

# Lees Carpet Tile Installation Guidelines

Encycle Backed Carpet Tiles

PVC Backed Carpet Tiles

AirTrek Attached Cushion Backed Carpet Tiles

Self-Lock Carpet Tile

Exclusive to Lees Carpet

**The Mohawk Group**

500 TownPark Lane Suite 400  
Kennesaw, GA 30144  
800.554.6637  
[www.leescarpets.com](http://www.leescarpets.com)

Field Technical Services Department  
405 Virgil Drive  
Dalton, GA 30721  
800.443.2241

## Site Conditions

Lees Carpet Tiles are intended for installation on dry, properly prepared floors. These products are not intended for installation on walls, outside use, or wet surfaces.

Lees is not responsible for any product failure if proper floor preparation and/or installation procedures are not followed. The required adhesive is Lees Pressure Sensitive Adhesive. It is the responsibility of the installation contractor to make certain the floor is properly prepared and suitable for the installation of Lees Carpet Tiles.

## Moisture & pH Testing

**Concrete – 1. Conduct a moisture test.** Moisture in the subfloor will interfere with the curing and performance of the adhesive. The *calcium chloride* test is the only acceptable test. A reading of 4.0 pounds per 1,000 square feet per 24 hours is the maximum acceptable reading for Lees Pressure Sensitive Adhesive. **2. Test the pH of the concrete** using an accurate wide-range pH test kit covering pH range from 0 to 14. The acceptable pH level is between 5 and 9 for Lees Pressure Sensitive Adhesive. If the pH level is above 9 mop the floor with a vinegar and water solution (eight ounces of vinegar to one gallon of water).

## Site and Material Condition

The floor should have a minimum temperature of 65°F for at least 72 hours prior to installation and 48 hours after installation. Temperatures should not exceed 90°F. Relative humidity above 65% will adversely affect the adhesive and primer.

Installation of Lees Carpet Tile on a floor outside the scope of the guidelines in this document will void all applicable warranties.

## Floor Preparation

The floor must be sound and dry prior to the installation of the Modular System. Any curing chemicals, sealers, or other chemicals must be compatible with the Modular backing system and Lees Pressure Sensitive Adhesive. Completely remove all wax, dirt, grease, paint, or old adhesives including cut back adhesive. DO NOT use solvents to clean the floor. DO NOT use oil based sweeping compound. Do not install over Resin Base Curing compound.

The floor should be flat to within 1/8" in 10 ft. Cracks, holes and depressions should be filled using a Portland based patching compound. Use leveling compound when required.

Sweep and vacuum the floor. Smooth, nonporous floors should be damp mopped prior to installation. All dust must be removed to insure proper adhesion.

## Floor Priming

All Gypcrete floors or substrates that have excessive dust must be cleaned, then primed with an approved primer or a latex milk additive.

Concrete: Prime only if floor has excessive dust. Note: Any existing sealer or primer should be tested for compatibility to the Lees Squared Pressure Sensitive Adhesive. Terrazzo, Marble, Vinyl Tile (VAC or VCT), Linoleum and other smooth nonporous surfaces

do not require priming. Damp mop only. If patching is required on these areas, prime the patched areas.

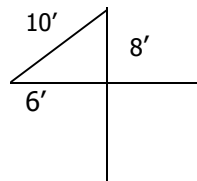
Plywood Floors must be completely primed. Note: Plywood substrates should be no less than  $\frac{3}{4}$ " thickness. Particleboard or thin plywood is not acceptable substrates.

## Site Layout

The starting point in a modular installation must be as near to the center of the room as possible and must be positioned to utilize the largest perimeter cut module size.

Snap a chalk line parallel to one major wall bisecting the starting point. It may be necessary to offset the center chalk line to assure perimeter modules will be at least half size.

A second chalk line must be snapped from the starting point at 90° to the first line. This can be accomplished using a 6-8-10, or larger triangle, depending on the room size. (See Illustration A) Meters or feet may be used to lie out the triangle in these proportions.



**Illustration A**

## Equipment and Supplies

- Heavy-Duty Frame Paint Roller with 1-inch Nap on a Plastic Core
- Lees Squared Pressure Sensitive Adhesive
- Wall Trimmer with Hook Blade (optional)
- Cushion Back Cutter
- Floor Scraper
- Tape Measure
- 75-pound Roller or 100-pound Roller
- 1/16 x 1/16 x 1/16 square notch trowel (optional)
- Portland Patching Compound
- Razor Blades
- Razor Blade Knife
- Straight Edge
- Chalkline
- Scissors
- Sheetrock or carpenter square

## Pallet and Box Sequencing

It is very important to install Lees Carpet Tiles in the order they were manufactured. This is easily accomplished by selecting pallets in sequential order and following the numbers located on each carton of tiles. Typically an installation will begin with the lowest carton numbers and progress through the highest numbers until the project is complete. Installing Lees Carpet Tiles by carton sequence will assure the most even uniform look possible.

## Adhesive Application

- Lees Squared Pressure Sensitive Adhesive or Lees SpraySet™ must be used. Other adhesives may not be compatible.
- If Self-Lock carpet tiles have been purchased, the adhesive has been pre-applied to the backing. Carpet tile can be installed directly to the floor with no additional adhesive.

## Lees Pressure Sensitive Application

- Apply the Pressure Sensitive Adhesive with a heavy-duty frame paint roller with 1-inch nap on a plastic core or a 1/16 x 1/16 x 1/16 square notched trowel.
- The adhesive must be applied in a full spread; the grid method is not acceptable.
- The amount of adhesive applied to the subfloor is important. Before beginning installation, mark off a small area of the subfloor and determine the adhesive spread rate. This will allow you to determine the proper coverage level and amount of pressure to apply to the roller during installation. The installer must gauge the adhesive spread rate.
- On smooth surfaces, be careful not to apply too little adhesive. Just because a surface is smooth and/or sealed, it still requires a proper coating of adhesive.
- Allow the adhesive to dry to a clear and tacky state. Tiles should be installed immediately after adhesive has dried. To determine if the adhesive is dry, press finger into adhesive. When dry, adhesive should not transfer to finger.

**IMPORTANT:** Set-up time is approximately 30 to 90 minutes depending on the climate. & humidity. Use of blower fans will speed up drying time.

- Roll Floor with 75 to 100 pound Roller

## Lees Pressure Sensitive Coverage

PVC Vinyl Tiles  
Encycle Tiles  
AirTrek Attached Cushion  
Self-Lock Carpet Tiles

1/16x1/16x1/16 square notched trowel  
1" Nap Roller

## Spread Method

Trowel or Roll (ROLL PREFERRED)  
Trowel or Roll (TROWEL PREFERRED)  
Trowel or Roll (TROWEL PREFERRED)  
Adhesive Already Applied

## Spread Rate

16 – 22 s.yds. per gallon  
Approximately 30 s.yds. per gallon

## SpraySet™ Adhesive Application

Attach the SpraySet™ Heat Jacket (**XL137**) to the cylinder using the Velcro straps. Plug the cord into an electrical outlet for approximately ten minutes. The cylinder must be heated to 86°. Green color on the temperature bar on the cylinder indicates actual adhesive temperature.

**DO NOT LEAVE THE HEAT JACKET ON THE CYLINDER FOR MORE THAN TWENTY MINUTES AT A TIME**

**After the cylinder has reached the 86° point, remove by unfastened the Velcro strips and placing the heat jacket on a flat surface.**

Begin spraying by holding the wand approximately 20" off the floor at a 45 degree angle.

### SpraySet™ Adhesive Coverage

|                 | Standard          | Platinum          |
|-----------------|-------------------|-------------------|
| PVC Vinyl Tiles | XL115 4,500 s.ft. | XL131 2,500 s.ft. |
| Encycle Tiles   | XL115 2,500 s.ft. | XL131 2,500 s.ft. |

\*Medium to Heavy frost = 2,500 s.ft. coverage  
 Light to Medium frost = 4,500 s.ft. coverage

Use SpraySet™ 22oz (**XL116**) for tight areas, cutting in, and all repairs.

Allow the adhesive to become tacky, but not completely dry. The adhesive should be tacky enough that the tiles do not slide around, but wet enough to achieve transfer to the backing.

**IMPORTANT:** Set-up time is approximately 5 to 15 minutes. Use of blower fans will speed up drying time.

Set-up time will vary in different climates.

Roll floor with 75 to 100-pound roller.

### Tile Installation

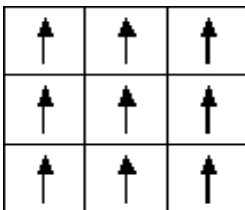
**Make sure you inspect Lees Carpet Tiles for dye lot style, quality and shipping damage prior to installation. Do not install any product that has visible problems.**

Occasionally, it may be necessary to switch around tiles to result in a better seam appearance. An example would be where two dark lines fall on both tiles on the seam causing a dark line.

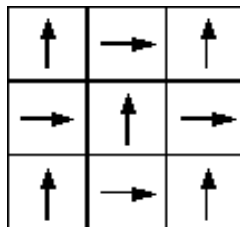
Before you begin the installation consult product specification to determine which installation format(s) are approved.

If you have any questions concerning a product's installation formats, contact Lee's Field Services at 1.800.443.2241

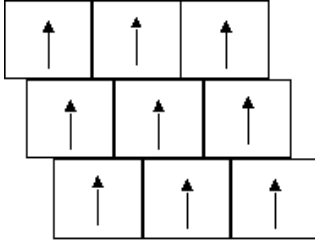
Shown below are some common installation formats.



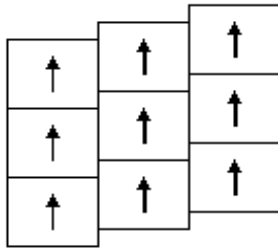
**Monolithic**



**Quarter-Turn**



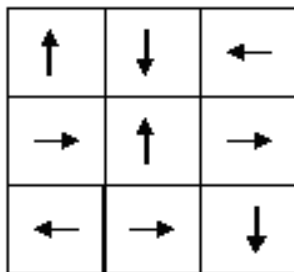
**Brick Ashlar, 3-Step 8-Inch Offset**



**Vertical Ashlar, 3-Step 8-Inch Offset**

### **Ashlar Formats**

In the **Ashlar** installation formats, each row of carpet tiles is shifted 8 inches, either in a brick format or vertically (see diagrams to the left). This is a three-step process, i.e. each successive row of tiles should be offset one-third the length of the tile. It is ***not acceptable*** to shift the tiles only one-half the length of the tiles (two-step process). This installation method maintains the random appearance of the carpet tiles, eliminating line-on-line or dark-on-dark effects that can create a skewed look in the finished installation. **NOTE:** Carpet tile products installed in the ashlar format will not have the same finished appearance as the same product in a broadloom (12' width).

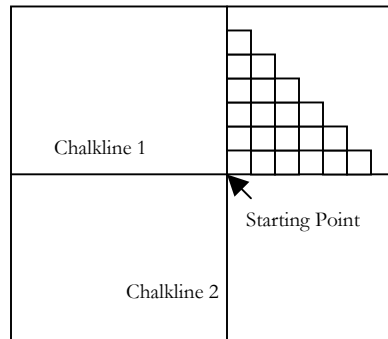


**Multi-Directional**

**Multi-Directional Format (Follow No Order)**  
**All arrows on the tiles must be turned in different directions.** Although there is no specific directionality that the installer must follow, products specified "Multi-Directional" ***cannot*** be installed with arrows facing the same direction on touching tiles. Mixing tiles from various boxes during installation will further blend color and design elements. This process is essential for achieving optimal aesthetics.

Start from the intersection point in the center of the floor. Install the tiles in one quadrant using the chalk lines as guidelines. Fill in the area in between the two chalk lines using the stair step method.

Continue to install tiles in a stair step or pyramid pattern, starting at the center point. Check to make sure the tiles are properly aligned at edges during the installation.



Fit the tiles together by sliding them together, being careful not to trap face yarns between or under the edges of the tile. Press or roll the tiles into the adhesive. They may be removed at any time and repositioned.

All carpet tiles should be rolled with a 75 lb. or 100 lb. roller.

### Cutting Border Tiles

Cuts are made from the back. Install border tiles by placing the tile face down exactly on top of the last row of field tiles, keeping the arrows pointed in the same directions. This will be your cut tile. Using another tile, butt it against the wall allowing it to lie on top of the tile that is to be cut. Using this tile as a reference tile, score a line on the back of the tile that is to be cut. Cut the tile along the reference line being careful not to cut through the installed tile below. Install the cut tile with the cut edge along the wall. Use this same technique at doorways and other objects that must be cut around. A transition strip must be used to protect any exposed edges.

### Stairs: Modular Tiles Are Not Recommended For Stairs

### Finished Installation

Do not allow traffic on tiles unless they are anchored at control grids and perimeters. When heavy furniture or wheeled traffic is moved over tiles, use plywood runners to avoid tile shifting.

### Chair Pads

Chair pads are not required, but are recommended for use under chairs with roller casters. Casters should be the flat round type with 5/8" to 1" width minimum. If chair pads are not used, the appearance of the carpet tile will decrease. Maintenance and/or shifting of the modular may be required more frequently if pads are not used.

## **Replacement Tiles**

Occasionally, it may be necessary to replace damaged or heavily soiled tiles. Tiles can be replaced with on site inventory or from another area of the installation. A difference of appearance may be noticed when the tile is replaced, however, this difference usually diminishes in a short time.

### **Please Note:**

The use of Lees branded adhesives are required to ensure optimum results and are the only approved adhesives that Lees will warrant. Failure to use Lees branded adhesives can result in warranties being null and void.