



Carpet Tile & Plank

EcoFlex® NXT, EcoFlex® AIR, EcoFlex® ONE, EcoFlex® Matrix, and EcoFlex® Matrix ULC

INSTALLATION

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

SITE CONDITIONS

Concrete slabs must be tested for moisture by the current version of ASTM F2170. (Consult CRI 104 part 6.2 for standard test method for determining relative humidity on concrete floor slabs using In-Situ Probes.) Below are the requirements for each Mohawk Group Carpet Tile product.

EcoFlex® NXT, EcoFlex® MATRIX, and EcoFlex® MATRIX ULC

The following applies to renovation and new pour concrete:

On or Below Grade:

An ASTM E-1745, Class B minimum vapor barrier must be in place and directly in contact with the concrete

- If reading is below 95% RH, EnPress adhesive, SimplySpray adhesive or FlexLok tabs only
- If reading exceeds 95% RH, and no signs of visible moisture are present, Mohawk FlexLok tabs are an approved installation method.
- For thorough guidelines regarding site conditions, floor prep and installation consult the SimplySpray technical data sheet or the complete set of FlexLok installation instructions.

Above Grade:

- If reading is below 95% RH, EnPress adhesive, SimplySpray adhesive or FlexLok tabs only
- If reading exceeds 95% RH, and no signs of visible moisture are present, Mohawk FlexLok tabs are an approved installation method.
- For thorough guidelines regarding site conditions, floor prep and installation consult the SimplySpray technical data sheet or the complete set of FlexLok installation instructions.

The alkalinity or pH in a concrete slab must be tested by the current version of ASTM F710 for a glue-down installation. If pH exceeds 12, consult Mohawk Group Technical Services at 800.833.6954.

EcoFlex® AIR & EcoFlex® ONE

The following applies to renovation and new pour concrete:

On or Below Grade:

An ASTM E-1745, Class B minimum vapor barrier must be in place and directly in contact with the concrete.



- No pH or RH testing required when using EnPress adhesive, SimplySpray adhesive or FlexLok tabs and the following –
 - No Sign of visible moisture
 - Slab is older than 30 days

Above Grade:

- No pH or RH testing required when using EnPress Adhesive, SimplySpray adhesive or FlexLok Tabs and the following –
 - No Sign of visible moisture
 - Slab is older than 30 days

Hydrostatic Pressure

If the concrete slab is visibly wet, or experiencing hydrostatic pressure, the cause of the moisture should be properly addressed prior to installation of floor covering. Consult Mohawk Group Technical Services at 800.833.6954.

TEMPERATURE

The floor and room temperature must be acclimated by maintaining the temperature between 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 controlled temperature and humidity.

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

FLOOR PREPARATION AND EXISTING ADHESIVES

It is the responsibility of the Flooring Contractor to ensure that all installation guidelines are followed.

Floor Preparation

Floor must be flat, smooth, and clean of any substance that may prevent a good adhesive bond.

- Remove dirt, wax, grease, paint, oil, dust, and any other substances from the floor surface.
- Do not use solvent cleaners or oil based sweeping compounds to remove these substances.
- Fill in cracks and uneven floor areas with a cement-based patching and/or self-leveling compound which contains Portland or high alumina cement and meets or exceeds the compressive strength of 3000 PSI.
- Prime patched and leveled areas with latex primer as per manufacturer's guidelines.

Note: Do not disturb flooring or adhesives containing asbestos until you contact the Resilient Floor Covering Institute for guidance on proper removal/handling of asbestos.

Existing Adhesives

Existing adhesives must be handled properly to prevent potential bonding and/or reactive issues.

- Remove existing adhesives* from the floor to create a flat, smooth, and clean surface.
- Do not use chemical or citrus-based adhesive removers to remove existing adhesives.



- When asphaltic cutback adhesive has been removed, floor must be sealed with OptiSeal.

*When installing EcoFlex® Air or EcoFlex® ONE, removal of existing adhesive is not necessary, unless high moisture is present.

Note: If floor has been chemically abated, contact Mohawk Group Technical Services at 800.833.6954 for guidance before starting installation process.

Mohawk Group is not responsible for improper floor preparation or failure to follow installation guidelines.

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 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 surfaces, prime the patched areas if required by patch manufacturer.
- Gypcrete or substrates with excessive dust must be cleaned and then primed with a product such as PrimeCoat to ensure proper bonding.
- Bond Test must be performed over concrete substrates with unidentified sealers or primers: Adhere a small area of 2 to 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.
- Wood substrates are required to be structurally sound, flat, dry and securely anchored with $\frac{3}{4}$ " minimum thickness. Substrates, such as plywood, OSB or other materials must be flooring grade (APA approved) and installed according to manufacturer specifications. Irregularities, imperfections and joints must be properly patched and prepared. Primer such as PrimeCoat is required over any wood substrate.

INSTALLATION

Required Equipment

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

Razor Blades	Mohawk Group Carpet Tile Adhesive or FlexLok+ Tabs
Framing Square	Straight Edge
Floor Scraper	Tape Measure
Razor Knives	Chalk Line
Scissors	Cement-based Patching Compound
75 lb. Roller or 100 lb. Roller	Heavy Duty Frame Paint Roller with 3/8" Nap Roller OR a 1/16" x 1/32" x 1/32" U-Notch Trowel

Product Inspection

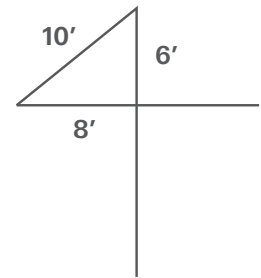
Make sure to inspect Mohawk Group carpet tiles for dye lot, style, quality and shipping damage prior to installation. Do not install any product that has visible problems. No claims will be allowed for visible defects after the carpet has been cut and installed.

For concerns, please contact Technical Services at 800.833.6954.



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 lay out the triangle in these proportions. A framing square can also be used.



Adhesive Application

EnPress Adhesive Application

1. Use Heavy Duty Frame Paint Roller with 3/8" Nap Roller or 1/16"x1/32"x1x32" U-Notch Trowel.
2. The use of Mohawk Group branded adhesives is required to ensure optimum results and are the only approved adhesives that are authorized by the Mohawk Group. The Mohawk Group will not be responsible for damage caused by a failure to use our branded adhesives.
3. The adhesive must be applied in a FULL SPREAD – NOT grid.
4. 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.
 - When rolling the adhesive, the spread rate is 35-40 yards per gallon and 25-30 yards per gallon using a trowel.
5. 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.
6. Allow the adhesive to dry to a clear and tacky state. Tiles must be installed immediately after adhesive has dried. To determine if the adhesive is dry, press finger into adhesive. When dry, adhesive will not transfer to finger.
7. Set-up time is approximately 45 to 90 minutes depending on the climate and humidity.

SimplySpray

Coverage Per Can: 100–125 ft²

1. HVAC must be continuously operated for a minimum of 72 hours at a temperature of no less than 68°F (20°C) prior to installation.
2. Protect from overspray with a spray shield, drop cloths, paper, or masking.
3. Shake aerosol can well.
4. Remove white cap.
5. Measure and mark out an area of 100 ft² (10' x 10') for a porous subfloor, 125 ft² (10' x 12.5') for a nonporous subfloor, prior to using the first can.
6. Spray out one full adhesive can completely within marked area to achieve a visual reference.
7. Stand straight up to spray. Hold can upside down, approximately 20–30 inches (50–76 cm) from the substrate, aim at floor and press tip with finger.



8. Match spray pattern by placing guide on the floor.
9. Walk right to left smoothly to achieve results in photo on reverse side. Adhesive should spray out in a wide mist and fall similar to snow.

NOTE: Spraying in a sweeping motion may result in an inconsistent spray pattern. Excess buildup or inconsistent spray pattern on substrate may cause telegraphing. Avoid extremely heavy application.

- To ensure optimal spray pattern, remove any adhesive buildup that may occur during the application process.
- If overspray occurs, it may be removed with a damp cloth while the adhesive is still wet.
- Use mineral spirits for dry overspray.

10. Allow adhesive to dry until there is no adhesive transfer when lightly touched (10–20 min).

- High humidity and/or low temperature increases tack time.
- Open time after tack is four hours. While open, ensure that adhesive is not contaminated by dust.

11. Follow flooring manufacturer’s recommendations for installation.

- Position tile or plank; ensure proper alignment before application of pressure. Reposition as necessary.
- Roll flooring with a 75–100 lb (34–45 kg) roller within one hour after installation to complete the bonding process.
- After rolling, floor is ready for all access.

Tab Application Rate

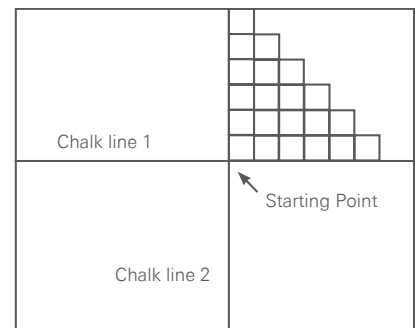
24" x 24" Tiles	Coverage (Sq. Yds./Box)
Monolithic, Quarter Turn, Multidirectional	150
Horizontal and Vertical Ashlar	100

12" x 36" Tiles	Coverage (Sq. Yds./Box)
Monolithic	110
Ashlar, Basketweave, Herringbone	80

Tiles & Planks	Coverage (Sq. Yds./Box)
Monolithic, Stepping, Half-Lap, Brick Ashlar, Random, Herringbone	100

Tile Installation Methods

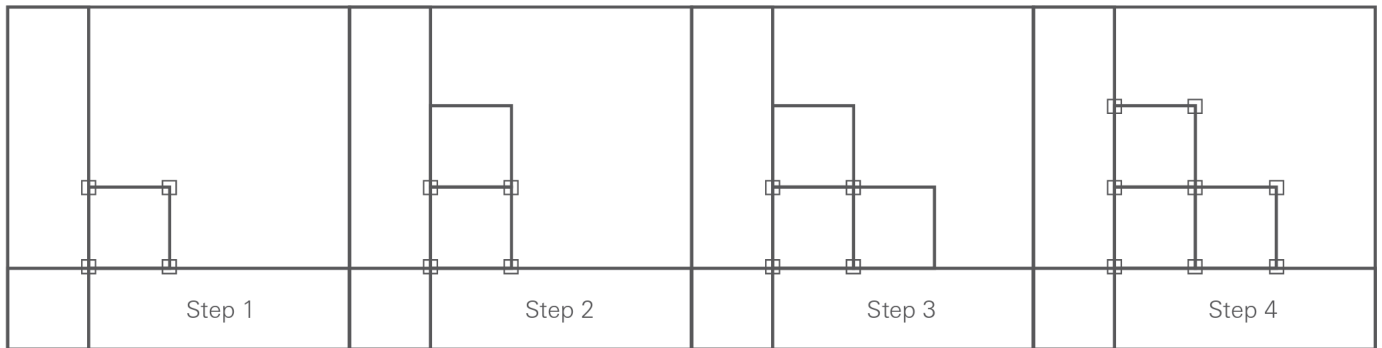
1. Start from the intersection point in the center of the floor with the 1st tile. Place a tab under each edge of the tile at the corners, leaving ¾ of the tab exposed.
2. Carefully insert the second tile in place then firmly press the tile into the tab.
3. Continue with the third tile, creating a stair 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.)
4. Place tabs under the edges of the second and third tile.





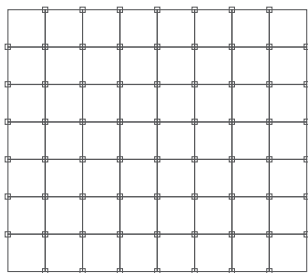
5. Continue with the stair step method until the entire area is completed.
6. All carpet tiles must be rolled with a 75 lb. or 100 lb. roller.

NOTE: Before pressing tile into the adhesive tab, fit the tiles together, being careful not to trap face yarns between or under the edges of the tile and/or crease the tab under the tile.

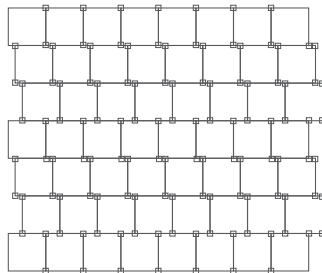


Tab Placement

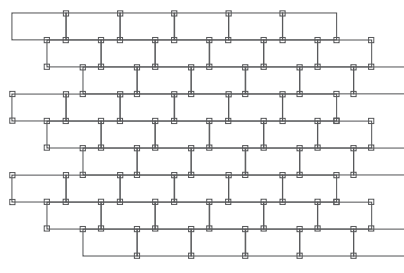
Tabs must be placed on every corner of the tile or the plank. A tab is also required at any seam next to the wall or transition. 12x36 planks require an additional tab in the middle along the 36" side. See Below.



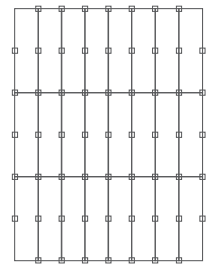
MONOLITHIC, QUARTER-TURN & MULTIDIRECTIONAL (24" X 24" TILES)



BRICK & VERTICAL ASHLAR (24" X 24" TILES)



12" X 36" PLANKS



24" X 48" PLANKS

Tile Installation Methods

Before you begin the installation, consult product specifications to determine which installation formats are approved. Shown below are some common installation formats.

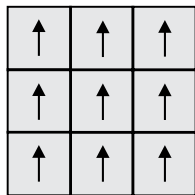
Ashlar Formats

In the Ashlar installation formats, each row of carpet tiles is shifted 8", either in a brick format or vertically (see diagrams below). 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

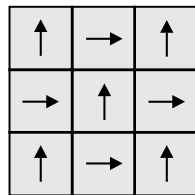


the carpet tiles, eliminating line-on-line or dark-on-dark effects that can create a skewed look in the finished installation.

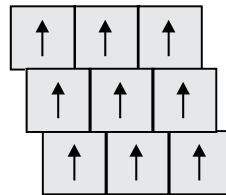
Please note: Carpet tile products installed in the Ashlar format will not have the same finished appearance as the same product in a broadloom (12' width).



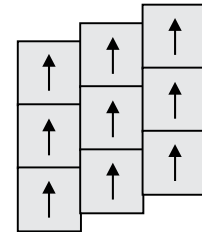
MONOLITHIC



QUARTER TURN



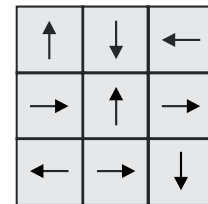
BRICK ASHLAR,
3-STEP 8" OFFSET



VERTICAL ASHLAR
3-STEP 8" OFFSET

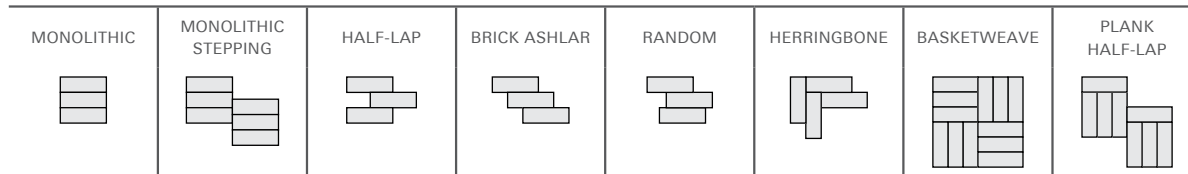
Multi-Directional Format (Follow No Order)

Tiles are to be placed without concern for 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.

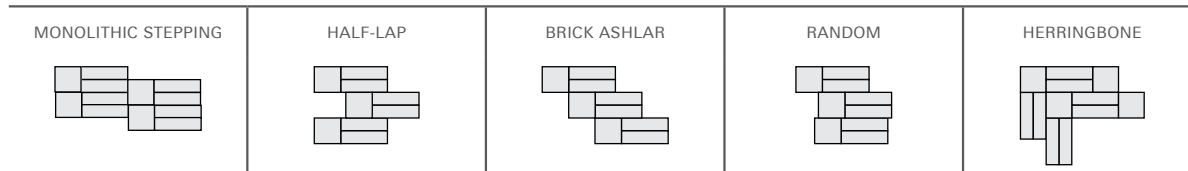


Plank Tile Installation Methods

12 x 36



12 x 36 + 24 x 24

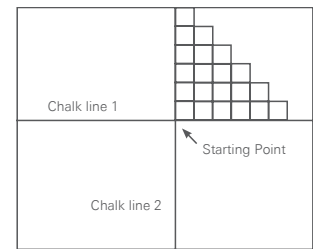


Fitting Of Tile

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 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. 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.
4. Press or roll the tiles into the adhesive.

Important Tile Measurements

- When installing EcoFlex® NXT, EcoFlex® Matrix, EcoFlex® Matrix ULC, EcoFlex® AIR, and EcoFlex® ONE tiles, the 10-tile measurement must be between 240 3/16" to 240 7/16".

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

- All carpet tiles must be rolled with a 75 lb. or 100 lb. roller.
- A seam roller can be used to blend and enhance the seams. The loop pile modules will have some yarn blossoming at the edges. The face yarn or primary backing 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 around other objects that must be cut. The 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. Never use a cut edge as a seam.

Tiles can also be cut by measuring and cutting from the back with a straight edge and knife or by running them up the wall and cutting them with a knife or wall trimmer.

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

For all carpets where no transition molding is used, apply a minimum of 1/8" bead of seam/edge sealer to the edge of the carpet along the entire transition.

POST INSTALLATION CARE

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. Plywood or Masonite boards should be used when moving heavy equipment.



STAIRS

Carpet tiles and Flexlok+ tabs are NOT recommended for stairs.

Flexlok+ tabs are NOT recommended for ramps, inclines or under heavy rolling loads. Mohawk Pressure Sensitive Adhesive must be used in these areas.

CHAIR PADS

Chair pads 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. When replacing tiles, a new tab must be used.

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