

## **Installation Instructions for Mainstreet Carpet Tiles**

### **IMPORTANT NOTICES**

All carpet tiles should be carefully inspected for damage or defects prior to installation. Beaulieu will not be responsible for any cost associated with replacement or repair as a result of damaged or defective tiles being installed when said damage or defects were identifiable prior to installation. These Installation Instructions cover most installation procedures. If you encounter any conditions or defects during installation that could jeopardize the installation or affect the installation procedure, you should STOP the installation immediately and call the Beaulieu Help Desk: 800-387-3155. The carpet tiles are warranted in accordance with Beaulieu's Standard Product Warranty. If you do not have a copy of Beaulieu's Standard Product Warranty and wish to obtain one, call the Beaulieu Help Desk.

EXCEPT AS EXPRESSLY PROVIDED IN THE STANDARD PRODUCT WARRANTY, BEAULIEU MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF ITS PRODUCTS FOR ANY PARTICULAR PURPOSES, AND HEREBY DISCLAIMS THE SAME. Without limiting the foregoing, Beaulieu will not be responsible for staining, soiling, contamination, tears, burns, cuts, pulls or other damage, deterioration or loss caused by abuse, misuse, improper installation, improper maintenance or failure to protect carpet tiles during building construction. Beaulieu shall not be responsible for any damage or loss resulting from failure to strictly follow any part of these Installation Instructions, and such failure shall void any and all portions of the Standard Product Warranty that are affected by such failure.

WARNING: IN THE EVENT THAT ANY ASBESTOS-CONTAINING MATERIALS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED DURING INSTALLATION, YOU SHOULD STOP THE INSTALLATION IMMEDIATELY AND OBTAIN ASSISTANCE FROM A QUALIFIED REMEDIATION CONSULTANT OR CONTRACTOR PRIOR TO PROCEEDING.

### **PRE-INSTALLATION VISIT**

New concrete needs at least 90 days to dry under ideal conditions. Lightweight concrete and concrete poured above grade in metal pans take a considerably longer time to dry. Installation cannot begin until it is fully dried and in compliance with moisture and alkalinity requirements. The temperature of your job site must stay within  $60^{\circ}$  F (15.5° C) and  $85^{\circ}$ F (29.5°C) with relative humidity between  $40^{\circ}$  -  $60^{\circ}$  for  $48^{\circ}$  -  $72^{\circ}$  hours prior to, during, and  $48^{\circ}$  -  $72^{\circ}$  hours after installation. So be sure the heating and air conditioning system is operating. All carpet tiles must be removed from the cartons and allowed to adjust to the job site temperature for  $48^{\circ}$  hours prior to installation.

### **CONCRETE MOISTURE AND ALKALINITY TESTING**

NOTE: The required pre-installation moisture and alkalinity tests should be performed to ASTM standards. Per CRI guidelines, it is recommended that these tests be performed by a qualified independent testing consultant. Beaulieu will not be responsible for failures, problems, or damage arising from high moisture, high alkalinity, or other subfloor conditions.



NOTE: New or bare concrete is defined as concrete free of adhesive residue, paint, sealers, primers and other applied materials.

Before installing, all concrete floors, regardless of age, must comply with the moisture and pH requirements stated below, and must otherwise be suitable for carpet tile installation. The moisture conditions of the concrete should be determined by use of the In-Situ probe relative humidity (rH) test method (ASTM F 2170). Beaulieu requires the use of a moisture testing device manufactured by Wagner or Vasela. The testing device must be properly maintained and calibrated in accordance with the manufacturer's specifications and frequency recommendations. Certificates of calibration should be maintained for test validation.

For glue-down installations, you may install over concrete with up to 80 % rH and with a pH up to 9.0. NOTE: Moisture and pH test results reflect only the conditions of the concrete at the time of testing. If the moisture or pH test results are outside of the stated allowable limits, STOP and DO NOT PROCEED with the installation. Seek further advice from Beaulieu before proceeding. Refer to Preparing the Subfloor for additional information concerning issues relating to surface conditions of the concrete slab prior to installation.

# **OIL CONTAMINATED CONCRETE (STEPS TO TAKE)**

Since concrete is porous, oil that has seeped into the surface can be challenging to remove. Utilize an industrial cleaner-degreaser (various options are available in the market) to clean the floor. Post-cleaning, the floor should appear even in color without any spots that repel water (test by sprinkling water on the floor once it's dry), indicating the potential presence of oil or grease. Allow the floor to fully dry before continuing with the recommended method of surface preparation.

Regarding the use of muriatic acid: Employing muriatic acid for cleaning concrete can effectively brighten and remove various stains if applied properly. It can tackle rust, oil stains, algae, and paint residues in a single use by applying the chemical and then pressure washing the area.

### PRODUCT INSPECTION

INSPECT BEAULIEU CARPET TILES TO BE SURE THEY MEET THE ORDER SPECIFICATIONS. IF THE WRONG PRODUCT OR COLOR IS INSTALLED, BEAULIEU WILL NOT BE RESPONSIBLE FOR CORRECTING THE PROBLEM.

The labels on each carton indicate product style, pattern, color, run number and dye lot. Be sure the style, pattern and color match the specifications for each area of your installation. On larger installations, you may find that some cartons have different run numbers or dye lots. To avoid subtle variations in the finished installation, do not mix run numbers or dye lots in the same area. Check to confirm that you have the right quantity and correct installation method. Be sure you also have enough tiles to establish an "attic stock" for future replacements. Open all cartons to inspect for damaged or defective tiles. If you find any, call the Beaulieu Help Desk.

#### LIGHTING

Ensure adequate overhead lighting is provided. Ideally, lighting should mimic or consist of the same conditions expected at time of occupancy.



INSTALLATION OF CARPET TILES SHOULD BE THE LAST ITEM ON THE CONSTRUCTION SCHEDULE. CAREFULLY CONSIDER THE RISKS IF YOU ARE ASKED TO INSTALL CARPET TILES TOO EARLY. IF CARPET TILES ARE INSTALLED BEFORE CONSTRUCTION IS COMPLETE, ANY STAINING, SOILING OR DAMAGE CAUSED BY OTHER TRADES MAY VOID THE PRODUCT WARRANTY.

#### **CARPET TILES POSITIONING**

An arrow is printed on the back of each carpet tile to indicate pile direction. Make sure the arrows point in the same direction throughout your installation.

Some Beaulieu tiles are designed to be installed in a parquet pattern. In this case, the arrows should be turned 90 degrees every other tile.

Some Beaulieu tiles are designed to be installed in an ashlar pattern by offsetting the front and back tile joints.

Some Beaulieu tiles are designed to be installed in a brick pattern by offsetting the side joints of the tiles.

For carpet tile patterns that include numbers on the backing, Beaulieu recommends to randomize the numbers during installation for an optimal visual effect.

\*Note, though the numbers indicate tiles with similar visuals, they do not represent a true pattern match.

# **TOOLS**

Proper installation requires tools on the following checklist:

- English/Metric steel measuring tape
- Hammer
- Scraper
- Sander
- Steel straight edge
- Carpenter's square
- White chalk line
- Carpet knife
- Carpet knife replacement blades
- Adhesive, follow manufacturer's specifications and instructions for required roller or trowel size
- Broom
- Vacuum
- Floor Roller 75 lb

NOTE: BEAULIEU ASSUMES NO LIABILITY FOR ISSUES RELATED TO OR RESULTING FROM INSTALLING OUT OF SPECIFICATION, INCLUDING, BUT NOT LIMITED TO, RECOMMENDED INSTALLATION METHOD.



## PREPARING THE SUBFLOOR PRIOR TO CARPET TILES INSTALLATION

### Installing over concrete

Reference 10′ (3 m) straight edge method. Level is defined as having up to 1/4″ (6 mm) maximum gap within 90 % of samples taken. Level the floor to the standards outlined in the American Concrete Institute specifications for Concrete Buildings in regards to troweled finish and finishing tolerances. Leveling compounds must be cement-based.

All concrete floors must comply with moisture and alkalinity requirements prior to proceeding with installation. (See "Moisture and Alkalinity Test" above.)

Patch cracks and holes with one of the following approved patching compounds: ARDEX Feather Finish, ARDEX K-15, Henry's 547 or similar cement-based compound. NOTE: Some patching compounds can be mixed with water while some must be mixed with latex. Follow the manufacturer's specifications and instructions for use.

NOTE: Incompatible adhesives, (multipurpose, cutback, etc.) solvent-based materials and other contaminants must be removed or encapsulated prior to installation of carpet. Contact the Beaulieu Help Desk.

Beaulieu recommends that dusty or porous conditions be primed using ARDEX P 51, XL Brands Prelude or a similar product.

# Installing over wood, plywood or particle board

Repair loose or broken boards. Secure with 8-D cement-coated screw nails. Sand the finish down to bare wood. Remove dust by sweeping, then wiping with a tack cloth. If the majority of the boards are worn or badly cupped, cover with 5/8" (1.6 cm) exterior grade AD plywood secured with 8-D cement-coated screw nails spaced 6" (15.2 cm) apart. Sand seams smooth. All wood surfaces should be primed prior to application of an adhesive. Beaulieu recommends ARDEX P 51, XL Brands TriSeal or similar product.

NOTE: Incompatible adhesives, solvent-based materials and other contaminants should be removed or encapsulated prior to installation of carpet. Contact the Beaulieu Help Desk.

## Installing over vinyl tile, sheet vinyl or natural materials

Use an appropriate non-solvent stripper or a sander to remove the wax top coat. Remove any damaged or loose vinyl tiles and replace with comparable thickness tile or patching compound.

Remove sheet vinyl with a scraper. Do not install over sheet vinyl. Any existing adhesive remaining on subfloor must be removed by grinding/scraping and residue encapsulated.

For natural materials such as granolithic, terrazzo, marble, ceramic tile, etc., breakout and remove all material or replace damaged areas with substitute material of the same thickness.



Patch and fill cracks and irregularities, including grout lines, with one of the following approved patching compounds: Ardex Feather Finish, Ardex K-15, Henry's 547 or similar cement-based compound. NOTE: Some patching compounds can be mixed with water while some must be mixed with latex. Follow the manufacturer's specification and instructions for use. Sand top surface to remove glaze. Remove dust by sweeping, then wiping with a tack cloth. All porous surfaces should be primed prior to application of an adhesive. Beaulieu recommends XL Brands TriSeal or similar product.

# Installing over raised floors

Patch or replace any damaged floor panel inserts. Panels should be free of any dirt, grease, oil, paint, sealer, adhesive or other materials from floor.

NOTE: Incompatible adhesives, solvent-based materials and other contaminants must be removed or encapsulated prior to installation of carpet. Contact the Beaulieu Help Desk.

### **ESTABLISHING THE STARTING POINT**

- 1. Measure to determine the center point of the room and mark. Snap a chalk line.
- 2. Measure 8 feet (243.5 cm) out from your center point along the chalk line. Make a mark.
- 3. Measure 6 feet (182.9 cm) from your center point at a right angle to your chalk line and make a mark.
- 4. Measure the distance between your marks. It should be exactly 10 feet (304.8 cm). If it is, your quadrants will be square. Snap a chalk line here.

NOTE: If the room is too small for the above measurements, reduce them by half. Measure 4 feet (121.9 cm) vertically and 3 feet (91.4 cm) horizontally. In this case, the measurement between your two marks should be exactly 5 feet (152.4 cm).

Determine if center lines need to be offset. Dry fit (without adhesive) a row of tiles along the entire length of your vertical and horizontal center lines. Go all the way to the walls. If necessary, offset either or both center lines to ensure perimeter tiles will be cut no less than half size, or 9.84 inches (25 cm).

#### Adhesive installation

On all areas other than stairs, if you choose spread adhesive, Beaulieu highly recommend the use of Peerless Contract 301 Pressure Sensitive Carpet Tile Adhesive or if not available, we recommend the use of MAPEI 811, MAPEI 373 or Roberts 6300 adhesives. On stairs, use only vinyl compatible permanent adhesive. For stair nosing, use manufacturer's recommended installation method. PLEASE FOLLOW THE INSTRUCTIONS LISTED ON THE CONTAINER OF THE ADHESIVE.

# Adhesive in special situations

Never apply adhesive directly over flatwire. The flatwire may be damaged if the tiles need to be removed. Any surface that cannot be leveled may require adhesive or double-sided tape to hold a tile in place.

### Laying tiles – 50 cm x 50 cm tiles

Follow the center lines closely. Dividing the area into quadrants will help ensure a more square/straight installation. In smaller rooms, your anchor rows may consist of fewer than 11 tiles. Lay an anchor row of 10 additional tiles (11 including the one you've already placed) aligned with the center line.



Measure your anchor rows. Each should equal 550 cm (11 tiles x 50 cm each, or 216 17/32") with no more than a 3 mm (1/8") gain. If the gain is more than 3 mm, the tiles aren't tight enough and should be laid again. After relaying, measure again. If tiles are less than 550 cm they are too tight and should be laid again.

Tip into place, lay tiles in step or pyramid pattern. Don't position tiles by sliding them across the adhesive. This will cause the corner to bend under. Instead, brush the pile back with one hand, then tip a corner of the tile into place. Position the rest of the tile once the corner is properly aligned. Do not catch the pile in the joints.

- 1. Lay two tiles vertically, and check that they are square to the anchor rows. Check Square
- 2. Lay two tiles horizontally, and check that they are square to the anchor rows. Check Square
- 3. Lay one tile to complete the step. Check Square
- 4. Follow the pattern laid out here until you reach the end of your anchor rows. Repeat laying anchor rows and patterns in all quadrants until complete.

## **Cutting tiles**

Tiles adjacent to fixtures, architectural elements and walls need to be cut. Follow these guidelines:

- If practical, remove the base molding before installing perimeter tiles. Replace molding when finished.
- Replace blades often. Sharp blades make cutting quicker, easier and more precise.
- Never use tiles as a cutting surface. Place tiles on layers of cardboard before cutting.
- Always secure cut tiles with adhesive.

Floor outlets are usually wired after carpet tiles have been installed. Consequently, you should install tiles directly over floor outlets and mark the location with tape. This way, it will be easy to see which tiles need to be lifted for cut-outs later.

Tile layout should allow trench headers to be centered under a row of tile. Secure the tiles on either side of trench headers with adhesive. This will prevent the installation from shifting while servicing trench headers. Tile layout should allow flatwire to be centered under a row of tile.

Raised floor panels are susceptible to subtle flexing. To ensure uniform appearance, avoid matching raised floor seams with tile joints.



# Floor rolling

After the carpet tiles are all laid out over the prepared Pressure Sensitive Adhesive, the carpet tiles will need to be pressed down onto the adhesive using a 75 pound roller to insure uniform adherence of the tile backing to the subfloor. Rolling over the tiles in both directions, in length and across the entire area, is recommended for optimum result.

## PREPARING FOR OCCUPATION

Inspect the entire installation, paying close attention to joints and any tiles that have been cut. Vacuum the floor with a pile lifter. If you don't have a pile lifter, use an upright vacuum cleaner.

In addition to the specific floor preparation and installation instructions detailed here, the Carpet and Rug Institute's Carpet Installation Standard must be followed. Please note that many of the Beaulieu installation requirements may exceed or differ from those in the CRI Standard. In the event of conflict between the Beaulieu Installation Instructions and the CRI Standard, you should follow the Beaulieu Installation Instructions.

Please visit our website at <u>beaulieucanada.com</u> for the most up-to-date version of this document as it may have been revised and updated since this printed version.