INSTALLATION PROCEDURES FOR MANNINGTON'S rEvolve ™ Carpet Tile

> **MAKE SURE YOU INSPECT CARPET MODULES PRIOR TO INSTALLATION.**
> **NO CLAIMS WILL BE HONORED IF MODULES ARE INSTALLED WITH VISIBLE DEFECTS.**
> **READ ALL INSTRUCTIONS PRIOR TO BEGINNING INSTALLATION.**

SITE AND MODULAR MATERIAL CONDITIONING IS A MUST

Modules must be conditioned to room temperature for 24 hours prior to installation. Floor temperatures must be a minimum of 65° for 24 hours prior to installation. Floor temperature can usually vary 5-10° lower than room temperature. Relative humidity must be between 10% - 65% maximum for 24 hours prior to installation. These conditions must also be maintained for 48 hours after completion of installation.

SURFACE PREPARATION

Dust, dirt, debris, and non-compatible adhesive must be removed before installation begins. Surfaces must be smooth and level with all holes and cracks filled with a latex based Portland cement patching compound.

LATEX ADHESIVES

Must be removed and floors sanded or covered with a skim coat of Portland patching compound. Latex adhesive may also be covered with TriSeal (800-367-4583). **Note:** Failure to remove or seal old latex adhesive may cause installation failure, plasticizer migration, shifting, buckling or edge curling; these conditions will not be covered under warranty.

CUT BACK ADHESIVES

Must be wet scrapped and covered with 2 applications of TriSeal (800-367-4583). **Note:** Failure to remove or seal old cut back adhesive may cause installation failure, plasticizer migration, shifting, buckling or edge curling; these conditions will not be covered under warranty.

MOISTURE TESTING

Sub-floor surfaces must be tested for moisture content. It is the responsibility of the general contractor and/or installer to perform moisture test prior to starting the installation. MANNINGTON recommends calcium chloride tests be performed to detect the presence of moisture. **Acceptable results require that moisture content does not exceed 8 lbs. Per 1,000 square feet per 24 hours.** Mannington also accepts the Relative Humidity ASTME-F-2170 test method. **Acceptable moisture levels are 90% maximum relative humidity.** Alkalinity must have a maximum Ph level of 10 or less. Contact Technical Services for recommendations for moisture readings over 8 lbs., 90% RH or Ph levels over 10. **Note:** Moisture emissions in excess of the recommended levels can cause the adhesive to chemically break down and fail. This condition can result in shifting, bucking, or edge curling of the modules.

SUBFLOORS

New Concrete – New concrete must be fully cured and free of moisture. New concrete requires a curing period of approximately 90 days. Test for moisture and alkalinity must be performed. Ph should register between 5 and 9. If a moisture control system is required contact technical services for additional information.

Old Concrete – Old concrete should also be checked for moisture. Dry, dusty, porous floors must be sealed with a latex primer.

Wood – Wood floors must be smooth and level. If floor is uneven, an approved underlayment may be required. Old finishes must be tested for compatibility with adhesives or removed and porous wood sealed.

Terrazzo / Marble – Level all grout lines with a latex based Portland cement patching compound. Glossy surfaces must be sanded for adhesive bond.

Hard Surfaces – Tiles must be well secured to the floor or removed. Broken, damaged, or loose tiles must be replaced. Wax must be removed from VCT before applying adhesive. Existing sheet vinyl is not a suitable substrate for modular installation and should be removed.

OLD CARPET

Remove old carpet and check adhesive for compatibility. If unsure remove or cover adhesive with a Portland based patching compound or encapsulate with TriSeal (800-367-4583)

FULL ADHESIVE METHODS

MANNINGTON recommends a full spread adhesive system for the most trouble free installation. Modules can easily shift during the installation process or by heavy rolling traffic if not fully adhered to the substrate. Fully spread Mannington's RV-500 pressure sensitive adhesive in starting quadrant using a **1/16 x 1/32 x 1/32 "U" notch trowel**. Allow to dry so adhesive does not transfer when touched. Proceed with tile placement. Spread rate should be approximately 25 sq. yd. per gallon for trowel on applications. **Note:** Inadequate amounts of adhesive can cause modules to shift and move and will not be covered under warranty. Strictly adhere to recommended spread rates. Use a **1/16 x 1/32 x 1/32 "U"**notch trowel to achieve the proper coverage. **Note**: For Mannington's lifetime limited bond warranty RV-500 must be used. Mannington will not be responsible for the adhesive bond where other adhesives have been used.

PALLET AND BOX SEQUENCING

It is very important to install MANNINGTON Modular 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 project is complete. Installing MANNINGTON Modular tiles by carton sequence will assure the most even uniform look possible.

INSTALLATION METHODS

MANNINGTON'S CARPET TILE MAY HAVE A SPECIFIC RECOMMENDED INSTALLTION METHOD. PLEASE REFER TO THE PRODUCT SPECIFICATION SHEET OR ARCHITECT FOLDER FOR INSTALLATION RECOMMENDATIONS. Mannington Commercial's modular carpet tile can be installed in any configuration as long as it is visually acceptable to the end user. The installation method has nothing to do with performance or warranties. Please note that all patterns and colors may not be aesthetically acceptable with certain installations methods. A mock up area is recommended to allow all parities to review modules in various configurations i.e.; monolithic, quarter turn, random, ashlar etc. Mannington evaluates each product and recommends the installation method for the best aesthetics other methods would be at the owner's discretion.

TILE PLACEMENT

Starting in the corner of one quadrant, install tiles in a pyramid fashion. Install by butting edges together evenly, **being careful not to compress modules** (this can cause peaked edges). Arrows are embossed or printed on the module backing to show pile direction. To ensure proper alignment, check spacing every ten modules. Measure ten 24-inch modules for a total of 240 inches; proper spacing should not be less than 240 inches and no more than 240 ¼ inches. Continue to check spacing every ten modules throughout the entire installation. Roll entire job with 75-100 lb roller after completion of installation.

EXPANSION GAP AT PERIMETER WALLS

It is very important to leave a ¼" gap at all perimeter walls.
Cut doorways net to frames.

CUTTING / TRIMMING

Carpet modules will require cutting at perimeters, floor electrical outlets, and door openings. Whenever modules are cut or trimmed, adhesive must be used. Loop pile modules may require some trimming or clipping of tufts. This is typical of this type construction and is not a manufacturing problem. Small pieces of carpet tile should also have glue applied to the backing to help hold them in place.

FLATWIRE CABLE / TRENCH HEADERS

Flat-wire cables are easily accessible when carpet modules are used. Cable should be centered under modules and no adhesive used unless approved by the manufacturer. Trench headers require a control grid of adhesive on either side of header panels to prevent movement.

STAIRS
Use a raised stair nosing and cut tiles to fit nosing, both step and riser. Use full spread adhesive under modules.

FINISHED INSTALLATION
When heavy furniture and wheeled traffic is moved over tiles, use plywood runner to avoid tile shifting. Roll entire job with a 75-100 pound roller.

CHAIR PADS
Chair pads 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 modules will decrease and maintenance and/or shifting of the modules may be required more frequently.

LOOP PILE CONSTRUCTION
Carpet modules with loop pile constructions may experience yarn blossoming at the edges, which is consistent with this type of construction. Clipping or shearing the yarn edges can remedy this condition.

TILE ARRANGEMENT
Some carpet styles require more attention from the installers during installation. Due to the light row, dark row construction of these products, dark lines may appear at the edges. **This is not a manufacturing defect**. These products will require shifting tiles around to avoid dark lines at the edges.

Some carpet tile constructions are designed for random installation. This type of carpet tile installation is very installer friendly because it eliminates having to locate the directional arrow on back of the tile. There is still a possibility of having to shift the tiles around to avoid dark lines at the edges.

REPLACEMENT TILES
On occasion, it may be necessary to replace damaged or heavily soiled modules. Modules can be replaced with new MANNINGTON tiles from on-site inventory or from another area of the installation. A difference of appearance may be noticed when modules are replaced; this difference usually diminishes in a short time.

CARPET TILE APPEARANCE
Carpet module seams are usually noticeable on a new installation and do not typically have a seamless appearance like broadloom carpet. They are die cut from the face, which can create small gaps at the seams. Pile crush can occur from the bottom to the top of the pallets and may appear to have a color shade variance from tile to tile. Both of these conditions will improve considerably after a " walk-in" period of approximately 60-90 days. This allows the yarn to acclimate and respond to the crush from the stacked cartons on the pallets. Normal foot traffic and regular vacuuming will also improve seam appearance. The use of a seam tractor can normally blend the yarn at the seams quickly. Pile lifting and/or wet extraction can decrease the time needed for "walk-in" acclamation.

The procedures listed above are our best recommendations for installing rEvolve™ (Carpet Tile) Backing. This document and other literature are available upon request. If you have further questions or require additional information, please contact our Technical Services Department at 800-241-2262 Ext. 3.   revolveinst – 3-2-18