

Installation Guidelines

AFFIX™ Hardback Tile

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Basics

Bentley Mills has adopted the Carpet and Rug Institute's (CRI) 104 Carpet Installation Standard for Commercial Carpet as a basic minimum industry guideline for the installation of both broadloom and modular carpet. Please note; the installation instructions for some specific styles may exceed the basic minimum requirements set forth in the CRI 104. When consulting CRI 104 please make certain it is the most recent edition and contains the latest updates; copies may be obtained on the CRI website <https://carpet-rug.org>

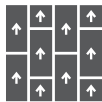
Layout

Carpet tile seams will never be invisible and are usually most visible on the day of installation. Seams become increasingly less visible with routine vacuuming and foot traffic. Bentley goes to great lengths to determine how a particular style should be installed to help maximize its appearance in all standard color combinations. The variety of styles and tile sizes make it extremely important for the installer to know whether the preferred installation layout for a particular style is monolithic, brick, ashlar, quarter-turn, herringbone or other.

Some styles allow for a variety of installation layouts; others have only one or two recommended layout methods that would assure an aesthetically pleasing installation for the customer. The installer should know which recommended layout is preferred by the end user prior to starting the installation. If there are questions about the recommended layout, please contact Bentley prior to starting installation of any carpet tile style.

Tile Installation Reference

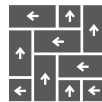
18 in x 36 in Carpet Tile:



ASHLAR



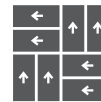
BRICK



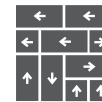
HERRINGBONE



MONOLITHIC



PARQUET



RANDOM

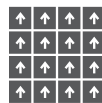
24 in x 24 in Carpet Tile:



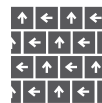
ASHLAR



BRICK



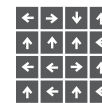
MONOLITHIC



QUARTER DROP



QUARTER TURN



RANDOM

Floor Preparation

CRI 104

Carpet Installation Standard for Commercial Carpet Carpet and Rug Institute. In addition to the specific instructions detailed here, the CRI 104 must be closely followed as basic minimum requirement for floor preparation and installation on all carpet installations CRI 104 can be downloaded from <https://carpet-rug.org/resources/installation-standards/>

Concrete Sub-Floor

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. Pre-existing adhesive must be 90% removed resulting in only trace amounts of old adhesive showing (10% or less of the old adhesive showing on the subfloor). Remove by either hand scraping or mechanically sanding smooth; after which, apply Taylor 2025 Primer prior to the installation of Bentley Mills AFFIXX Hardback carpet tile. All concrete floors must comply with moisture and alkalinity requirements prior to proceeding with installation. Whenever a powdery surface is encountered such as lightweight concrete or excessive dust, the floor must be cleaned and then primed with an approved primer; (Taylor 2025 Primer).

Note: AFFIXX Hardback Tile products can be used on installations up to 100% RH. See adhesive free installation guidelines below.

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.

Note: Incompatible adhesives, solvent-based materials, cut back adhesives and other contaminants should be removed and encapsulated with Taylor Enhance or Zephyr prior to installation of carpet. Contact Bentley for further information at 800.423.4709.

Concrete Moisture

Concrete floors, even with adequate curing time, can present an unacceptable moisture condition by allowing excessive amounts of moisture vapor to pass through to the surface. AFFIXX Hardback Tile products can be used on installations up to 100% RH. No RH or pH testing required. No 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."

Asbestos

Floor coverings containing asbestos and any adhesive potentially containing asbestos, require special preparation, handling, and removal procedures. Please consult the appropriate local or state authorities or the Resilient Floor Covering Institute before disturbing any suspected asbestos-containing material.

Access Panels

When installing carpet tiles over raised access floor panels, it's suggested to start the installation by overlapping the access panel joints to prevent the seams of the tiles from lining up with the access panel joints. All access panels must be sound, level and edges firmly secured to the raised flooring pedestals.

Bentley Mills is not responsible for any product failure due to improper floor preparation and/or installation procedures.

Test Conditions

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

Installation Instructions

Conditioning Carpet

The floor and room temperature must be acclimated by maintaining the temperature at 65°F and 85°F, and the relative 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 prior to installation. The installation site must be acclimated with HVAC in operation and maintained at normal service temperature and humidity.

Note: Bentley Mills can not 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. Make sure quadrants meet at right angles. Take care to keep perimeter carpet tile cuts larger than half size. Carpet tiles are printed on the back with arrows for consistent installation direction.

Adhesive Free Installations – AFFIXX Double Sided Tape

Perimeter areas and anchor points must be clean and free of debris including most of the old adhesives prior to the application of AFFIXX double sided tape in those areas. Areas greater than 100 square feet dimensionally, require AFFIXX double sided tape at walls to prevent shifting; also apply AFFIXX double sided tape every 30 feet as necessary to further secure the installation. In heavy roller traffic areas apply AFFIXX double sided tape every 12 feet.

VELCRO® Brand Tab Installation for AFFIXX Hardback Tile

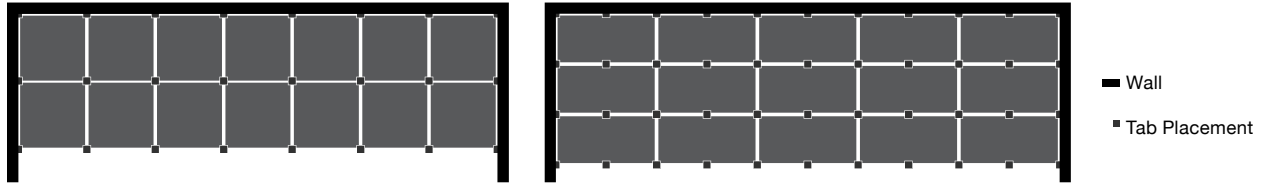
1. Each VELCRO® Brand Tab is approximately a 6 in x 6 in square that must be centered at the carpet tile intersection, also at all fills near terminating walls. Care should be taken not to trap the face yarn under the tile edges.
2. Start from the established intersection point (the center of the floor) with the 1st tile, place a VELCRO® Brand Tab under each edge of the tile at the corners leaving $\frac{3}{4}$ of the VELCRO® Brand Tab exposed.
3. Place the 2nd tile in place and firmly press the tile into the VELCRO® Brand Tab.
4. Continue with the 3rd tile creating a pyramid pattern; be sure the tiles are properly aligned at the edges during the installation.
5. Place an VELCRO® Brand Tab under the edges of the 2nd and 3rd tiles continuing with the pyramid pattern until the entire area is completed.
6. If tiles are 18 in x 36 in, an additional Velcro Brand Tab must be placed in the middle of the long direction at the seams.
7. Roll all of the carpet tiles with a 100lb roller

For 24 in x 24 in Tile Installation

In areas less than 100 square feet dimensionally, apply a 6 inch band of Bentley's Healthbond 2399 Pressure Sensitive Adhesive at walls to prevent shifting. Apply adhesive with a $\frac{3}{4}$ " nap roller or a $\frac{1}{16}$ " x $\frac{1}{32}$ " x $\frac{1}{32}$ " trowel. For large rooms and long corridors, a 6 inch grid of adhesive should also be used every 30 feet. For areas with heavy rolling traffic, a grid application of adhesive should be applied every 12 feet.

Large Rooms and Long Corridors

Dimensions over 100 feet must have a 2 feet wide band of Bentley's Healthbond 2399 Pressure Sensitive Adhesive applied with a 3/4" nap roller or a 1/16" x 1/32" x 1/32" trowel to help prevent movement in the tile installation. This should be done in equal dimensions proportionate to the length and width of the area being carpeted.



Note: Diagram displays Monolithic installations only. For other installation methods, ensure tabs are placed on all tile corners and an extra tab in the long direction of 18 in x 36 in tiles. Use half tabs at walls.

Through Doorways

An additional perpendicular line should be established and squared from the center line of the room to run through doorways. 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. That point in the doorway will determine where the first tile is installed.

Tipping Tiles Into Place

Tip individual carpet tiles into place. Please take care to prevent tile corners from rolling under when they are positioned. 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 because of spacing at the joints. To insure a tight installation and minimize the amount of gain, measure 10 squares (in length) from the front side of the first tile to back side of the 10th 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 backing edge. Reposition and check again.

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 Technical Services 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

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