The Mohawk Group
Installation Guidelines for Carpet Tiles

Ecoflex Urethane Cushion Backed Carpet Tiles
PVC Backed Carpet Tiles
Encycle Backed Carpet Tiles
Self-Lock Carpet Tiles
Site Conditions

Mohawk 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.

Mohawk is not responsible for any product failure if proper floor preparation and/or installation procedures are not followed. The required adhesives are Mohawk’s enpress PSA or NuSpraylok. It is the responsibility of the installation contractor to make certain the floor is properly prepared and suitable for the installation of Mohawk Carpet Tiles.

Moisture & pH Testing

Concrete – Conduct a moisture test. Moisture in the subfloor will interfere with the curing and performance of the adhesive. Concrete Substrates must be tested for moisture and pH prior to installation.

1. enpress PSA Calcium Chloride (ASTM F1869) results should not exceed 5 lbs per 1,000 s.ft. per 24 hours, RH (ASTM F2170) tests results should not exceed 80%, and pH should not exceed 9.
2. enpress HP (Encycle) Calcium Chloride (ASTM F1869) results should not exceed 10 lbs per 1,000 s.ft. per 24 hours, and pH should not exceed 11.
3. enpress HP (Vinyl/PVC) Calcium Chloride (ASTM F1869) results should not exceed 8 lbs per 1,000 s.ft. per 24 hours, and pH should not exceed 10.
4. NuSpraylok Platinum Adhesive Calcium Chloride (ASTM F1869) results should not exceed 10 lbs per 1,000 s.ft. per 24 hours, RH (ASTM F2170) tests results should not exceed 92% and pH should not exceed 12. NuSpraylok Standard Adhesive Calcium Chloride (ASTM F1869) results should not exceed 7 lbs per 1,000 s.ft. per 24 hours, RH (ASTM F2170) tests results should not exceed 85% and pH should not exceed 11.
5. When floor conditions of moisture or pH exceeds acceptable levels, please contact field services 800.833.6954 for more information.

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. High humidity above 65% or cold substrates will adversely affect the drying time of the adhesive.

Installation of Mohawk Group’s 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 Mohawk Group’s specified carpet tile adhesives. Completely mechanically remove all wax, dirt, grease, paint, or old adhesives. DO NOT use solvents to clean the floor. DO NOT use oil based sweeping compound. Do not install over resin or silicate based curing compound.

The floor should be flat to within 1/8” in 10 feet. 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 or primed with PrimeCoat to insure proper adhesion.

Old cut-back adhesive must be properly removed or sealed with The Mohawk Group Sureseal prior to any direct glue-down installation. See note below.

Please Note: Asbestos-containing floor tiles, any adhesive possibly containing asbestos, or other asbestos-containing floor coverings require special preparation, handling, and removal procedures. Consult the appropriate local or state authorities or the Resilient Floor Covering Institute before disturbing any suspected asbestos-containing material.

Floor Priming

All Gypcrete floors or substrates that have excessive dust must be cleaned, then primed with The Mohawk Group’s PrimeCoat or an approved primer such as a latex milk additive.

Concrete: Prime only if floor is extremely porous or has excessive dust. Note: Any existing sealer or primer should be tested for compatibility with the Mohawk Group Adhesive. Terrazzo, Marble, Vinyl Tile
(VAT 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.

NOTE: A bond test should be performed over concrete substrates with unidentified sealers or primers: Adhere a small area of 2-3 feet of carpet and allow to dry completely. Let set for 24 hours. If the adhesive is bonded tightly, proceed with installation.

Plywood Floors must be completely primed. Note: Plywood substrates should be no less than ¾” 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.

Equipment and Supplies

- Starter Kit for NuSpraylok™
- Heatjacket for NuSpraylok™
- Heavy-Duty Frame Paint Roller with 3/8” Nap Roller
- Mohawk Group Adhesives
- 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 (Ecoflex)
- Portland Patching Compound
- Razor Blades
- Razor Blade Knife
- Straight Edge
- Chalkline
- Scissors

Pallet and Box Sequencing

It is very important to install 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 the carpet tiles by carton sequence will assure the most even uniform look possible.

Adhesive Application

The Mohawk Group’s **enpress PSA** Carpet Tile Application

- Mohawk Group’s Adhesive must be used. Other adhesives may not be compatible. Use of other adhesive may affect your warranty.
- If Self-Lock carpet tiles have been purchased, the adhesive has been pre-applied to the backing. Carpet tiles can be installed directly to the floor with no additional adhesive. If the substrate is dusty or porous, use The Mohawk Group’s PrimeCoat to prime the surface.
- Apply the adhesive with a heavy-duty frame paint roller with 3/8” nap roller or a 1/16 x 1/16 x 1/16 square notched trowel as directed by adhesive label. The spread rate should be between 16 – 22 s.yds. per gallon. (Ecoflex Urethane Cushion Tile)
• The adhesive must be applied in a full spread; the grid method is not acceptable.
• The spread rate of the adhesive is 35 to 40 yards per gallon when using a 3/8” nap roller. The amount of adhesive applied to the subfloor is important. Before beginning the 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 45 to 90 minutes depending on the climate & humidity. Use of blowers fans will speed up drying time.

• Roll Floor with 75 to 100 pound Roller

<table>
<thead>
<tr>
<th>Spread Method</th>
<th>Spread Rate</th>
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<tbody>
<tr>
<td>PVC Vinyl Tiles</td>
<td>3/8” Roller</td>
</tr>
<tr>
<td>Encycle Tiles</td>
<td>3/8” Roller</td>
</tr>
<tr>
<td>Ecoflex Urethane Cushion Tiles</td>
<td>1/16x1/16x1/16 Square notch Trowel Only</td>
</tr>
<tr>
<td>Self-Lock Carpet Tiles</td>
<td>Adhesive Already Applied</td>
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</table>

**NuSpraylok™ Adhesive Application**

• When installing PVC vinyl backed or Encycle carpet tile use NuSpraylok™ (DK115) whenever the Moisture Vapor Emission is up to 7 lbs. Per 1,000 sq. ft. per 24 hours tested with a pre packaged Calcium Chloride crystal kit performed in accordance with ASTM F 1869-98, and a pH of 11 when tested according to industry standards.

• When installing PVC vinyl backed or Encycle carpet tile use NuSpraylok™ Platinum (DK131) whenever the Moisture Vapor Emission is up to 10 lbs. Per 1,000 sq. ft. per 24 hours tested with a pre packaged Calcium Chloride crystal kit performed in accordance with ASTM F 1869-98, and a pH of 12 when tested according to industry standards.

• When installing Ecoflex Urethane Cushion Tile use NuSpraylok™ (DK127) whenever the Moisture Vapor Emission is up to 7 lbs. Per 1,000 sq. ft. per 24 hours tested with a prepackaged Calcium Chloride crystal kit performed in accordance with ASTM F 1869-98 and a pH of 11 when tested according to industry standards.

• When installing Ecoflex Urethane Cushion Tile use NuSpraylok™ Platinum (DK130) whenever the Moisture Vapor Emission is up to 10 lbs. Per 1,000 sq. ft. per 24 hours tested with a pre packaged Calcium Chloride crystal kit performed in accordance with ASTM F 1869 – 98, and a pH of 12 when tested according to industry standards.

Attach the NuSpraylok™ Heat Jacket (DK137) 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 unfastening 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.
NuSpraylok™ Adhesive Coverage

<table>
<thead>
<tr>
<th>Material</th>
<th>Standard Coverage</th>
<th>Platinum Coverage</th>
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<tbody>
<tr>
<td>PVC Vinyl Tiles</td>
<td>DK115 4,500 s.ft.</td>
<td>DK131 2,500 s.ft.</td>
</tr>
<tr>
<td>Encycle Tiles</td>
<td>DK115 2,500 s.ft.</td>
<td>DK131 2,500 s.ft.</td>
</tr>
<tr>
<td>Ecoflex Urethane Cushion Tiles</td>
<td>DK127 2,500 s.ft.</td>
<td>DK130 2,500 s.ft.</td>
</tr>
</tbody>
</table>

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

Use NuSpraylok ™ 22oz (DK116) 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 30 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.

Follow instruction included in Starter Kit (DK119)

**Tile Installation**

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

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

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).
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.

IMPORTANT: As the tile is placed into position, start with a lower corner and press the tile into place in an upward motion with the palm of the hand. The entire tile should be pressed with the installers’ palm. Do not try to put both corners down at the same time. Do not jam or force the tiles too tightly.

To ensure that the tiles are placed into the correct position and not compressed, the installer should measure 10 tiles. When installing Encycle tiles, the measurement should be between 240 3/16” to 240 7/16”. When installing PVC tiles, the measurement should be between 240 – 240 1/4”.

Special attention should be made when the tiles are trimmed against the walls, baseboards, columns, etc. Tiles should be cut flush, but not to tight where they are forced into position.

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

Use an Orcon steel wheel seam roller or similar roller to blend and enhance the seams. The loop pile modules will have some yarn blossoming at the edges. The face yarn may require occasional trimming.

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 are wheeled traffic is moved in 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 TMG branded adhesives are required to ensure optimum results and are the only approved adhesives that Mohawk Industries will warrant. Failure to use TMG branded adhesives can result in warranties being null and void.

This information, offered as a customer service, is based on The Mohawk Group’s engineering tests and field experience. It is intended for installers with professional experience, to be used at their discretion and risk. The Mohawk Group does not guarantee results and assumes no liability in connection with these installation instructions.