

CoreBOO™ - Installation Instructions for "Walls"

The **CoreBOO™** product line has many products that can be applied via a 'Direct-glue/Pin-nail' installation protocol, which can be done either by directly bonding the panels to the existing wall surface, or a wooden strip furring strip frame can be built to act as the application surface. For the purposes of this installation guide, we are focusing on the "Direct-glue/Pin-nail' method.

The CoreBOO™ products that typically are installed via this method are **GROOVE Panels**, **OPEN SLAT Panels**, **SOLID SLAT Panels**, **PET Perf Panels**, **FELT SLAT Panels**, **FLEXI SLAT Panels**, and **T&G Perf Panels**.





^(*) See additional notes on Page 3 for specific CoreBOO™ product version considerations.

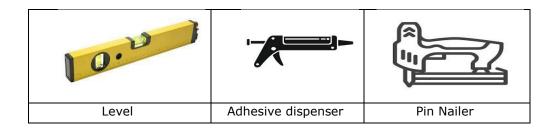
General pre-installation considerations and guidelines:

- **Bamboo as a 'natural' material** Bamboo is a natural product that naturally and inherently varies in color and grain, so this is expected, and would not be considered a defect. It is suggested that prior to installation, all the material is opened, unpacked, and collectively examined to determine the most desirable arrangement for the installation. If you question the color, finish, or any other part of the assembly as it was supplied, contact Sustainable Materials before the beginning of the installation process. **Note:** physical 'installation' of the CoreBOO™ material is considered formal acceptance of the material in its' delivered state.
- **Acclimating** Material should be delivered to the jobsite and acclimated for at least 72 hours prior to installation, and with the space having a stable environment, and please note that 'acclimating' is NOT a function of time, but rather equalized moisture content of the material relative to the space it is being installed. **Note:** If you have any questions about 'acclimation', please view our "Acclimating" reference guide under "Resources" on the Sustainable Materials website, and if you still have questions, please let us know.
- **Conditioning the space** The CoreBOO™ products should be installed only when the space is being 'conditioned', meaning the HVAC system is running, and the conditions are equalized to ongoing equilibrium conditions (consistent temperature and humidity). Recommended equilibrium conditions are between 60-70°F with a relative humidity between 40-60%; and this should be maintained prior to installation, during it, and throughout the year, as not only does this help ensure there is not excessive movement with the CoreBOO™ material, but also it tends to be an ideal range for maintaining a healthy indoor air quality. **Note**: Fluctuating conditions outside of this equilibrium range can lead to excessive movement, which is not considered a manufacturing defect.



- **Site preparation** In addition to ensuring the temperature and relative humidity are ideal for the installation, it is also critical to ensure the space is clean, adjacent surfaces are painted, and the material is installed as if no additional site work will be completed after it's installation. Of critical importance when you are 'gluing' a material to a wall, is that the receiving wall surface(s) are primed or sealed, and free of dust and debris, or any contaminant that would affect adhesion. **Note**: Sustainable Materials is not liable for lack of adhesive, or anything related to insufficient site preparation.
- **General Note on this document** These installation instructions are meant as general guidelines to help the installation contractor with site preparation, product considerations and general techniques, but the final decisions and methods selected are theirs (liability and otherwise) based on specific site conditions and goals of the installation. **NOTE:** Sustainable Materials is not liable for anything related to supplemental components used in the installation, product movement or changes related to variable site conditions, and the method and procedure(s) used to install the CoreBOO™ products.

Parts needed:



General "Direct-glue/Pin-nail' Installation Guidelines:

When installing CoreBOO $^{\text{\tiny TM}}$ products via the 'direct-glue/pin-nail' method, though the process is straightforward, two initial determinations are: 1) panel orientation, and 2) whether to mount directly on the existing wall or whether to build a 'furring strip assembly'.

Step 1: (determining orientation)

Once the panel orientation has been decided, either vertically (up and down) or horizontally (left to right), you can now construct the furring strip structure assembly if one is to be used. The furring strips will be placed perpendicularly to the direction that the panels are to be installed, and then they should be placed no more than 16" apart. **Note**: use a 6'+ long level to ensure accuracy.

Step 2: (analyzing layout)

Lay out several panels/planks next to one another on the floor to confirm your layout (whether everything fits as planned, etc.). And, depending on the product being used, its' size, and whether there will be visible 'seams', it is important to strategize where to place the seams (ie: joints between the panels). It is often recommended that with certain products (like the GROOVE Panel, which has a narrow width) the panel ends are staggered along the wall when they are installed. This diminishes the visual presence of the 'seams', especially if/when there is seasonal shrinkage or movement. **Note:** Expansion space for any natural material is important, and that said, leave approximately 1/3" (8mm) around any fixed component (to ensure that if movement occurs, it does not cause buckling).

Step 3: (installing)

Adhesive: Use a fast-setting, low-sag construction adhesive (we have tested and recommend: Wakol Loba MS 262). The adhesive should be applied in 'beads', to either the back of the panel or directly to the firring strips. **Note:** It is important to ensure that the adhesive is applied in the right location on the back of the panels, and that during the glue application process the installer pays attention to the perimeter of the panels, to avoid 'glue creep' which can occur when the panel is pulled tight against the substrate when it is mechanically fastened. This spreading of the adhesive from behind the panel edge can be messy and difficult to clean.

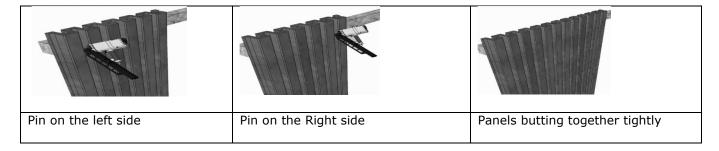


Pin Nails: Once you place the adhesive-backed panel in place, use pin nails to secure the panel to the wall (or furring strips). Pin nails should be placed no less than 16" apart, across the length of the panel, and ensure you have a pin nail within 3-4" of the materials' edge.

General Note for Pin Nailing: it is always important to 'test' and monitor the pressure of the Nailer used to ensure the pin head penetrates to the proper depth of the CoreBOOTM panel product being installed. If adjustments are needed, make them, and move on.

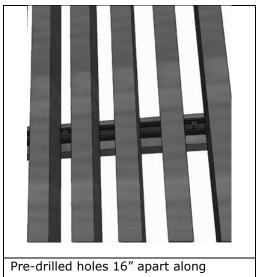
Note for GROOVE Panels:

For the GROOVE Panels, 2 pin nails should be used across the panel width in each location to allow for consistent bonding across its' width (approx. 1 valley in on each side).



Note for OPEN SLAT Panels:

The OPEN Slat Panels have the solid bamboo strips mounted onto an aluminum channel, and throughout the length of the black aluminum supports, there are pre-drilled holes to allow a screwing the panels directly into the wall or substructure.



aluminum supports

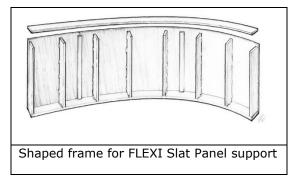
Note for FELT SLAT Panels:

The FELT Slat Panels, though not designed for flexibility, can be installed upon low radius curves. Note: If the FELT Slat Panel is used on a curved surface, check/test to confirm suitability, and then alter the volume of adhesive and/or quantity of fasteners used.

Note for FLEXI SLAT Panels:

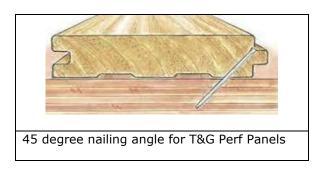
The FLEXI Slat Panels are often wrapped around a shaped substructure or frame (plywood and dimensional wood, or lightweight steel framing) that function as the nailing surface allowing for curvature and radius wrapping.





Note for T&G Perf Panels:

The T&G Perf Planks are typically installed with the plank running horizontally up the wall surface (nailing into the vertically aligned supports). Unlike the other products that are pin nailed 'face-on' (ie: at 90 degree), the T&G Perf Panels are nailed at 45 degrees, like how wood flooring planks are installed. This hides the fastener and ensures that each subsequent plank installed is pushed against the other for a tight fit.



Care and Maintenance Instructions

Cleaning

- Blot up spills and spots immediately (Standing or trapped moisture can penetrate the CoreBOO™ 'Panels', which can cause irreversible discoloration and damage).
- Lightly vacuum and/or dust the wall to minimize abrasive grit and dirt. *Note: Do not use vacuum with beater bars, or anything that could act as an abrasive.*
- If more vigorous cleaning is needed, you can clean the wall with BonaX surface cleaner available from your local hardware store or www.bona.com. Follow the instructions provided, but the use of a Terry cloth is typically recommended to prevent scratching or marring the 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 damage.

Protecting Your Investment

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

If you have any questions about the installation and/or care and maintenance process, please contact your $CoreBOO^{TM}$ representative.