

Hemp SHAPES™ - Installation Instructions

Important:

- 1) Do not install with temperatures below 60° F (15°C). **Hemp SHAPES™** should be kept at the same temperature as the room conditions, both prior to and during the installation process.
- 2) **Hemp SHAPES™** need to acclimate to site conditions prior to the start of the installation process. Though we recommend a default time of 72 hours, acclimating is not a function of time, but rather balancing of the moisture content of the material to the installation environment. Sometimes this takes longer, but it is critical that equilibrium is met or excessive expansion and/or contraction can occur.
- 3) Acclimating involves opening the packs of hemp so that the tiles have access to air on all sides, so they achieve an equalized moisture/humidity level as the conditioned environment into which it will be installed (ie: HVAC running and operable). If the hemp is not acclimated prior to installation, either gapping or expansion can occur. NOTE: expansion and/or contraction is not considered a product defect, and nor is it a warrantable claim. It is advisable, though not required, to paint the walls in a similar color to the hemp material being installed, especially if using Contact Cement during the installation, so if movement does occur, the color behind the tiles is the similar hemp to the tiles. If using the Unilateral glue (which is white), this would be less of a benefit.
- 4) Walls need to be clean and smooth, free of dirt, waxes, polishes, old adhesives, paint and voids. Follow directions on adhesive manufacturer's label to complete installation.
- 5) It is recommended that the **Hemp SHAPES™** is applied to primed substrates, as this will help ensure effective adhesion. When priming and painting, <u>paint should be fully cured</u>.
- 6) **NOTE:** Hemp pattern and visual seams: Depending on the version/pattern of Hemp used, the layout (staggering tiles vs. not) may vary. Specifically, for the <u>Stripes Pattern</u>, the panels should be staggered on the wall during the installation process (so, the end joints do NOT line up across the installation field as inherent expansion and contraction would be visually exacerbated. With any of the Hemp Stripes panels, it is important to note that the seams become more visible depending on the intensity of the light (ie: greater intensity of light, greater visibility).

Adhesive: Hemp is a wood product and loves glue. Make sure that the adhesive you choose will make strong contact with the wall surface you are applying the hemp to, as different wall surfaces accept adhesive differently. It is always recommended to test a small area with the selected adhesive prior to undertaking the installation (if there is any question as to whether an adhesive is suitable, or if the substrate is properly prepared). NOTE: ineffective adhesion is not a product defect, nor a warrantable claim, and it is always recommended to test the adhesion of a product prior to its use.

There are 2 suitable and recommended adhesives for the installation of the Hemp SHAPES™ panels, both of which will work, though each one is applied in different ways, and arguably has different pros and cons. The 2 recommended adhesives are:

1) Water-based contact cement is generally the most straight-forward option. Product sets very quickly (ie: immediately) which allows to start in the middle of the wall. Wakol Loba D3540 is the recommended adhesive, which is designed specifically for use with hemp. It is important to follow the manufacturers recommendations as it relates to the application and ensuring a solid bond. A note relative to the setting procedure using the D3540 product, is that once the tile is placed on the wall, it should be forced (with impact) into place to ensure the chemical cross-linking occurs to create a solid bond. This can be done by applying force (via a non-marring mallet, or other method) to the surface of the Hemp SHAPES™ panels.

Note: Be careful to not damage the Hemp SHAPES™ during the installation, as if hit improperly the face(s) of the material can break.



2) Single-component, unilateral urethane adhesive. We recommend Wakol-Loba MS262 or MS245. Since these do not enable an immediate permanent bond (like that created with 'contact cement'), a consideration should be made relative to ensuring the panels stay flat to the substrate while the adhesive dries. These adhesives are often considered easier in that the adhesive is applied to only one surface (the wall), and by the nature of them, there is more time to set (and/or move as needed) the Hemp panels into place on the wall, but ensuring the panels are flat and level is of critical importance. For installing with the MS262 or MS245, use a U-Notch 1/32" x 1/16" x 1/32" trowel. Apply the adhesive to dry directly to the primed surface and spread with trowel (into level and even beads). Press the Hemp SHAPES™ panels with equal and level pressure, directly into the adhesive. For the Hemp panels, you should additionally roll with hand-roller (kitchen rolling pin, etc.) to ensure even and level bond.

Note: It is important to follow the manufacturers recommendation as it relates to the application and ensuring the tiles are applied within the optimal open time (see instructions included in the packaging).

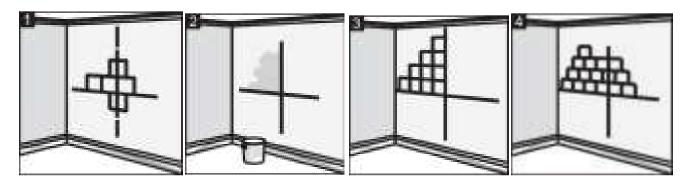
Substrate: Make sure substrate is clean and free of debris. Make sure substrate is nonabsorbent. If you have an absorbent substrate, it is required that it is sealed and/or primed to enable a solid bond with the selected adhesive. Poor adhesion of the hemp to substrate chosen is not a product failure.

Tips:

Establish a level line (if installing horizontally), and a plumb (vertical) line to work from. Use a measuring tape, 4' level and a non-staining chalk line.

Pre Lay material flat before applying to the wall. It may be helpful to pre-cut the hemp pieces on the ground, not on the wall for vertical seam applications.

Check the wall dimension by measuring from the middle, making sure that the widths of the first and last tiles will be identical and greater than 2 inches. If necessary, repeat the previous step by drawing new parallel lines to the first ones.



ANY QUESTIONS REGARDING INSTALLATION – Please contact Sustainable Materials or your local representative



Hemp SHAPES™ - Care and Maintenance Instructions

Your new **Hemp SHAPES™** covering will add warmth and beauty to your home or commercial setting for years to come. Following a few simple maintenance steps, however, will help protect your investment.

Cleaning

- Do not use abrasive materials.
- Blot up spills and spots immediately (Trapped moisture can penetrate into the **Hemp SHAPES™**, which can cause irreversible discoloration and damage).
- Vacuum and/or dust mop the wall to minimize abrasive grit and dirt. *Note: make sure there is nothing on the bottom of the vacuum that can scratch or mar the surface of Hemp Strips.*
- If more vigorous cleaning is needed, we recommend cleaning with BonaX surface cleaner, and using a Terry Cloth to apply (as this will prevent marring or scratching of wall surface).
- ALWAYS WIPE DRY IMMEDIATELY until no moisture is visible on the wall. Do not use wax, polish, oil soap, abrasive cleaners, steel wool, scouring powder, or ANY appreciable amount of water
- Do not use wet mops, wet scrubbers or steam cleaners as these products may cause irreversible discoloration and damages

Protecting Your Investment

 Your newly installed Hemp SHAPES™ is made from natural wood fibers and therefore is subject to change from excessive moisture, or nonconforming environmental conditions. Remove any standing or trapped water immediately and maintain an indoor relative humidity level of 35-55% throughout the year.