

# Carpet Tile & Plank Direct Glue Down

## INSTALLATION

Ultraset®  
Ultraset® NXT  
Ultraset® AIR  
Ultraset® Matrix

160 South Industrial Blvd.  
Calhoun, GA. 30701  
AladdinCommercial.com

Technical Services Department  
508 East Morris St.  
Dalton, GA 30721  
800.833.6954  
product\_tech@mohawkind.com

This information, offered as a customer service, is based on Aladdin's engineering test and field experience. It is intended for installers with professional experience to be used at their discretion and risk. Aladdin 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 Aladdin Carpet Tile products.

### **Ultrasound NXT & Ultrasound MATRIX**

#### **The following applies to 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 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 complete set of FlexLok installation instructions.

Above Grade:

- If reading is below 95% RH, Enpress 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 complete set of FlexLok installation instructions.

#### **The following applies to renovation:**

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 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 complete set of FlexLok installation instructions.

Above Grade:

- If reading is below 95% RH, Enpress 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 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 Aladdin Technical Services at 800.833.6954

## **Ultraset AIR**

### **The following applies to 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 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 and the following –
  - No Sign of visible moisture
  - Slab is older than 30 days

### **The following applies to renovation:**

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 and the following –
  - No Sign of visible moisture

Above Grade:

- No pH or RH testing required when using Enpress Adhesive and the following –
  - No Sign of visible moisture

## **Ultraset**

### **The following applies to 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 80% RH, Enpress or FlexLok Tabs
- If reading is between 80-90% RH, Optiseal is required with Enpress adhesive or with FlexLok Tabs
- If reading exceeds 90% RH, consult Aladdin Technical Services at 800.833.6954

Above Grade:

- If reading is below 80% RH, Enpress adhesive or FlexLok Tabs
- If reading is between 80-90% RH, Optiseal is required with Enpress adhesive or with FlexLok Tabs
- If reading exceeds 90% RH, consult Aladdin Technical Services at 800.833.6954

### **The following applies to renovation:**

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 80% RH, Enpress adhesive or FlexLok Tabs
- If reading is between 80-90% RH, Optiseal is required with Enpress adhesive or with FlexLok Tabs
- If reading exceeds 90% RH, consult Aladdin Technical Services at 800.833.6954

Above Grade:

- If reading is below 80% RH, Enpress adhesive or FlexLok Tabs
- If reading is between 80-90%, Optiseal is required with Enpress adhesive or with FlexLok Tabs
- If reading exceeds 90% RH, consult Aladdin Technical Services at 800.833.6954

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 9, on new pour or renovation, consult Aladdin Technical Services at 800.833.6954

## **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 Aladdin 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**

Pre-existing adhesive ridges should be mechanically or hand scraped to a residue to create a smooth flat surface before installing our carpet products. Mohawk cannot be held liable for issues arising from excess adhesive left on the substrate; this includes, but is not limited to, bond failures between encapsulated / skim coated old adhesive and patching compounds used in place of removing adhesive (mechanically or hand scraped) to a smooth surface.

- When active non-asbestos containing cut back adhesive, or any incompatible adhesive is present, the existing adhesive should be scraped smooth with only residual adhesive remaining in the pores of the substrate and properly sealed with OptiSeal when installing Ultraset, Ultraset NXT or Ultraset Matrix.
- Chemical adhesive removers cannot be used to remove old existing adhesives.
- 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 larger than 1/16" wide with a 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 with an approved primer such as PrimeCoat. (Consult patch manufacturer for requirements.) DO NOT install over resin or silicate based curing compounds.
- Floor tiles containing asbestos, any adhesive possibly containing asbestos, or other floor coverings containing asbestos 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
- 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.
- Mohawk will not be responsible for any damages arising out of the failure to follow these guidelines. Aladdin is not responsible for any product failure due to improper floor preparation and/or improper installation including the use of unauthorized adhesive.

Pre-existing adhesives, once scraped smooth, should be treated as follows:

### **Ultraset NXT and Ultraset Matrix:**

No further treatment required unless old adhesive shows signs of plasticizer migration, in which case we recommend applying OptiSeal to the substrate.

### **Ultraset Air:**

No further treatment required

### **Ultraset:**

OptiSeal must be applied to the substrate after proper removal of adhesive

## **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 Aladdin'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 ¾" 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:

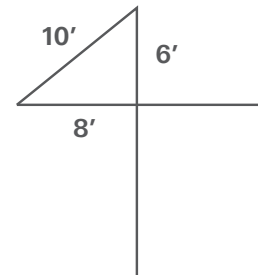
Razor Blades	Straight Edge
Aladdin EnPress Adhesive	Framing Square
Floor Scraper	Tape Measure
Razor Knives	Chalk Line
Scissors	Cement-based Patching Compound
75 lb. Roller or 100 lb. Roller	Heave Duty Frame Paint Roller with 3/8" Nap Roller OR a 1/16" x 1/32" U-Notch Trowel

### Product Inspection

Make sure to inspect Aladdin 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.



### 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

- Ultraset, NXT, Matrix and AIR require EnPress Adhesive.

- Ultraset Air requires Enpress adhesive using a 1/16" x 1/32" x 1/32" U-Notch Trowel.
- The use of Aladdin branded adhesives is required to ensure optimum results and are the only approved adhesives that are authorized by the Aladdin. The Aladdin will not be responsible for damage caused by a failure to use our branded adhesives.
- 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.
  - When rolling the adhesive, the spread rate is 35-40 yards per gallon and 25-30 yards per gallon using a trowel.
- 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 determine if the adhesive is dry, press finger into adhesive. When dry, adhesive will not transfer to finger.

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

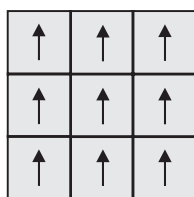
### Tile Installation Methods

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

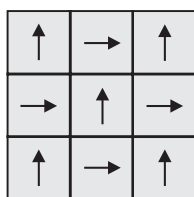
### Ashlar Formats

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.

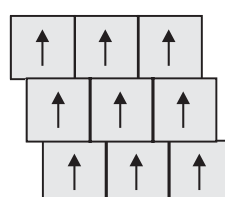
Please note: Carpet tile products installed in the Ashlar format will not have the same finished appearance as the same product in a broadloom (12' width).



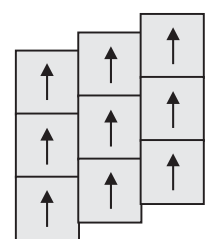
MONOLITHIC



QUARTER TURN



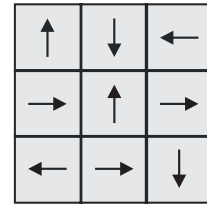
BRICK ASHLAR,  
3-STEP 8" OFFSET



VERTICAL ASHLAR  
3-STEP 8" OFFSET

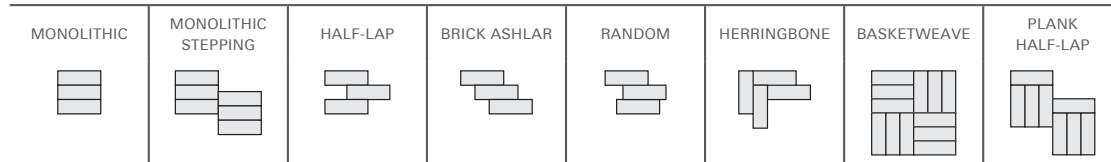
### Multi-Directional Format (Follow No Order)

Tiles are to be placed without being 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.

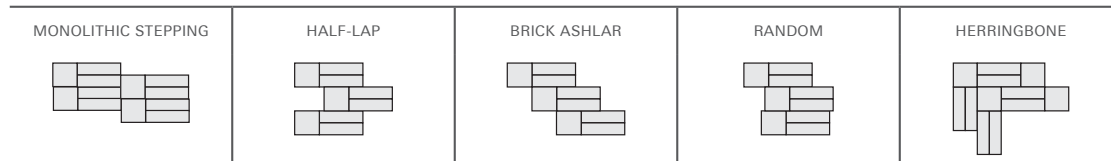


### Plank Tile Installation Methods

#### 12 x 36

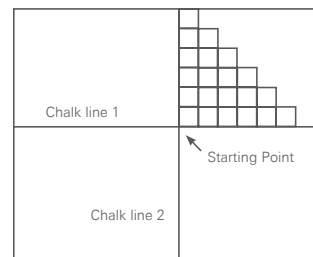


#### 12 x 36 + 24 x 24



### 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 Ultraset NXT, Ultraset Matrix and Ultraset AIR tiles, the 10-tile measurement must be between 240 3/16" to 240 7/16".
- When installing Ultraset tiles, the 10-tile measurement must be between 240" to 240 1/4".

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 Ultraset NXT and Ultraset Matrix 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.

## **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 are NOT recommended for stairs.

## **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.