Carpet Tile
Installation Instructions
Ecoflex® AIR Cushion Back
Ecoflex® ICT Vinyl Back
Ecoflex® NXT PVC Free Back
Carpet Tile Installation

Carpet Installation Check Off List

1. Newly poured concrete floors generally will take 30 days per inch to cure. Moisture should not exceed 5 lbs. /1000sf per 24 hours or 80% relative humidity as determined by current ASTM standards. If the results are more than 5 lbs or higher than 80% RH, do not proceed with the installation. Gyprocrete or substrates with excessive dust must be cleaned, and then primed with an approved primer, such as a latex milk additive.

2. The alkalinity or pH in a concrete slab should be between 5 and 9 for a glue-down installation.

3. The floor and room temperature must be acclimated by maintaining the temperature at 65° F and 85° F, and the humidity between 30% and 65%, for at least 48 hours before and during installation. In addition, the carpet and adhesive should be stored under these conditions for at least 24 hours before installation. The installation site must be acclimated with HVAC in operation.

4. When the installation is complete, the jobsite must be maintained at normal service temperature and humidity.

5. Pre-existing adhesive must be 90% removed to have only trace amounts of adhesive showing (10% or less of the old adhesive showing on the subfloor) or hand scrape/mechanically sand smooth and for EcoFlex ICT® apply OptiSeal prior to any installation of Mohawk Group’s carpet tiles. Any cut back adhesive should be scraped smooth and sealed as well. See note #1.

6. Mechanically remove all wax, dirt, grease and paint. DO NOT use solvents to clean the floor. DO NOT use oil based sweeping compounds. Fill cracks more than 1/16" wide with a Portland or cement based patching compound. The floor must be flat to within 1/8" in 10 feet. Use leveling compound when required. Patched areas may need to be primed (consult patch manufacture for requirements) with an approved primer. DO NOT install over resin or silicate based curing compounds.

7. Inspect all carpet prior to cutting and contact your sales representative before installing the carpet if you discover any problems. No claims will be allowed for visible defects after the carpet has been cut and installed.

8. Never cut carpet over carpet as this can result in over penetration of the blade and cutting loops on the lower carpet.

9. Carpet should be protected from heavy traffic and construction dust with a non-staining building material paper. Never use plastic sheeting as it will trap moisture and prevent proper curing of the adhesive. Plastic may also leave residues that can result in rapid soiling after removal.

10. If any of the above conditions are not attainable, contact Mohawk Group Technical Services at 800-833-6954.

Please Note

1. 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.

2. Installation of Mohawk Group’s carpet tiles on a floor outside the scope of the guidelines in this document will void all applicable warranties.

3. The Mohawk Group is not responsible for any product failure due to improper floor preparation and/or installation procedures. The required adhesives are Mohawk Group’s family of adhesives.

4. When installing carpet tiles over raised access floor panels, start installation by overlapping the access panel joints to prevent the seams of the tiles from lining up with the access panel joints. Additionally, all access panels should be sound, level and edges firmly secured to the raised flooring pedestals.
**Carpet Tile Installation**

**Required Equipment**
The following items may be purchased from a local carpet workroom supplier:

- Razor Blades
- Straight Edge
- Mohawk Group’s Adhesives
- Framing Square
- Cushion Back Cutter
- Tape Measure
- 1/16” x 1/32” x 1/32” U-notch trowel (Ecoflex Air Cushion)
- Heavy Duty Frame Paint Roller with 3/8” Nap Roller or a 1/16” x 1/32” x 1/32” U-notch trowel (Ecoflex ICT and Ecoflex NXT)
- Razor Knives
- Chalk line
- Scissors
- Floor Scraper
- 75 lb. Roller or 100 lb. Roller
- Portland Patching Compound
- Mohawk Group’s Adhesives
- Scissors
- Framing Square
- Floor Scraper
- 75 lb. Roller or 100 lb. Roller
- Portland Patching Compound

**Floor Priming**
**Concrete:** Prime if floor is extremely porous or has excessive dust. Note: Any existing sealer or primer must be tested for compatibility with Mohawk Group’s adhesives. 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 if required by patch manufacture.

**NOTE:** When non-asbestos containing cut-back or any incompatible adhesive is present, existing adhesive has evidence of plasticizer migration, or EcoFlex ICT (PVC) products are being installed, the existing adhesive must be properly removed and Mohawk Group’s OptiSeal must be applied over the adhesive residue. Chemical adhesive removers cannot be used to remove old existing adhesives.

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

**Plywood Floors:** Plywood Floors must be completely primed. Plywood substrates must be no less than 3/4” thickness. Particleboard or thin plywood is not an acceptable substrate.

**Site Layout**

1. The starting point in a carpet tile 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.
2. Snap a chalk line parallel to one major wall bisecting the starting point. It will be necessary to offset the center chalk line to assure perimeter modules will be at least half size.
3. 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 below) Meters or feet will be used to lie out the triangle in these proportions. Framing square can also be used.

![Diagram of a 6-8-10 triangle](image)

**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.
**Adhesive Application**

**EnPress Adhesive Application**
- Ecoflex ICT requires EnPress PSA adhesive
- Ecoflex NXT requires EnPress NXT adhesive
- Ecoflex AIR either EnPress PSA or NXT adhesive
- Other adhesives may not be compatible and will void product warranties.
- For Ecoflex ICT and Ecoflex NXT carpet tiles, apply the adhesive with a heavy-duty frame paint roller with a 3/8” nap. A trowel can also be used (1/16”x1/32”x1/32” U notch minimum) For Ecoflex AIR tiles, apply the adhesive with a 1/16”x1/32”x1/32” U-notched trowel.
- The adhesive must be applied in a FULL SPREAD – NOT grid.
- Ensure the proper amount of adhesive is applied to the sub-floor. Prior to installation, mark off a small area of the sub-floor 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.
- 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 must be installed immediately after adhesive has dried. To determined if the adhesive is dry, press finger into adhesive. When dry, adhesive must not transfer to finger.
- For installations that involve both Ecoflex ICT and Ecoflex NXT tiles use EnPress PSA adhesive. Roll the adhesive on under the PVC tile and trowel the adhesive under the NXT tile. If that isn't practical, toweling the adhesive for all tiles is acceptable. Use a 1/16”x1/32”x1/32” U-notch trowel.

**Set-up time is approximately 45 to 90 minutes depending on the climate and humidity.**

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<thead>
<tr>
<th>Spread Method</th>
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<tbody>
<tr>
<td>Ecoflex AIR Cushion Tiles</td>
<td>1/16”x1/32”x1/32”</td>
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<tr>
<td>Ecoflex ICT Tiles</td>
<td>3/8” Roller or 1/16”x1/32”x1/32”</td>
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<tr>
<td>Ecoflex NXT Tiles</td>
<td>3/8” Roller or 1/16”x1/32”x1/32”</td>
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<tr>
<td>1/16”x1/32”x1/32” U-notched trowel (Ecoflex AIR Cushion Tile)</td>
<td>25 - 30 square yards per gallon</td>
</tr>
<tr>
<td>3/8” Nap Roller Approximately 1/16”x1/32”x1/32” (Ecoflex ICT and Ecoflex NXT)</td>
<td>35 - 40 square yards per gallon</td>
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<td>25 - 30 square yards per gallon</td>
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**Adhesive**

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Tile Installation Methods

Before you begin the installation consult product specification to determine which installation format(s) are approved. Shown below are some common installation formats.

*Monolithic* and *Quarter-Turn*

**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 must 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.

**Please 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 Format (Follow No Order)**

Tiles are to be placed without being concerned with the arrow direction (random). Mixing tiles from various boxes during installation will further blend color and design elements. This process is essential for achieving optimal aesthetics.
**Tile Installation**

Make sure to inspect Mohawk Group’s carpet tiles for dye lot, style, quality and shipping damage prior to installation. Do not install any product that has visible problems. For concerns, please contact Technical Services at 800-833-6954.

1. 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.

2. Continue to install tiles in a stair step or pyramid pattern, starting at the center point. Check to ensure tiles are properly aligned at edges during the installation. (See figure to right).

3. 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.

**IMPORTANT:** When installing Ecoflex NXT and AIR tiles, the 10 tile measurement must be between 240 3/16” to 240 7/16”. 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 must 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.

When installing Ecoflex ICT tiles, the 10 tile measurement must be between 240 – 240 1/4”. As the tile is placed into position, slightly apply pressure making sure the seams are tightly joined together.

**Please Note:** Tiles that are trimmed against the walls, baseboards, columns, etc. must be cut flush, but not too tight where they are forced into position. Ensure that the adhesive spread is within 1/2” of walls and other obstructions.

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

5. Use a seam roller to blend and enhance the seams. The loop pile modules will have some yarn blossoming at the edges. The face yarn will 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. The NXT tile must have the backing cut slightly shorter by cutting the backing at a slight angle. A transition strip must be used to protect any exposed edges.
Carpet Tile Installation

**Stairs**
Carpet Tiles Are **NOT** Recommended For Stairs

**Chair Pads**
Chair pads are not required, but are recommended for use under chairs with roller casters. Casters must 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 carpet tiles will be required more frequently when pads are not used.

**Replacement Tiles**
Occasionally, it will 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 will be noticed when the tile is replaced, however, this difference usually diminishes in a short time.

**Please Note:** The use of Mohawk Group’s branded adhesives are required to ensure optimum results and are the only approved adhesives that the Mohawk Group will warrant. Failure to use our branded adhesives can result in warranties being null and void.

This information, offered as a customer service, is based on 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.