

AFIRMA II™ Hardback Tile

LuxFelt™ Cushion Tile

NexStep® Cushion Tile

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Basics

Bentley Mills has adopted the Carpet and Rug Institute's "Standard for Installation of Commercial Carpet," (CRI 104) (www.carpet-rug.org) as the basic minimum industry guideline for the installation of Bentley Mills carpet. Please note, however, that the instructions for some specific styles may exceed the basic minimum requirements set forth in the CRI 104 Standard. When consulting the CRI 104, please make certain it is the most recent edition and contains the latest updates. Copies may be obtained on the CRI website. These instructions relate to Bentley Mills' carpet tile and include AFIRMA II™ Hardback Tile, LuxFelt™ Cushion Tile, and NexStep® Cushion Tile.

Layout

Confirm the End User's preferred layout prior to beginning work.

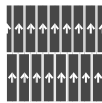
If there are questions about the recommended layout, please contact Bentley Mills prior to starting installation of any carpet tile style. Bentley Mills product design team determines the recommended layout for every style to maximize the final appearance of the product. Carpet tile seams will never be invisible and are usually most visible on the day of installation. Seams become increasingly less visible once acclimated to the interior and with routine vacuuming and foot traffic.

Tile Installation Reference

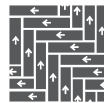
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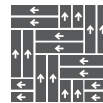
ASHLAR



BRICK



HERRINGBONE

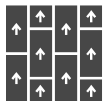


DOUBLE-
HERRINGBONE



MONOLITHIC

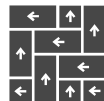
18 in x 36 in Carpet Tile:



ASHLAR



BRICK



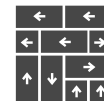
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MONOLITHIC

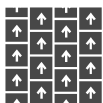


PARQUET

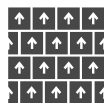


RANDOM

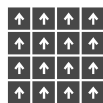
24 in x 24 in Carpet Tile:



ASHLAR



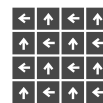
BRICK



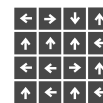
MONOLITHIC



QUARTER DROP



QUARTER TURN



RANDOM

Floor Preparation

Carpet and Rug Institute

In addition to the specific instructions detailed here, for all carpet installations, the Carpet and Rug Institute's "Standard for Installation of Commercial Carpet," (CRI 104), must be closely followed as basic minimum requirements for floor preparation and installation.

CRI 104 can be downloaded from <https://carpet-rug.org/resources/installation-standards>

Concrete Subfloor

All new concrete must be fully cured, clean, and dry. Old concrete must be clean, dry, level, and free of paint, dirt, old adhesive, oils, or other contaminants. The concrete should be free of curing or parting agents that interfere with the bonding of the adhesive. Whenever a powdery surface is encountered like lightweight concrete, a sealer compatible with the adhesive, such as Taylor 2025 Primer, must be used to provide a suitable surface for direct glue installation.

Level the floor to the standards outlined in the American Concrete Institute specifications for Concrete Building ACI 301 in regards to trowel finish and finishing tolerance. Leveling compounds must be Portland-based cement. Patch cracks and holes with one of the following approved patching compounds: Ardex Feather Finish, Ardex K-15, Henry's 547, Mapei Plani Patch, or similar cement based compound. Do not exceed manufacturer's recommendation for patch thickness. Gypsum based compounds are not recommended.

Metal Raised Access Panels

All metal raised access panels must be secure, smooth, clean, dry, level, and free of paint, dirt, old adhesive, oils, or other contaminants. The raised access panels should be free of agents that may interfere with the bonding of the adhesive.

Other Substrates

Underlayment grade OSB, APA registered underlayment plywood, Gypsum or lightweight concrete must be primed with Taylor 2025 primer.

Note: For all subfloors, incompatible adhesives, solvent-based materials, and other contaminants should be removed 85-90% and encapsulated prior to installation of carpet. Chemically abated floors will void the warranty. Contact Bentley Mills for further information at 800.423.4709.

Test Conditions

Testing is not required when using Bentley Healthbond 2399 adhesive. No RH testing, no pH testing, no verifiable intact moisture vapor retarder required.

Note: Hydrostatic pressure is not an acceptable condition of the substrate. Hydrostatic pressure is the occurrence of the concrete slab being hydrated from below or water under the slab pushing up through the surface. This is visually seeing effervescence or alkaline salts carried with water on the surface of concrete and occurs with "on grade" or "below grade" concrete.

Installation Instructions

Conditioning Carpet Tile

Let the carpet tile acclimate prior to installation. The amount of time necessary for conditioning will depend upon potential temperature extremes during storage. Carpet tile subject to extreme temperature fluctuations will require more acclimation time than carpet stored in acclimate-controlled building. During periods of high humidity more time may be required to allow the carpet tile to acclimate. Healthbond 2399 adhesive is water-based and may need more time to flash off prior to placing carpet tile onto the adhesive. The carpet should be allowed to acclimate in the climate controlled space to be carpeted for a minimum of 24 hours prior to installation.

Note: Bentley Mills cannot be held responsible for carpet stability issues such as curl, dome, expansion, or contraction when carpet is not properly conditioned prior to installation.

Centering/Squaring

Divide the room into four quadrants and snap a chalk line and seal it. Make sure quadrants meet at right angles. Take care to keep perimeter carpet tile cuts larger than half size or 9 inches. Once the chalk lines have been established at right angles in the center of the room, install only one carpet tile. This first tile should be placed snugly in the corner formed by the 90-degree angle of the chalk lines with two sides of the tile aligned along two chalk lines of one quadrant. Repeat procedure on remaining quadrants. Arrows are printed on the back of carpet tiles for consistent installation direction. For monolithic installation, make sure arrows point in the same direction throughout the installation.

Note: When installing over any raised access panels, the carpet tile seams should be offset a minimum of three inches from the raised access panel joints.

Doorways

In order to spread adhesive throughout the room and allow for a single set-up time, an additional perpendicular line should be established and squared from the center line of the room to run through doorways before application of adhesive begins. Care should be taken to measure a distance equal to an even number of carpet tiles from the room's center line to a point in the doorway. This point in the doorway will determine where the first tile is installed. This allows the installer to begin a square installation in the doorway without having to track back through the adhesive.

Adhesive and Adhesive Application

Adhesive: Bentley Healthbond 2399 Pressure Sensitive Adhesive

Note: Use of any other adhesive, without prior written approval, shall void the warranty.

Bentley Healthbond 2399 Pressure Sensitive Adhesive requires a full spread application for AFIRMA II, LuxFelt and NexStep Installations.

Once the floor has been properly prepared as detailed in CRI 104, adhesive should be applied to the entire area prepared to receive carpet tile. This will prevent lateral shifting due to regular foot traffic and will ensure a successful installation of Bentley Mills carpet tile. After carpet is in place, all full spread installations must be rolled with a 75 - 100 lb. roller to ensure proper adhesion.

AFIRMA II Hardback Tile:

Use a 3/8" nap paint roller. Spread rate is 33-38 yd²/gal (300-350 ft²/gal).

LuxFelt Cushion Tile:

Use a 1/2" nap paint roller. Spread rate is 33-36 yd²/gal (300-325 ft²/gal).

NexStep Cushion Tile:

Use a 1/16" X 1/32" X 1/32" U-notch trowel. Spread rate is 25-30 yd²/gal (225-275 ft²/gal).

For Metal Raised Access Panels:

AFIRMA II Hardback Tile: Use a 1/4" nap paint roller. Spread rate is 50-55 yd²/gal (450-500 ft²/gal).

LuxFelt Cushion Tile: Use a 1/4" nap paint roller. Spread rate is 50-55 yd²/gal (450-500 ft²/gal).

NexStep Cushion Tile: Use a 1/2" nap paint roller. Spread rate is 33-36 yd²/gal (300-325 ft²/gal).

Tipping Tiles into Place

Tip individual carpet tiles into place. Do not slide tiles across the adhesive. This will cause corners to roll under. Frequently check tile joints for proper alignment and firm abutment. Avoid tight or overly compressed joints that can cause peaking edges or corners.

Check Tightness

Expect a slight gain as the tiles are installed due to spacing at the joints. To ensure a tight installation and minimize the amount of gain, measure ten tiles (in length) from the front side of the first tile to the back side of the tenth tile. The measurement should have with a gain no greater than about 1/8-inch. If gain exceeds 1/8-inch, tiles should be reinstalled and butted more tightly along the backing edge. Reposition and check again.

Final Inspection

Vacuum carpet tile after installation has been completed. Visually inspect the area for any issues with the carpet or installation and correct appropriately.

Some carpet styles may occasionally have the darker yarns align at the seams. If this occurs, reposition the tile to another area of the installation to break up that alignment.

Loose yarn on the edge of carpet tile may occur during manufacturing due to the tile cutting process. Trim any loose yarn with scissors.

Pile crush may occur due to carpet tile being stacked on the pallet for shipping. Vacuum and allow time for yarn to acclimate.

Seam appearance is normal for carpet tile. Allowing time to acclimate along with foot traffic can reduce some of this visibility.

Important Advice

These installation procedures are recommendations designed for the experienced and competent installer. Strict adherence to these procedures will result in a quality installation under most conditions. Any situation that could alter the installation procedure or jeopardize the possibility of a satisfactory installation, such as identification of defective material or unusual installation conditions, including Hydrostatic pressure creates a responsibility for the installer to STOP the installation immediately and call Bentley Mills at 800.423.4709. Bentley Mills will not be responsible for substandard installation or for an installer’s decision to proceed with an installation that is not resulting in a satisfactory or acceptable finished installation.

Contact Us

Bentley Mills, Inc. 14641 East Don Julian Road, City of Industry, California 91746

800.423.4709 | bentleymills.com