

# **Eco Forest Solid Locking Bamboo Flooring**

## **Installation Instructions**

Natural flooring reacts to the conditions in the environment. Natural flooring plank systems expand and contract in response to fluctuations in temperatures and humidity. Controlling the environment, maintaining an adequate temperature and relative humidity will minimize the visible effects of normal contraction and expansion. Optimum temperature is 70 degrees Fahrenheit and a relative humidity of 40% to 60% must be maintained. In very dry climates, the use of a humidifier is necessary.

### **PRIOR TO THE INSTALLATION OF THE BAMBOO FLOOR:**

Inspect the bamboo product for the correct shipment, grade, and for any visible defects prior to installation. The warranty does not cover bamboo products with visible defects that are installed.

It is the responsibility of the owner/installer to ensure that the flooring and the subfloor have been acclimated sufficiently. Moisture content should not vary more than 3% between the floor and subfloor at the time of the installation.

Check the panels from all cartons before and during installation. Before installing, all cartons must be fully acclimatized for 5 – 7 days in the area where it is to be installed, with temperatures ranging from 50 to 75 degrees Fahrenheit. To acclimatize the flooring, place the packs, opened or unopened, in the middle of the room where it will be installed. NEVER place the packs against a wall or in a corner.

In the unlikely event of there being any damaged panels, these should not be installed.

The Eco Forest bamboo flooring should preferably be installed parallel to the way the light falls.

### **SUBFLOORS:**

Repair any defects in the subfloors. All subfloors must be clean, firm, flat (within 3/16" in 10 ft.), dry (less than 3% moisture on concrete, 10% or less on plywood) and smooth.

Plywood subfloors must conform to the U.S. Uniform Building Code. The moisture content of the plywood subfloor must not exceed 10%. It is essential that the crawl space under wood subfloors is sufficiently ventilated. Any obstacles should be removed to ensure sufficient ventilation. A 6 mil poly vapor barrier must be installed on the crawl space floor.

Concrete subfloors must not exceed 3 lbs. using a Calcium Chloride test method (ASTM) or 80% Relative Humidity (ASTM).

Existing flooring such as full spread sheet vinyl are acceptable to go over providing they are tightly bonded with no loose edges or seams. Approved cushion underlay is still required.

In areas exceeding acceptable moisture levels, and in all on or below grade installations a moisture vapor is required.

### **RADIANT HEATED SUBFLOORS:**

Before installing over a radiant-heated floor, turn off the heat and wait until the floor has reached a room temperature (68 to 70 degrees Fahrenheit). After installing the floor, return the heat to the previous setting. This should be done gradually over a three week period. The use of an exterior thermostat will raise the home temperature at a more controlled rate as the temperature outside falls,

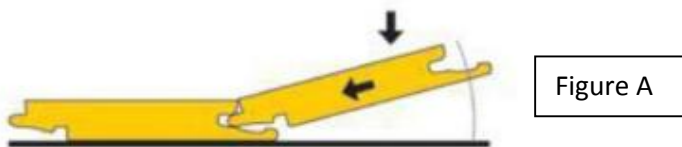
putting less stress on the flooring. NOTE: The slab surface must never exceed 85 degrees Fahrenheit in temperature.

### **INSTALLATION TOOLS NEEDED:**

Tools needed for installing Eco Forest bamboo flooring include a hammer, saw, crowbar or pinch bar with protruding edge (to be tapped on with a hammer), and spacer blocks (3/8"). To achieve a clean cut, saw with the top side down if using a jigsaw, and with the top side up if using a hand saw or cross-cut saw. Note: glue may be needed if installing the flooring around pipes. See Figure 11 at the end of this document for further information.

### **LOCKING SYSTEM:**

Eco Forest bamboo flooring uses a tongue and groove lock system that allows the panels to “click” together. You can join together the panels of the Eco Forest bamboo flooring system in two different ways:



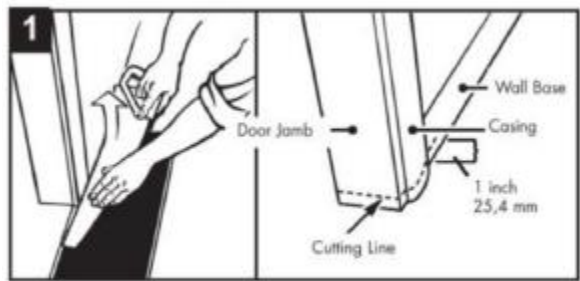
A – The panels can be rotated to fit into one another, with either the tongue into the groove, or the groove into the tongue. The easiest way to fit the Eco Forest bamboo flooring is tongue into groove. Installation instructions are based on using this technique. Fitting the groove into the tongue is only required in a few specific situations. Position the panel to be installed at an angle of 20 – 30 degrees to the panel already installed. Move the panel to be fitted slightly up and down at the same time exerting forward pressure. The panels will then click into place together.



Figure B

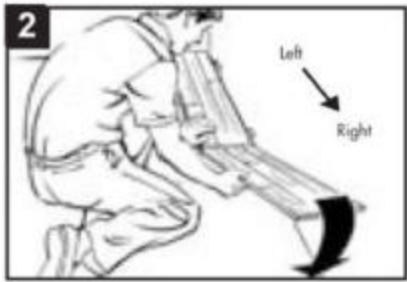
B. In some cases, the panels cannot be rotated into one another, for example along the short edge of a panel that has already been clicked into place along the long side, or under a door frame etc. In this case, the panels can also be fitted lying flat.

**BASIC INSTALLATION:**



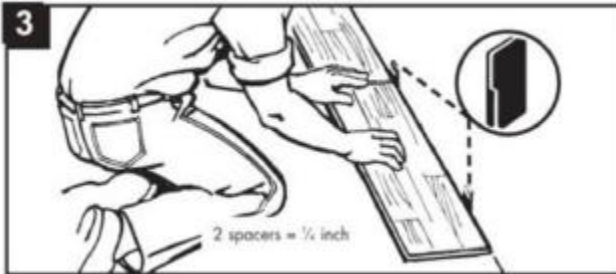
**Figure 1 – Installing Under Door Frames**

Slide the flooring at least  $\frac{1}{4}$  inch underneath the frame and wall base. Also leave a concealed  $\frac{1}{4}$  inch expansion space under each.



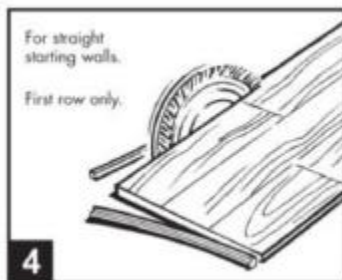
**Figure 2 – First Row of Planks**

Assemble the first row of planks with the tongue side toward the starting wall. Insert the tongue into the groove of the end joints and rotate downward. Keep planks aligned and joints closed.



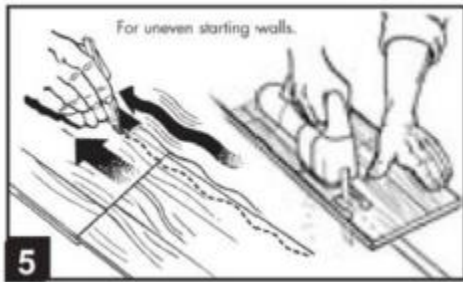
**Figure 3 – Spacing**

User spacers to maintain  $\frac{1}{4}$  inch expansion space. NOTE: For rooms exceeding 25 feet in any direction, additional expansion space should be added at the rate of  $\frac{1}{16}$  inch for every 3 feet of flooring. To add expansion space in the middle of a room, leave an appropriately sized gap between planks and cover the gap with a T-style molding. Expansion space may be added at the perimeter by leaving extra space between the edge of the flooring and wall. Add additional expansion joints in doorways and archways, covering the gap with a molding, such as a T-molding or a Threshold.



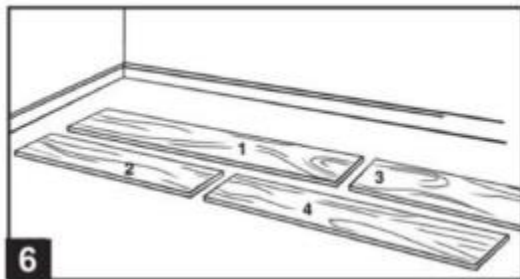
**Figure 4– Removing Tongue on Starting Wall**

Remove the tongue on the end of the first plank and the tongue along the length of all planks against the starting wall when the starting wall is straight.



**Figure 5– Uneven Starting Wall**

If the starting wall is uneven, scribe or draw the contour of the wall on the planks and cut along the pencil line. Also remove the tongue on the end of the first plank of the first row.



**Figure 6– Laying Planks**

Loose lay the first row of planks approximately 2 feet from the starting wall. Cut the first plank of row two 32 inches in length and loose lay several full sized planks for row two.



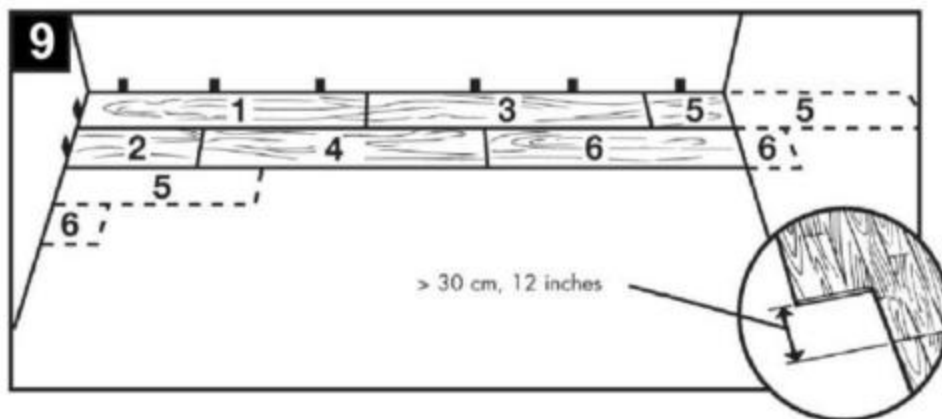
**Figure 7– Locking the Rows**

At a slight angle, insert the tongue of plank 2 into the groove of plank 1 until the edges meet, and then press downward until the joint locks. **There should not be any gaps at the joints.**



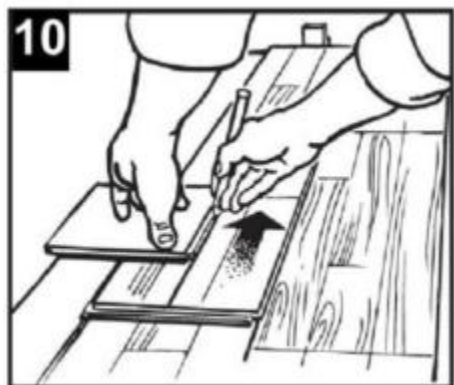
**Figure 8– Continuing the Row**

Join the short end of plank 1 to the end of plank 3 while keeping the plank ends perfectly aligned.



**Figure 9 – Sliding Rows 1 and 2 into Place**

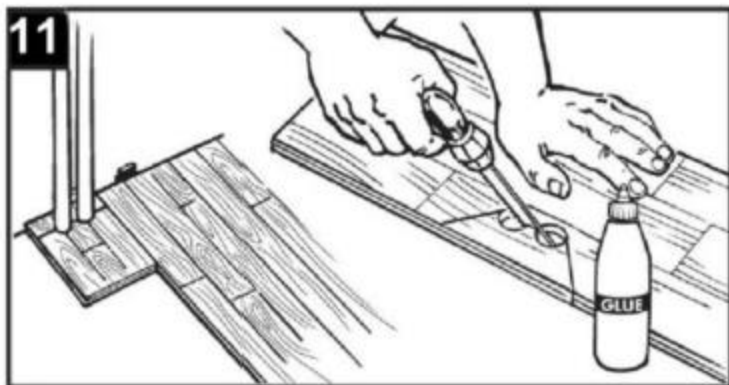
Slide the two assembled rows to the starting wall. Maintain a  $\frac{1}{4}$  inch expansion space with spacers. Use pieces cut from the opposite wall to begin the next row or another row always providing at least a 12 inch or greater distance between the end joints from one row to the next.



**Figure 10 – Cutting the Last Row**

Place a full row of planks directly on top of the last installed row of full planks. Use the full width of a scrap piece of plank. Place the tongue side against the wall and the pencil against the extended groove and mark a line the length of the wall. Cut along the pencil line.





**Figure 11 – Installing Around Pipes**

When installing around pipes, leave a  $\frac{1}{4}$  inch expansion space around the pipes. Use glue to join the cut pieces.

***Congratulations on the purchase and installation of your new Eco Forest bamboo floor!***

