is to submit *PRIOR* to commencing the installation information stating moisture and alkalinity testing results, as well as sealers or sealants that have been previously used on the substrate. The alkalinity reading should not exceed 9pH and the moisture emission rating shall not exceed 5% in a 24-hour period.
2. If carpet contractor holds a contract to install carpet or is given permission to commence work by architect, general contractor, dealer or owner, this contract or permission should relieve the floor covering contractor of any liability in regards to the condition of the substrate on which the carpet is installed regarding holes, levelness or deviations.
3. General Contractor is responsible for any discoloration, dark spots such as paint or oil or materials that could contaminate the concrete slab and cause the adhesive not to properly adhere.
4. Floor Covering Contractor is to inspect and mark areas that may hamper the installation process.
5. To achieve the best possible installation, all materials should be acclimated to room temperature prior to installation.

The Floor Covering Contractor has **NO** control over the following conditions:

- Temperature in the area that must be between 65 - 95 F degrees.
 - Relative humidity that is recommended to be between 10% and 65%
 - The SLAB temperature of a minimum of 65-degrees F twenty-four hours PRIOR to starting the installation
 - The indoor temperature that should never fall below 55-degrees F, regardless of the age of the installation.
6. All installations and materials must be protected from extreme conditions.
 7. Store carpet on a flat surface; no more than three rolls high to prevent damage to the product.
 8. All areas to receive flooring must be free of other trades and workers that hamper the proper installation procedures.

B. RECOMMENDATIONS FOR STORAGE OF MATERIALS

1. Store carpet on a flat surface, not on concrete and not draped over 2x4's or anything that creates a crease in the carpet.
2. Carpet should not be stacked more than three rolls high.
3. Do not store materials where they will be subjected to outside elements, such as covered by a canvas or in like manner. Materials are not to be stored in an unheated trailer, unless they are acclimated to room temperature PRIOR to installation.

SECTION THREE

REQUIREMENTS OF FLOOR COVERING INSTALLATION CONTRACTOR

1. Submit proof of a minimum of five-years installing commercial installations, preferably a CFI Certified Installer with a Commercial-II or above certification.
2. Submit complete list of installers who will be involved with the flooring installation
3. Installation contractor will be held accountable to ensure that a qualified and a knowledgeable installation team is employed that adheres to the correct and recommended installation procedures.
4. Comply with all OSHA and EPA, local and national government regulations.
5. Read and understand the specifications for installing double-glue
6. Use all specified materials **WITHOUT DEVIATION FROM SPECIFICATIONS**. If contractors deviate from specified materials, they assume the responsibility for the performance of these products.
7. Inspect all carpet and cushion to insure that merchandise received compares to the ordered products.
8. Maintain record of all purchased supplies used during installation for future reference.

SECTION FOUR – PROCEDURES FOR INSTALLATION OF CUSHION

A. INSTALLATION OF CUSHION WITH USE OF A TROWEL

Use only cushion recommended by the manufacturer for a double-glue installation

1. Installation of cushion:

- a) Whenever possible, always install the cushion at 90-degree angle from the lay of the carpet. If not possible, always offset the carpet seams at least six-inches from the cushion seams.
- b) Rough cut the cushion prior to the application of the adhesive
- c) Position the cushion flat.
- d) Fold back the cushion in order to apply the adhesive
- e) Secure the cushion to the floor with a pressure-sensitive adhesive applied with a **1/16" x 1/16" x 1/16" square-notched trowel**.
CAUTION: The notch size MUST be maintained throughout the installation
- f) Adhesive is to be thoroughly dry before the cushion is placed into it
- g) There are to be no gaps in the edges of the cushion
- h) Cut cushion net at the wall with no voids. Do not force the material into a compression fit, it must lay in a natural position and cannot be stretched.
- i) The use of tape on cushion seams is not recommended.
- j) IMPORTANT: Do not leave floor void of adhesive next to wall. Apply adhesive in a uniform manner to cover this area.
- k) Apply minimal amount of pressure to push bubbles away so cushion will lay flat and the adhesive will be transferred onto the backing of the carpet. A lightweight roller is used for this procedure.
- l) Once the cushion is secured to the floor, it is to lay flat and the seams butted together firmly.

B. INSTALLATION OF CUSHION WITH THE SPRAY SYSTEM

This is an acceptable method of installation when performed by a Spray Certified Installation Technician using materials that are approved for this type of application by the manufacturer.

SECTION FIVE – INSTALLATION PROCEDURES

A. INSTALLATION - CUTTING LENGTH SEAMS

Unroll the carpet and check for

- Width bow

- Skew

- Pattern elongation or distortion

NOTE: All manufacturers do not use the same tolerances. As carpets possess different characteristics, consideration must be allowed for each type. If necessary, check specifics with the carpet manufacturer.

It is understood that defects may not surface prior to installation. However, it is extremely important due to the replacement cost of a double-glue installation that the flooring contractor report visible defects immediately.

B. SEAM CONSTRUCTION USING HOT MELT SEAMING TAPE

1. Always reference the seaming diagram
2. Do not use the factory edges to construct seams
3. The majority of carpets are cut from face, running a row and using an appropriate cutter

C. WIDTH CUT SEAM

1. In the majority of applications, a straightedge and square are required when constructing seams across the width of the carpet. **Always** run a row, whenever possible.
2. Tools required for construction of width seams:
 - Square
 - Sharp knife
 - Straightedge

NOTE: WIDTH SEAMS SHOULD BE KEPT TO A MINIMUM

D. SEAMS CONSTRUCTED USING HOT-MELT SEAMING TAPE

1. After the carpet is cut, position the center of the seaming tape directly under the seam.
2. Use only seaming tape specifically designed and recommended for double-glue installation.
3. Apply appropriate seam sealer to the thickness of the primary and secondary backings on BOTH sides of the edges to be seamed.
4. Position carpet seams at 90-degree angles to the seams in the cushion. If not possible, offset the seams in the cushion and the carpet by a minimum of 6-inches.
5. Fold carpet back and spread adhesive up to the edge of the seaming tape.
6. A **1/8" x 1/8" x 1/16" notch U-shaped trowel** is recommended. This is the standard notched trowel for smooth-backed carpet.
7. When applying adhesive, hold the trowel in the correct position to apply the proper amount of adhesive. Slide it across the top of the cushion with minimal amount of pressure.
8. Begin by applying adhesive up to edge of seaming tape and work away from the area.
9. Allow adhesive to tack up before laying material into it. When it becomes tacky, lay the carpet into the adhesive. Seam are to remain butted together.
10. Periodically, check to ensure that both the floor and the cushion are completely covered with adhesive to achieve a total bonding of the two products.
11. Make necessary adjustments at this point with the use of a kneekicker, restretcher or powerstretcher and hold in position with the use of stay nails.

E. SEAMING PROCEDURES

1. The temperature of the iron will vary according to the quality of tape, type of seaming iron and the type of carpet and backing. **EXCEPTION:** To achieve a good transfer for rough backed carpet, use a heavier tape and a heavier notched trowel.
2. A star roller or carpet tractor is **NOT** to be used on cut-pile carpet. It is acceptable on loop-pile carpet. The use of a six-inch roller is mandatory to ensure the transfer of the thermoplastic onto the backing of the carpet.
3. When multiple breadths of carpet are required, dry lay as many breadths as possible.
4. Align the pattern, starting in the center of each breadth.
5. If pattern alignment is satisfactory, fold back sections approximately six-feet.
6. Apply adhesive using 1/8" x 1/8" x 1/16" U-notched trowel.
7. If patterns do not align and pattern runoff occurs after attempting to match in the center of the pattern, apply adhesive to within 18-inches of each side of the seam.
8. Lay the carpet into the wet adhesive. This will allow the sections to move easily. Align the patterns and use stay nails to achieve an acceptable match.
9. After seam is completed, spread the adhesive to within 18-inches of the next seam.
10. Repeat above procedure.

F. PROCEDURES TO FOLLOW AFTER SEAMING IS COMPLETED

1. Properly trim the edges of the carpet at the wall with a wall trimmer.
2. Remove all excessive scrap.
3. Transitions – When adjoining a double-glue installation to a surface where no transition bars are used, apply seam sealer to the adjoined surface to ensure that the edges of the carpet are sealed. This avoids edge raveling and curling.
4. Roll the carpet in four directions using a lightweight roller that does not exceed 35 pounds. This transfer ensures total adhesive coverage of the backing, which is equal to the total coverage of the substrate, creating a bonding of the products.
5. If quarterround or wallbase is present, remove and extend the carpet underneath. If not present, install quarterround or wallbase. An optional method is the installation of tackstrip to secure the carpet to prevent the edges from curling due to the extreme variances in temperature around the walls that are exposed to outside conditions.
6. Use an appropriate solvent to remove any adhesive from face pile.

SECTION SIX

A. INSTALLATION OF PATTERNED CARPET

1. Prior to cutting the carpet, check bow, skew and pattern elongation according to manufacturer's tolerance. If tolerance exceeds the following, consult with the manufacturer:

BOW – 1-inch in 12-feet

SKEW – 1-½ inches in 12-feet

PATTERN ELONGATION – 1-inch in 12-feet

2. Lay the carpet in the designated area.
3. When preparing to construct the seam, begin with matching the patterns in the center of the seam.
4. Fold sections of carpet back on each side and spread adhesive using proper-size notched trowel.
5. Lay the sections in wet.
6. Seal the edges with the appropriate seam sealer.
7. Using kneekicker, deadman and powerstretcher, align the pattern while constructing the seam and use stay nails to hold the carpet. NOTE: To align the pattern and to utilize the slippage in the adhesive, construct the seam as soon as possible.
8. Fold the carpet back until the adhesive is visible.
9. Spread adhesive out six additional feet or to the wall.
10. Draw the chalk line across the designated pattern points to align the pattern.
11. Repeat procedure as necessary until job is completed.

SECTION SEVEN

STAIR UPHOLSTERY PROCEDURES

1. Position tackstrip on the tread and riser as with a conventional installation.
2. Install specified cushion that is suitable for stair upholstery.
3. Extend cushion completely over bullnose; which is to be a $\frac{3}{4}$ -inch radius.
4. After the cushion is adhered, apply the double-glue adhesive on top of the cushion.
5. Install carpet into wet adhesive, which will soften and become pliable and easier to stretch.
6. It is recommended that all stair carpet be precut and dry fitted before commencing the stair installation.

SECTION EIGHT

FOLLOWING THE INSTALLATION

1. Use caution tape to alert others that floor **CANNOT** be walked on for 24-48 hours following the installation. **NO EXCEPTIONS** *unless* adhesive is sprayed.
2. The carpet is not to be cleaned for thirty days following the installation.

SECTION NINE

INSTALLATION TOOLS

1. Basic installation hand tools
2. Kneekicker
3. Powerstretcher
4. Powerstretcher with cottonhead when stretching loop-pile carpet, matching patterns and the alignment of colored yarns
5. Deadman
6. Six-inch smooth roller
7. Six-inch starred roller or carpet tractor
8. 35-pound roller
9. Dust broom
10. Stay nails
11. Dry line
12. Non-heat conducting seam weight, such as wood
13. Wall trimmer
14. Seaming Iron
15. Restretcher – Pattern Alignment Tool
16. Professional glue gun and adhesive sticks
17. Seam board upon which seams are to be constructed

LIABILITY WAIVER

The information contained in this handout is to be used as recommended guidelines. It is based on the best information available at the time of publication; always subject to revision. No guarantees are made as to results and CFI assumes no liability or responsibility in connection with the use of the information. It is suggested that you test all procedures before widespread use to determine results in your specific situation, as every circumstance is different. Information is provided as a guide and is not intended to take the place of good judgment, common sense or the manufacturer's written guidelines.