

# General Information

**NOTE:** If there is a noticeable problem with the carpet—**DO NOT CUT IT**—call the mill or your sales representative immediately.

This procedure will consist of four different types of installation: Direct Glue Down, Conventional Tackless Installation, Enhancer Plus and Secure Lock, and Double Stick Method (pad to sub-floor and carpet to pad).

Regardless of the type of carpet or installation procedure the following basic steps must be taken to ensure a proper installation and finish on the carpet.

- A. No carpet should be installed until all other trades have completed their services. As in many instances, a first class installation can deteriorate as a result of damages caused by those other than the carpet installer.
- B. The sub-floor receiving the carpet must be properly prepared. It is recommended all sub-floors should first be dust mopped so as to remove as much surface dust and other debris as possible. If the floors have been waxed frequently it will be necessary to remove all wax and build-up of foreign materials.
- C. Whether the carpet is to be installed over new or old construction, the surface must be free of cracks and depressions as irregular surfaces could cause excessive wear.
- D. The following should be inspected before the carpet is installed:
  1. Resilient Tiles: All tiles must be tight and broken tiles replaced.
  2. Concrete Floors
    - a. Patching Concrete Sub-floors: Patch cracks in concrete sub-floors greater than  $\frac{1}{8}$ " deep with an approved latex patching compound. Use latex additive to mix patching compound, not water. For larger areas requiring leveling, use a cementitious underlayment mix.
    - b. Concrete Moisture Content: New concrete sub-floors must cure for 90 to 120 days. All concrete sub-floors, regardless of age, must be tested for excessive moisture content. Slab temperature must be above 55 degrees F when tested. Use a Calcium Chloride Moisture Test Kit to obtain quantifiable results, carefully following test kit manufacturer's instructions. *The moisture emission rate of a concrete floor is expressed in lbs./1000 square feet/24 hours.* The test for an emission rate requires 72 hours to conduct; therefore, proper installation planning is a must. As a general guideline, an emission rate of 3 lbs. or less is acceptable for most carpet. In the range from 3 to 5 lbs., carpet with backing of porous constructions can usually be installed successfully; however, the risk of failure increases. An emission rate above 5 lbs. is generally considered unacceptable.
    - c. Concrete Alkalinity Content: Test all concrete, new or old, for excessive alkalinity by slightly wetting floor and applying pH test papers in several places. If pH exceeds 9, notify general contractor. Floor should be treated before installation.

**NOTE:** To treat, wash floor with one part Muriatic Acid to 10 parts water; rinse floor twice with cold water; wait 24 hours and retest; repeat if necessary.

- d. On or Below Grade Concrete Sub-floors: On or below grade concrete sub-floors must have an appropriate vapor barrier.
- 3. Wood Floors: Check for ridges, squeaks and looseness. It could be necessary to sand the floor until a smooth surface is attained.
- 4. Plywood: Check joints or seams and level with filler, or sand any high spots where there is a variation of thickness in the plywood. Nail down any blisters created by delamination.

Remember—any defect in the sub-floor will ultimately show up on the surface of the finished installed carpet.

E. Carpet should be installed in halls and corridors running lengthwise. The carpet should not be turned across the hall making seams every 12 feet.

F. Seam Sealer **MUST** be used in all types of installation or the mill will not recognize any responsibility for delamination. If seam sealer is not used, our warranties are voided.

G. Recommended Adhesives: Enclosed is a listing of recommended adhesives, seam sealers, and trowel sizes for the various backings of carpet available in the Blue Ridge Commercial Carpet line. This listing represents items that we have had experience with and found to be satisfactory. We suggest that you contact your adhesive manufacturer for specific recommendations and warranties.

H. Prints: Printed carpets have a pattern repeat in both width and length. Our printed carpet will not side match from roll to roll. The installer must allow extra carpet in both width and length of the installation so that the carpet can be overlapped and cut to make the pattern match. This procedure should be followed when the carpet is initially cut prior to applying adhesive or making seams. Always match the carpet in the center of a breadth which will make a pattern mismatch less noticeable, if there is one. All printed carpet is subject to standard industry tolerances in bow & skew.

I. Continuous dyed carpets must be installed in roll number sequence to avoid shading problems.

J. Storage: Store carpet and adhesives in dry area. Avoid product distortion in storage. Never stack carpet more than two rolls high nor stand rolls on ends.

K. Acclimation: Bring carpet and adhesives into space 48 hours before installation for acclimation. Unroll and smooth wrinkles, allowing product to relax. HVAC and lighting systems must be in service. During installation, and 72 hours thereafter, maintain temperature between 65 degrees and 90 degrees Fahrenheit and a relative humidity between 20% and 65%.

L. Graphic Pattern Carpet: Graphic pattern carpet should be cut in 2" to 3" on each edge to obtain total stepover of the pattern. All pattern carpet is subject to industry tolerances on elongation of patterns.

1. Pattern Elongation Tolerance

- a. Patterns with repeats of less than 4"—the tolerance is up to 1 pattern in 15'.
- b. Patterns with repeats of from 4" to 8"—the tolerance is up to 1 pattern in 30'.

On all graphics items, it is extremely fundamental to know that the pattern *is* actually *tufted into the carpet, not printed on*. Because of this tufted-in characteristic, the pattern and the rows must

line up. You must cut the center row of a pattern and follow that row—regardless of how far you travel—that row will fall in exactly the same place in the pattern every time it repeats.

Because of the tufted pattern characteristic, it is most helpful to use a blunt object (screwdriver, awl, etc.) to open up the row prior to using a row cutter to follow the row, thus cutting the pattern in exactly the same place each time. (\*If the pattern is not cut on the row, it will not match; chalk line, straight-edge, or free hand cuts are not recommended and will not achieve a side match).

Once the pattern carpet has been trimmed in the proper fashion (always use center of patterns):

1. \*An easy way to determine which cuts will match best is to count off 30 patterns and compare the measurements to determine sequence.

Example:

Drop A 30 Patterns Measure 15' 0"

B 30 Patterns Measure 15' 2"

C 30 Patterns Measure 14' 11"

D 30 Patterns Measure 15' 1"

- a. The proper procedure in this example is to place the drops as follows to diminish the pattern elongation: 14' 11", 15' 0", 15' 1", 15' 2".
  - b.\*In this example, the elongation from least to greatest is 3" or 1.6%. Experience has shown that most carpets easily stretch 1½% to 2% with a power stretcher. The deviation between Drop A and Drop C is only ½ of 1%.
2. Dry fit all pieces prior to beginning installation.
  3. Cut 24 hours in advance if possible. This allows the carpet to relax.
  4. If pattern is only slightly off, tightly rolling the short side drops face out and leaving rolled for 24 hours can help.
  5. Match all patterns in center of the length of the breadth and work toward ends.
  6. If you are mixing dye lots, do not expect color *or pattern* to match.

First, determine the short-patterned and long-patterned side. Since there is no dependable way to shrink a synthetic tufted carpet, we must use a process we do know: stretching. We are very simply going to stretch the short-patterned side out to meet the long-patterned.

## In Glue Down Installations

1. Glue long pattern drop in place approximately 4' to 6' wide and full length using approved adhesive.
2. Starting from center of seam (and start with center panel if more than two panels are involved), glue as far toward each end as the pattern matches and 4' to 6' wide on the short pattern drop.
3. Seal all seams with good quality seam sealer.
4. Place carpet in adhesive, making seam only as far as match will allow.
5. Roll with lino roller and allow to set up (15 to 30 minutes). (Stay-tacking may also be helpful.)
6. Roll the side with short pattern up from the ends toward center until you come back to the glued areas.
7. Glue 8' to 10' length by 4' to 6' width (or as much as you feel comfortable with).
8. Unroll carpet into adhesive. (As long as adhesive is "wet" it is slippery, not tacky, this will aid in step #9.)
9. Using power stretcher (not kicker), stretch pattern into register roll and stay tack (two-head power stretcher works great 'one head on each' end.) A knee-kicker can be used to align skewed areas. Stay tack to hold in place until seam is completed and set.
10. Repeat steps 6-9 until seam is complete. Leave stay nails in place until glue sets.
11. Use this procedure on each of the other seams.
12. The best way to determine pattern match is to stand back and sight down diagonals formed by pattern.

\*Remember—we can only stretch the short side (not shrink the long side). Lay out all work so this can be accomplished. Never glue the short side first.

## For Stretch-In Installation

1. Loosely lay all drops in place in proper sequence. Allow to relax for 24 hours if possible.
2. Trim and prepare seams per instructions in Conventional Tackless Installation Section on page 6.
3. Once long and short sides are determined, use two-head power stretcher (one head on each end) on short side to match pattern.
4. As always, begin pattern matching, in center of the drop. This divides the pattern elongation and makes for less work.
5. Apply seam sealer.
6. Run hot melt seam making minor adjustments with knee-kicker. Run short lengths of seam if necessary. Allow to cool and readjust as needed.
7. The best way to determine pattern match is to stand back and sight down diagonals formed by pattern.
8. Continue using regular stretch-in methods.

# Installation Procedures

## **DIRECT GLUE DOWN**

Installing Synthetic secondary backings direct to floor.

A. Preparation: All cracks, holes, depressions and expansion joints must be filled with a good grade of latex patching compound and all high areas must be sanded smooth. All areas to be covered must be clean and free from dust, dirt, wax and paint.

B. Side Seaming and Cross Seaming: Lay out each room or area by squaring the room and line on the location for the first seam. Dry cut the carpet, allowing at least one inch overage at sides and end. All carpets should be cut and put into the rooms before applying adhesive to the floor. **Important:** *Check for color matching and shading that may be in the carpet before cutting.* Position the carpet along the location of the seam. Trim the first breadth of carpet between the rows of pile with a cushion back cutter so the blade is projected to the same thickness as the carpet and cushion. Make certain the cutter is in a vertical position rather than an angle. The selvedge should be pulled downward to leave a clean, sharp edge. When cutting each length allow a minimum of 1<sup>1</sup>/<sub>2</sub> inches turned up at the wall for trimming.

When the first breadth is trimmed to fit evenly along the chalk line, trim the second breadth in like manner, and put the second breadth along the chalk line so it overlaps the first breadth one or two rows. Trim and fit all side seams and cross seams. **Important:** *Make sure the direction of the pile lay is the same.*

Fold the carpet back to expose the floor for the adhesive application. Lay back the first two breadths half way from the chalk line where the first side seam will occur. Using the recommended size notched trowel, spread the adhesive (see list of recommended adhesives and seam sealers) over the exposed floor area. Spread to the chalk line, but do not cover it. In the case of cross seams do not spread the adhesive within twelve inches of a cross seam location. Open time will vary according to the type of adhesive and local temperature and humidity. When the adhesive is ready to receive the carpet, lay the first breadth of carpet in, making certain the trimmed edge abuts the chalk line. Using a carpet tube, or a push broom, gently move any air bubbles toward the edge of the room to ensure complete contact with adhesive. In some cases, when the edges to be joined are of a different height, the lower edge can be brought up to the desired height by building it up with layers of double face adhesive tape. Using an applicator, or plastic squeeze bottle with a nozzle, apply a bead of seam adhesive sealer at the base of the tuft and primary backing on the first breadth. The bead should be as thick as the primary and secondary backing of the carpet, but should not get into the face pile. Extra care in using proper amount of adhesive will ensure tight seams and reduce amount of glue that will come to the face of the carpet when second breadth is positioned. Return the second breadth into the adhesive and fit the two breadths together. The second breadth should have a slight buckle, which is desirable. Seam sealer prevents edge ravel and delamination at the seams.

Work the excess carpet toward the seam so the seam area is tightly compressed. The seam adhesive previously applied will now transfer to the edge of the second breadth and seal the joint. If any

adhesive comes up through the seam, apply some seam adhesive cleaner or solvent to a clean white towel and remove. **Important:** Use only a clean white cotton towel to remove adhesive. Clip off any loose or sprouted ends of yarn along the seam with napping shears. When only side seams are required, continue to install each breadth in a similar manner until the area is completely covered with carpet. When cross seams are required, the first side of the cross seam should always be trimmed on the breadth that will permit the face yarn to lay over the cut. Overlap the first breadth onto the second breadth and following the cut edge previously trimmed, trace cut the second breadth with the cushion back cutter. Allow 1<sup>1</sup>/<sub>2</sub> inches for trimming at the wall.

Make sure the direction of the pile lay is the same. Remove the scrap and turn back both sides of the cross seam and apply the adhesive to the uncovered floor. Apply a bead of seam adhesive to the carpet backing on the side of the first breadth. Place the second length into position and fit the seam. Continue this procedure until all the carpet is installed. Clip off any loose or sprouted ends of yarn along the seam with napping shears. Check all seams to make sure the face yarn is level. Level any uneven areas by placing the thumbs on both sides of the seam and with a slight downward and outward pressure, open the seam and force the high side down to a level position. As the seam adhesive sets it will hold breadths in position. When the carpet has been installed use a cushion back wall trimmer to trim all of the straight walls in the area.

### **CONVENTIONAL TACKLESS INSTALLATION**

A. Cushions: Cushion is often called separate pad because it is not attached to the carpet. It is also called lining, underlayment or padding. It is any material placed between carpet and substrate, either loose or secured wall to wall. In either case, cushion seams should not be directly under carpet seams, and generally should be at right angles to them. Following these rules, cushion should be installed in the longest length possible, avoiding cross seams.

B. Selection of Proper Cushion: For commercial installation, cushion should support the carpet with minimum flexing of the carpet back, meet applicable flammability standards, be able to withstand handling during installation, and permit the carpet to slide easily during handling and stretching. Generally, thickness should not exceed <sup>3</sup>/<sub>8</sub> inches (9.5 mm). Acceptable commercial cushions include the following.

#### **ACCEPTABLE REQUIREMENTS:**

1. Requires <sup>1</sup>/<sub>4</sub> inch (6mm) slab rubber, minimum 64 oz. per sq. yd. (2.2 kg per sq. m.)
2. Requires <sup>1</sup>/<sub>4</sub> inch (6mm) densified or graft polyol based prime urethane, minimum 10 pounds per cu. ft. (43 kg. per sq. m.) density.
3. Hair-hair with or without rubberized surfaces, minimum 50 oz. per sq. yd. (1.7 kg. per sq. m.)

The softer types in the residential category, thick and easily compressed, may cause the following problems in heavy traffic installation.

1. Excessive flexing, which can result in a loose or wrinkled carpet, split seams, delamination of secondary backing, foot and leg fatigue, and possible accelerated carpet wear.
2. Impeding hooking carpet on tackless strip, because of elevation of carpet by pad.

Enclosed is a listing of the types of cushion to be used with our carpet, after much comparison and testing. Others may be used provided they meet the acceptable requirements listed on page 6 under Conventional Tackless Installation, Selection of Proper Cushion.

C. Installing Synthetic Back Carpet Over Pad: Our carpets may be installed over conventional padding in a manner consistent with the best industry practices. Place tackless strips around the perimeter of the room with the pins angled to the wall. Tackless is made in three different pin heights—C, D and E. For contract usage in large areas or long cuts, use architectural strips or double strips. Because the carpet being installed is not always the same thickness, tackless strips cannot always be installed at the same distance from the wall. For proper spacing hold a small scrap of the carpet against the baseboard on the wall and slide the tackless into it until the pile yarn covers the first row of pins.

On concrete floors tackless may need to be drilled or glued. In some cases, it may be best to use both of these methods to insure that the tackless will stay in place. If pre-nails do not hold, tackless should be drilled every 6 inches. A new fastener has been developed by Fal-Kon for securing tackless strip on concrete. Because of its design the fastener is driven into the stud plate at its base and actually rises up into the plate, yet the flange section remains flat on the concrete floor. After the fasteners have been driven in place, you merely put the tackless strip under the flange and tack the flange down to secure.

On wood floors it may be necessary to add more nails. Small pieces of tackless should always be fastened with two nails to keep them in position. If the carpet is installed abutting a hard surface floor covering, a metal molding or vinyl strip should be used to protect the carpet edge and to eliminate a tripping hazard.

The carpet padding should be fastened to the floor as recommended by the pad manufacturer. The scrim, rubber coated, or flat back of the pad is installed face up. This eliminates friction and makes it easier to stretch and reposition the carpet. Trim the padding where it meets the tackless strip. If staples are used to secure the padding, drive them to points where padding will not move or curl. Reinforce the pad seams with pad tape. Locate your starting corner, usually at the longest distance of the room. Using a kicker, hook in the carpet along two adjacent walls, hook the carpet onto the pins for approximately 3 feet on both walls and then across the first shortest wall.

***Important:*** Most kickers have a tooth adjustment. Adjust the teeth so they will not penetrate the carpet into the pad and pull it up to the strip. Place the kicker approximately 1½ to 2 inches from the wall. At this point you are not stretching the carpet, just moving it forward so when the carpet moves back after the kick the angle of the pins in the tackless will hook into the back. The kicker will ride on top of the tackless strip forcing the carpet onto the pin. Use a flat hammer to rub the carpet tighter and straighter. Adjust the stretcher teeth to the right length. The first length will be opposite of the starting corner. The stretcher head should be on the edge of the carpet. Position the tail block approximately three feet from the corner of the start wall. After stretching, press a spreader in the gully between the tackless strip and the wall and hold it firmly while slowly releasing the stretcher handle. The carpet will hook onto the tackless. After stretching half the

wall, use the kicker and hook into the carpet on the side wall you started in the starting corner. Rub the carpet onto the pin with a flat hammer. Use a slight angle when finishing the first stretch.

This process will not allow a wrinkle to accumulate as you go. Rub the carpet onto the pins with a hammer. Reverse stretch the carpet onto the pins with a hammer. In some cases of a long stretch, double stretching may be necessary. Total stretch during installation should be approximately 1½" for every 12' feet in length. Total stretch may vary according to the type of primary backing or synthetic secondary backing.

We recommend that new carpet *never* be installed over old carpet.

D. Seaming: The edges of Synthetic backed carpet are seamed using conventional techniques; seaming tape, heat bond seaming tape, or by hand sewing.

E. Heat Bond Seaming: Although the newest method of joining carpet, it is the fastest and most commonly used system of seaming. Two breadths of carpet are laminated to a special type seam tape, the thermoplastic adhesive that is used on the tape must be heated to a temperature of at least 215 degrees Fahrenheit, and in most cases can be heated to 300 degrees Fahrenheit without causing any distortion of the yarn fiber. If a delicate yarn is encountered, irons with heat control must be used. **Important:** *Always use a neat shield on the iron, keep the iron moving at a steady rate, usually 18 to 24 inches per minute, depending on the tape and temperature setting. It is suggested that the installers test the irons on a scrap piece of carpet and adjust the irons accordingly. In finishing the installation, use a carpet knife to finish trimming the carpet where a wall trimmer cannot be used. Important: We require the use of seam sealer cement to the raw edges at seams to prevent raveling and delamination.*

## **INSTALLATION OF ENHANCER & SECURE LOCK**

### **A. Planning and Layout**

1. Roll Orientation: Orienting carpet so that the pile lies in the same manufacturing direction is critical. Most manufacturers' backstamp rolls with arrows denoting manufacturing direction. Aligning arrows to point in the same direction within an installation should ensure proper pile lay.
2. Dye Lots and Roll Sequence: Avoid mixing dye lots in the same area. For best pattern match and minimum textural variations, especially on a large installation, always try to install rolls in the numerical sequence of production.
3. Patterned Carpet's: Although perfect pattern match cannot be guaranteed, best pattern match will come from cuts taken from the same carpet roll and/or dye lot. Plan ahead by verifying available roll lengths. Always allow extra carpet to compensate for pattern matching.
4. Seaming Diagram: Prepare a seaming diagram in advance, observing the following general guidelines.

**NOTE:** Many manufactures ship products with untrimmed selvedge edges. Allow trimming approximately 1 to 1½" of actual face material, in addition to selvedge, at seams and perimeter abutments.

- a. Run seams lengthwise to major area(s).
- b. Run major seams parallel to, not across, traffic paths.
- c. Plan major seams so that natural or artificial light does not shine directly across them.
- d. Avoid seams at major pivot points.
- e. Avoid seams which intersect perpendicular to doorways and entrances.

## B. Cutting and Seaming

**NOTE:** Products with the enhancer carpet backing require cutting and seaming techniques which slightly differ from conventional commercial broadloom products. The following procedures have been developed to include a wide range of face constructions. Consult your carpet manufacturer for recommendations on specific products.

1. Cut Lengths and Loose Lay: Cut carpet to required lengths, allowing 1½" to 2" turn-up at perimeter walls. Position in area by loose laying lengths, allowing 1" to 1½" overlap of face material along edges to be seamed. Make sure carpet lies flat without ripples or buckles before cutting the seams. If necessary, use knee-kicker to flatten.
2. Row Cut/Trace Cut Technique: To minimize compression and peaking at seams, the Row cut Trace Cut Technique is normally the most reliable seam cutting method.
3. Row Cut First Length: Check pile lay of carpet and select the first edge for trimming. Use a screwdriver or the nose of the cushion-back cutter to spread the tufted rows (at least 1" from the selvage edge) prior to row cutting. Using a cushion-back cutter with a sharp blade, row cut the first length. Edges may not be perfectly straight after row cutting. This is a normal condition. Seams can be aligned with a knee-kicker to compensate for minor bowing.
4. Position First Length: Strike a chalk line on the sub-floor to mark the first seam location near the center of the room. Position cut length along the chalk line. Work out any buckles or wrinkles, allowing carpet to lie smoothly.
5. Trace Cut Second Length: With the row cut length positioned along the chalk line, position the second length under the first length, allowing 1½" overlap. Using a cushion-back cutter with a sharp blade, trace cut the second length, using the first trimmed edge as a guide to form the seam.
6. Abut Seam: Abut the two trimmed lengths and align. Both edges should lie flat and fit together to form a tight seam without compression. If carpet height is not level, correct to level appearance.
7. Pattern Match: For patterned carpets, if required, use a knee-kicker or a power stretcher to assure best pattern alignment. Minimize stretching by starting at the middle and working outward. Consult your carpet manufacturer for pattern match tolerances on specific products.
8. Stay-Nail or Weight Seam: Stay-nail or weight both lengths along the center line (lengthwise) to prevent carpet from shifting. Carefully fold back both lengths away from the seam, taking care not to shift the carpet.

### C. Adhesive Application

The Enhancer carpet backing is compatible with many multipurpose carpet and seam adhesives. For specific product recommendation and application guidelines, contact your carpet and/or adhesive manufacturer.

**WARNING:** Inadquate adhesive spread rate, improper application of adhesive, failure to seal edges at seams and inset abutments, or use of low-grade adhesive products not intended for commercial usage may void important warranties extended by the carpet manufacturer.

**NOTE:** Be sure to provide proper ventilation when using carpet adhesives. For optimum indoor air quality, consult your carpet manufacturer for information on newly formulated, low emitting adhesive products.

1. Trowel Size: Use a  $\frac{3}{32}$ " x  $\frac{3}{32}$ " x  $\frac{3}{32}$ " V-Notch type trowel.

**NOTE:** A trowel with an insertable blade is recommended to maintain consistent notch size throughout the installation.

2. Apply Adhesive: Apply recommended adhesive to sub-floor, under both lengths, working in manageable sections. Observe manufacturer's instructions and allow recommended open or flash time to sustain proper tack.

**NOTE:** Use of high speed fans will shorten open or flash time.

### D. Installation

1. Set First Length: Set first length into adhesive, up to the chalk line and smooth out. Use a 75 lb. carpet roller to smooth buckles and remove bubbles.
2. Seal Seam: Using an applicator or plastic squeeze bottle with an adjustable nozzle, apply a  $\frac{1}{8}$ " bead of recommended seam adhesive to the edge of the first length along the primary backing level. Extra care in using the proper amount of seam adhesive will ensure tight seams, while reducing the possibility of sealer being forced to the face of the carpet when the opposing length is positioned.
3. Abut Opposing Length: Abut the opposing length to the first length. The seam adhesive will transfer and seal the seam. Do not let the seam peak.
4. Excess Seam Adhesive: Remove excess seam adhesive along seams with a recommended cleaning solvent using a white cloth.  
**NOTE:** Do not flood seam with cleaning solvent.
5. Transition Strips: To prevent edge raveling at transition borders (wherever carpet meets hard surface flooring), transition strips are required.

### E. Perimeters

1. Set Perimeters: Once seaming is complete, fold back the unglued lengths at the walls toward the seam. Spread adhesive, allowing open or flash time to sustain proper tack. Lay carpet into adhesive. Smooth buckles and remove bubbles with a 75 lb. carpet roller.

2. Trim Perimeters: Using a wall trimmer or carpet knife, trim along wall edge as each section is installed.
3. Remove Stay-Nails (if applicable)
4. Roll Surface: Roll entire installation with a 75 lb. carpet roller. First roll width-wise to remove air pockets. Then roll lengthwise to assure 100% adhesive transfer to the carpet backing, while still maintaining full floor coverage.

#### F. Stairs

1. Installation on Straight Stairs with Nosing
  - a. Carpet should be installed with one piece covering tread and nosing, and a separate piece covering the riser. Measure both the left and right sides of each step accordingly.
  - b. With pre-cut carpet, allow one inch extra in length and width. Mark the exact measurements of each tread and nosing, and cut carpet to fit.
  - c. Using the riser measurements of each step, cut carpet to fit.
  - d. Apply a band of nonflammable contact adhesive with a 3" paint roller to the nosing, under the nosing, and 2" to 3" on the stair tread. Apply non-flammable contact adhesive to the corresponding areas on the back of the pre-cut carpet for both the tread and nosing.
  - e. With a 1/8" V-shaped notched trowel, apply a premium grade multi-purpose adhesive to the remaining areas of the tread and riser.
  - f. Allow multi-purpose adhesive to tack before installing carpet to tread, nosing and riser. Contact adhesive should be dry to the touch.
  - g. Position carpet to tread and nosing, and smooth out carpet to the sides and comers using your hands and a stair tool.
  - h. Position carpet to the riser and smooth out with your hands and stair tool.
2. Installation on Straight Stairs without Nosing
  - a. Carpet should be installed in one piece over tread and riser. Measure both the left and right sides of each step accordingly.
  - b. With pre-cut carpet, allow 1" extra in length and width. Mark the exact measurement of each step, and cut carpet to fit.
  - c. Apply a band of non-flammable contact adhesive with a 3" paint roller to the step nosing carrying over 2" to 3" on the tread and riser. Apply non-flammable contact adhesive to the corresponding area on the back of the pre-cut carpet.
  - d. Using a 1/8" V-shaped notched trowel, apply a premium grade multi-purpose adhesive to the rest of the tread and riser.
  - e. Allow multi-purpose adhesive to tack before installing carpet on step. Contact adhesive should be dry to the touch.
  - f. Smooth carpet out to sides and comers on both tread and riser, using your hands and a stair tool.

- g. Vacuuming: Before the area is occupied, the entire installation should be vacuumed with an upright, cylindrical brush type vacuum cleaner.
- h. Wiring Cut-Outs: Normally, electrical and communications floor outlets are connected after the installation. If so, install directly over boxes and surface-mark with tape. Cutouts can be made later.
- i. Protect Until Occupancy: Protect carpet from other tradespeople and heavy traffic until occupancy. If furniture or other equipment is to be rolled over installation, provide plywood or masonite sheets in traffic paths.

**NOTE:** Plastic film should not be used as carpet protection as it retards adhesive curing.

**NOTE:** Failure to provide adequate protection until occupancy, especially if carpet is installed before the work of all tradespeople has been completed, may result in damage and deterioration, and may void important warranties extended by the carpet manufacturer.

## **DOUBLE STICK METHOD**

### A. General Information

Only smooth specially designed commercial grade pad with a special scrim can be used for the Double Stick method and only if the pad manufacturer recommends the Double Stick method for their pad. See listing for recommended pads.

We recommend only woven synthetic secondary back carpet be used on the Double Stick method. *Our Grip-Tite unitary back carpet is not to be used on the Double Stick method.*

### B. Installation Instructions

#### 1. Sub-floors

Sub-floors must be properly prepared for installation, being free of dust, wax, paint, grease, oil and/or loose dirt.

All concrete floors should be free of moisture, hydrostatic pressure and excessive alkalinity.

Dry or chalky floors should be sealed with an approved primer prior to installation.

#### 2. Pad to Sub-floor

Use one of the methods recommended by adhesive manufacturer for application of adhesive. The method is dependent upon the type of sub-floor and type of adhesive either releasable or permanent. Note porous and nonporous surfaces require different methods of application and frequently different adhesives. *See attached listing for recommended adhesives.*

Before installing pad allow the adhesive to become tacky dry from milky to clear in color. (Fans may be used to accelerate drying time.)

After installation of pad use a push broom to smooth out air bubbles and to insure 100% contact of the pad to the surface. A heavy roller should not be used.

### 3. Carpet to Pad

Apply adhesive using trowel size  $\frac{1}{8}$ " x  $\frac{1}{8}$ " x  $\frac{1}{16}$ " U notch. Allow adhesive to become tacky dry before installing carpet following directions under Installation Procedures, Direct Glue Down on page 5 and applicable instructions according to type of carpet, ie., Graphic Carpet or Printed Carpet.

Apply a bead of seam sealer at the base of the tuft and primary backing. Seam sealer is a necessity which will lock in the last row of tufts and bond the edges together. If seam sealer is not used, delamination will occur at the seam.

Should the carpet have a tendency to shrink, or if the seam areas are located in a heavy traffic area, a nonsilicone backed hot melt tape may be used to reinforce the seam area.

After installation of the carpet use a 30 to 50 pound roller to assure transfer of adhesive to back of carpet.

If at all possible, traffic should be kept off the carpet for 48 hours after installation to allow the adhesive to dry completely.

The temperature should be kept between 65 and 70 degrees with a 20 to maximum 65 percent humidity level for 48 hours after installation, as well as before and during installation.

# Seaming Information

Today's carpet styles, being so varied in design and construction, i.e. printed patterns, tufted graphic patterns, tufted graphic loops, loop piles with varied step overs and velva loops require different methods of cutting the edges for seaming multiple breadths together.

The following is a list of our styles with the method to be used for cutting the edges.

| STYLE          | *METHOD | STYLE                | *METHOD |
|----------------|---------|----------------------|---------|
| Afghan         | 2       | Mirada III           | 1       |
| Allante        | 2       | Mirada IV            | 1       |
| Arbor          | 2       | Mirada V             | 1       |
| Balances       | 6       | Mirada Solids        | 1       |
| Basketry       | 2       | Mosaic               | 2       |
| Belvedere      | 1       | Network              | 1       |
| Berkshire      | 7       | Odyssey              | 2       |
| Blanket Stitch | 2       | Orient Express       | 1       |
| Broadway       | 2       | Palm Court           | 4       |
| Canopy         | 2       | Patchwork            | 2       |
| Center Court   | 2       | Performance          | 1       |
| Checks         | 6       | Point Royale         | 2       |
| Chenille       | 1       | Portico              | 2       |
| Chenille Fleck | 1       | Prodigy              | 3       |
| Columns        | 2       | Protocol             | 1       |
| Consulate      | 1       | Rattan               | 2       |
| Contender      | 1       | Reed                 | 2       |
| Coventry       | 1       | Regis Square         | 2       |
| Excalibur      | 1       | Sunburst             | 2       |
| Fencing        | 2       | Talona               | 2       |
| Gingham        | 2       | Tangiers             | 4       |
| Grand Palazzo  | 1       | Terrace Garden       | 4       |
| Hallmark       | 2       | Touch of Marble      | 2       |
| Homespun       | 2       | Tower Place          | 1       |
| Honeysuckle    | 2       | Trellis              | 2       |
| Lattice        | 2       | Veranda              | 2       |
| Madison Square | 6       | Vista                | 1       |
| Madras         | 2       | Wallstreet           | 5       |
| Marrakech      | 3       | Waverly (Wellington) | 2       |
| Matting        | 2       | Wickerwork           | 2       |
| Melrose        | 2       | Windstar             | 1       |

\*See following pages for explanation of methods for cutting edges for seaming.

# Explanation of Methods

1. Row cut first breadth for seaming using a loop pile cutter. Be sure the blade is sharp and positioned on the side of the full width of the carpet. Cutters will cut close to the edge if blade is on the correct side of the cutter. If the blade is not on the correct side of the cutter there will be a heel on the edge of the carpet causing a gap at the seam.

If the rows on both breadths of carpet run straight the edge of the second breadth may be cut in the same manner. If the rows do not run straight the edge of the second breadth is cut by placing the first breadth over the edge of the second breadth. Using the first breadth as a guide trace cut the second breadth.

The same procedure is used for additional breadths.

2. It is important to know that the pattern is tufted into the carpet. Because of this characteristic, it is imperative to follow the correct procedure.

You must cut the center row of a pattern and follow that row the entire length of the cut. Make sure the blade in the cutter is positioned on the side of the full width of the carpet being cut. If the blade is not positioned on the correct side of the cutter there will be a heel on the edge of the carpet causing a gap at the seams.

The second breadth is cut in the same manner as the first breadth. Thus, when the two breadths are put together a complete pattern will be formed.

Follow procedures on page 2–Graphic Pattern Carpet–for matching patterns.

3. Place a straight edge on the face of the carpet at the edge to be cut. The straight edge should be positioned as close to a row as possible. The same row should be followed as the straight edge is repositioned down the edge being cut. Make sure the blade in the cutter is on the side of the full width of the carpet being cut. If the blade is not on the correct side of the cutter there will be a heel on the edge causing a gap at the seam.

The same procedure is used to cut the edge of the second and all consecutive breadths of carpet.

**NOTE:** There may be short term areas where a zippering effect is visible at the seam. The zippering effect is due to the fact that it is virtually impossible to manufacture carpet with the rows running perfectly straight. This is especially applicable where long seams are made.

4. These styles of carpet have the design printed on the face of the carpet. Because the design is printed, row cutting cannot be used for trimming the edge for seaming. The row and the pattern will not run true.

The edges are cut by selecting a particular area of the pattern. Using a straight edge placed on the area of the pattern and all consecutive areas of the same pattern, cut the carpet using the straight edge as a guide.

The second and all consecutive breadths are cut in the same manner after choosing the exact opposite portion of the pattern cut on the first breadth.

When the breadths are placed together there will be a complete pattern.

Make sure the blade of the cutter is positioned on the side of the full width of the carpet being cut. If the blade isn't placed on the side of the full width of the carpet, there will be a heel on both edges of the carpet causing a gap at the seam.

5. Row cut first breadth leaving either a cut yarn line or a loop yarn line. Then row cut the adjacent breadth leaving the opposite yarn line, either a cut or loop yarn line. When the two breadths are butted together there will be a cut yarn line adjacent to a loop yarn line.

If there are gaps which cannot be put together with the use of a knee-kicker then the adjacent breadth must be cut again by placing the edge of the first breadth over the adjacent breadth. The adjacent breadth is trace cut using the first breadth as a guide.

**NOTE:** There may be short term areas where either two loop pile or two cut pile yarn lines are side by side. This is especially characteristic of long seams. This is due to the fact that it is impossible to consistently manufacture carpet with the yarn lines running perfectly straight.

6. It is important to know that the pattern is tufted into the carpet. Because of this characteristic, it is imperative to follow the correct procedure.

You must cut the center row of the loop pile pattern and follow that row the entire length of the cut. Make sure the blade in the cutter is positioned on the side of the full width of the carpet being cut. If the blade is not positioned on the correct side of the cutter there will be a heel on the edge of the carpet causing a gap at the seams.

The second breadth is cut in the same manner as the first breadth. Thus, when the two breadths are put together a complete pattern will be formed.

Follow procedures on page 2–Graphic Pattern Carpet–for matching patterns.

7. It is important to know that the pattern is tufted into the carpet. Because of this characteristic, it is imperative to follow the correct procedure.

You must cut the center row of the loop pile pattern and follow that row the entire length of the cut leaving the accent loop. Make sure the blade in the cutter is positioned on the side of the full width of the carpet being cut. If the blade is not positioned on the correct side of the cutter there will be a heel on the edge of the carpet causing a gap at the seams.

The second breadth is cut in the same manner as the first breadth cutting off the accent loop. Thus, when the two breadths are put together a complete pattern will be formed.

Follow procedures on page 2–Graphic Pattern Carpet–for matching patterns.

## List of Recommended Adhesives, Seam Sealers & Trowel Sizes

| MANUFACTURER   | BRAND #                      | TROWEL SIZE                      |
|--|------------------------------|----------------------------------|
| <b>Woven Synthetic Secondary Backing</b>                 |                              |                                  |
| Capitol Adhesives<br>800-831-8381                        | 001, 002, F75<br>F95         | 1/8" x 1/8" x 1/16" V Notch      |
| Chicago Adhesive Products Company<br>312-581-1300        | SS3, SS975<br>DB900          | 1/8" x 1/8" x 1/8" V Notch       |
| ParaChem Southern, Inc.<br>864-967-7691                  | M-4099                       | 1/8" x 1/8" x 1/8" V Notch       |
| D A P Incorporated<br>800-543-3840                       | LE-8000                      | 1/8" x 1/8" x 3/32" V or U Notch |
| W. F. Taylor Co., Inc.<br>800-397-4583                   | 2080, 2055                   | 1/8" x 1/8" x 1/8" V Notch       |
| <b>Secure Lock &amp; Enhancer Plus Secondary Backing</b> |                              |                                  |
| Capitol Adhesives  | 001, 002<br>Fast 75, Fast 95 | 1/8" x 1/8" x 1/16" V Notch      |
| Chicago Adhesive Products Company                        | SS3, SS975<br>DB900          | 1/8" x 1/8" x 1/8" V Notch       |
| ParaChem Southern, Inc.                                  | M-4099                       | 1/8" x 1/8" x 1/8" V Notch       |
| D A P Incorporated                                       | LE-8000                      | 1/8" x 1/8" x 3/32" V or U Notch |
| W. F. Taylor Co., Inc.                                   | 2080, 2055                   | 3/32" x 3/32" x 3/32" U Notch    |

## Double Stick Adhesive

| MANUFACTURER                    | BRAND #     | APPLICATION  |
|---------------------------------|-------------|--|
| <b>Pad to Surface</b>           |             |  |
| Capitol Adhesives               | PS-100      | $\frac{1}{16}$ " x $\frac{1}{16}$ " x $\frac{1}{16}$ " Square Notch  |
| W. F. Taylor Co., Inc.          | 2045        | $\frac{1}{32}$ " x $\frac{1}{32}$ " x $\frac{1}{32}$ " Notched Trowel, roller or spray on non-porous surfaces.<br>$\frac{1}{32}$ " x $\frac{1}{32}$ " x $\frac{1}{32}$ " V Notched Trowel only on porous surfaces. |
| ParaChem Southern, Inc.         | M-4277      | To be used on non-porous surfaces only. Apply with roller or $\frac{1}{32}$ " x $\frac{1}{16}$ " x $\frac{1}{32}$ " U Notched Trowel.  |
| ParaChem Southern, Inc.         | M-4099      | To be used on non-porous surfaces only. Apply with $\frac{1}{32}$ " x $\frac{1}{16}$ " x $\frac{1}{32}$ " Trowel. Note M-4099 is a permanent type adhesive.  |
| D A P Incorporated              | LE-2-PR     | Releasable to be used on smooth surface with $\frac{1}{32}$ " x $\frac{1}{32}$ " x $\frac{1}{32}$ " Trowel or Porous surface with $\frac{1}{16}$ " x $\frac{1}{16}$ " x $\frac{1}{16}$ " U Notched Trowel.         |
|                                 | LE-6000     | Permanent Pad Installation using a $\frac{1}{16}$ " x $\frac{1}{16}$ " x $\frac{1}{16}$ " Square Notch Trowel.   |
| <b>Pad to Carpet</b>            |             |  |
| Capitol Adhesives               | 001-Fast 95 | $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{16}$ " U Notched Trowel  |
| W. F. Taylor Co., Inc.          | 2055        | $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{16}$ " U Notched Trowel  |
| ParaChem Southern, Inc.         | M-4099      | $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{16}$ " U Notched Trowel  |
| D A P Incorporated              | LE-6000     | $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{3}{16}$ " U Notched Trowel  |
| <b>Double Stick Seam Sealer</b> |             |  |
| Capitol Adhesives               | #022        |  |
| W. F. Taylor Co., Inc.          | 2075        |  |
| ParaChem Southern, Inc.         | M-4263      |  |
| D A P Incorporated              | D-15        |  |

**NOTE:** The above manufacturers should be contacted for warranty information.

## Recommended Seam Sealers

| MANUFACTURER                  | DIRECT GLUE SYNTHETIC | STRETCH IN | ENHANCER PLUS/SECURE LOCK |
|-------------------------------|-----------------------|------------|---------------------------|
| Capitol Adhesives             | #022                  | #022       |                           |
| Chicago Adhesive Products Co. | 31                    | 31         | 31                        |
| ParaChem Southern, Inc.       | M-4263                | M-4263     | M-4263                    |
| D A P Incorporated            | D-15                  | D-15       | D-15                      |
| W. F. Taylor Co., Inc.        | 2075                  | 2075       | 2075                      |

## Double Stick Seam Sealer

| MANUFACTURER            | BRAND # |
|-------------------------|---------|
| Capitol Adhesives       | #022    |
| W. F. Taylor Co., Inc.  | 2075    |
| ParaChem Southern, Inc. | M-4263  |
| D A P Incorporated      | D-15    |

**NOTE:** Blue Ridge Commercial Carpet does not recommend any of the above listed adhesives for use over Vinyl Asbestos Tile unless prior approval is obtained from the adhesive manufacturer.

All of the above listed adhesives either have low or zero Volatile Organic Compounds (VOC) making them safe for installations in nursing homes, hospitals, schools, restaurants, hotels and office buildings.

## Recommended Pads

| MANUFACTURER                         | PRODUCT NAME  | SPECIFICATIONS   |
|--------------------------------------|---------------|--|
| General Felt Corp.<br>800-366-8743   | Sierra IV     | Wt. 80 oz. Sponge Rubber<br>Thickness—.250"<br>CLD @ 25%—1.50 PSI  |
|                                      | Delta IV      | Wt. 56 oz. Hair<br>Thickness—.250"<br>Density—9.5 lbs./cu. ft.     |
|                                      | Ultima Six II | *Wt. N/A<br>Thickness—.188"<br>Density—30 lbs./cu. ft.             |
| Sponge Cushion, Inc.<br>815-942-2300 | 1562          | *Wt. N/A   |
|                                      | Tred-Mor      | Thickness—.155"<br>Density—33 lbs./cu. ft.                         |
|                                      | 2568          | *Slab Rubber   |
|                                      | Tred-Mor      | Thickness— $\frac{1}{4}$ "<br>Density—22 lbs.                      |
| Dixie Mfg. Co., Inc.<br>804-625-8251 | 2580          | *Slab Rubber   |
|                                      | Tred-Mor      | Thickness— $\frac{1}{4}$ "<br>Density—26 lbs.                      |
|                                      | Villa         | Wt. 50 oz. Hair<br>Thickness—.375"<br>Density—9.5 lbs./cu. ft.     |
|                                      | Cheveux       | Wt. 50 oz. Hair<br>Thickness— $\frac{3}{8}$ "<br>Density—11.1 lbs. |

*\*Recommended for Double-Stick Installations*