



Grass Elements Floating Installation

Grass Elements ... Elements for Home, Business & Life

PRIOR TO INSTALLATION

Please read the following instructions prior to beginning the installation. Our warranty does not cover flooring materials with visible defects once it has been installed. Since this bamboo is a solid 5/8" thick product, following the general guidelines of the National Wood Flooring Association for solid wood flooring is normal.

- The area to be installed must be brought to normal year round living conditions a minimum of one week before installation. A room temperature of 60-72 degrees and humidity of 40-60% would be considered normal.
- Our bamboo should be delivered to the job a minimum of 72 hours before installation begins. Each box should be opened and protective material such as shrink-wrap and foam, removed. This acclimation period may need to be greater in some situations due to local environmental conditions, such as, in extremely dry climates when removing all the boards from the boxes and acclimating 5 or more days.
- Bamboo is a natural product and therefore color or grain variations are a normal occurrence. Do not install any board if there are any questionable aspects of quality. Therefore, it is imperative that you work with good lighting when installing the floor.
- It is the responsibility of the installer, contractor or owner to determine if the sub-floor and job site conditions are environmentally and structurally acceptable for bamboo floor installation. We decline any responsibility for bamboo failure resulting from or connected with sub-floor, subsurface, job site damage or deficiencies after bamboo flooring has been installed. Flooring should be the last item installed in a new or remodel project. Any work requiring water or moisture must be completed prior to the 72 - hour acclimation time frame.

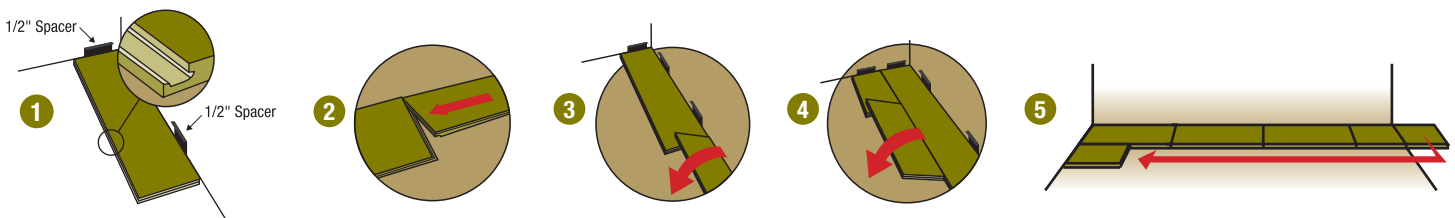
INSTALLATION

- **Sub Floors/General information:** The sub-floor must be level, clean, and dry. Proper moisture tests should be performed on the sub-floor, as well as, the bamboo. The difference between the moisture level of the sub floor and the bamboo flooring should be less than 3%. For concrete installations, use the Calcium Chloride Test Method and do not install bamboo if vapor pressure exceeds 3 lbs. per 1,000 square feet in 24 hours. Also, an alkalinity test should confirm the pH of the concrete is 6-8. To achieve flatness, fill any low spots or voids and ground down any high spots. The sub-floor is considered flat when it does not vary by more than 3/16" in a 10-foot radius. Because of the natural color variation in bamboo flooring from piece to piece, it is important to work out of four to five boxes at a time to assure a beautiful blend of shading. Our warranties do not cover color variation, so staggering boards with color differences throughout the floor is important. Always allow 1/2" to 3/4" space for expansion around the perimeter of the room or when a vertical obstruction such as fireplace, posts, etc. are parallel to the direction of the flooring. In a room or area wider than 20 feet some spacing between boards may be necessary to minimize expansion.
- **Floating Floor Installation:** Sub-floors of 3/4" CDX plywood or oriented strand (OSB) will produce the best performing bamboo floors. Buildings with crawl space foundations should include a vapor barrier installed between the ground and the sub-floor. The vapor barrier can be 4 to 6 mil polyethylene sheets laid on the crawlspace floor. Proper air circulation is important to prevent moisture build-up. At least two vents should be left open year round. Install a vapor barrier over the entire subfloor surface following closely the manufacturer's recommendations. Next, roll out 5/64" (2mm) padding (underlayment) one roll at a time over the vapor barrier, being careful not to poke holes through or damage either material during installation. Run padding up walls 1" to 1-1/2" and secure in place with tape. Make sure to tape down all loose edges. Follow underlayment manufacturer's installation instructions. Note: flexible underlayment should not exceed 5/64" (2mm) in thickness as it may result in plank movement causing creaking or squeaking.

First Row: Start in a corner of the room with the locking strip (lower edge of the lock) facing into the room **1**. Using spacers, maintain a 1/2" gap between the wall and the edges of the planks being installed. Install the first plank. Install the second plank **2**, pressing the short end of the second plank against the leading edge of the first plank and fold down flat **3** to engage the locking mechanism. Ensure that the edges of all planks being installed are parallel and even. Continue with this method until you are ready to install the last plank of the first row.

Carefully measure the required length of the last plank in the row, allowing for a minimum of a 1/2" gap at the end of the row. Cut the last plank of the first row to size, then install as done for the previous planks, leaving a 1/2" gap at the end. After the first row is complete, ensure that all edges are perfectly even and parallel.

Second Row: **4** Start the second row beginning with (if available) the piece left over (cut off) from the first row. If the piece is too short (or if there is no leftover piece), start with a new board, cut in half. **5** Always ensure that the end joints (between planks in adjacent rows) are staggered at least 10" apart (see picture #7)



Maintaining a 1/2" gap between the end of the plank (row 2 plank 1) and the wall using a 1/2" spacer, begin the second row by inserting the long edge of the locking mechanism of the first plank (row 2 plank 1) into the long edge of the locking mechanism of the adjacent plank of the first row. Push the plank forward and press down at the same time to fully engage the locking mechanism (8). With the plank flat on the floor, ensure there is no gapping at the joint between it and a first row. If necessary, use a tapping block to ensure that the plank's locking mechanism is fully engaged and that there is no gap between it and the adjacent plank. To install the second plank (row 2 plank 2), place the long edge of the plank into the adjacent plank of the first row. Slide this plank to the left until the short end of the second plank is flush against the leading edge of the first plank (row 2 plank 1). Then, in one movement, lay the plank down flat, ensuring that there is no gapping on either the short end or the long side of the plank. Use a rubber mallet and tapping block to correct any gapping.

(Continued on other side)



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Installation Around Pipes or Columns

Drill holes and saw out flooring as required to make room for any exposed structure or pipe. Note: holes around pipes or other items must be at least 3/4" (19mm) greater in diameter than the pipe or structure.

Installation with Transition Pieces

Flooring must be allowed to float freely underneath the overlap portion of the transition piece. To ensure freedom of movement, cut or chisel off tongue as required allowing unrestricted movement of the flooring under the transition piece.

- **Radiant Floors:** Bamboo can be installed over floors with radiant heat. We follow the guidelines of the National Wood Flooring Association (NWFA) for solid plank flooring. Bamboo may be directly nailed to a sub-floor, nailed directly to sleepers, double plywood floating or glued down. The NWFA recommends that an outside thermostat be installed to minimize the effect that rapid changes in temperature will have on the moisture content of the floor. Prior to installation the radiant should be operating for a minimum of 6 days. Radiant systems work most effectively and with less trauma to the floor if the heating process is gradual, based on small increment increases in relation to the outside temperature. The maximum surface temperature should not exceed 85° F. It is important to note that movement in a wood floor is due to moisture and that movement will happen in all wood or bamboo floors. Therefore, the more constant the moisture content is maintained, the less likely there will be problems with the floor.

MAINTENANCE

We suggest caring for your new bamboo floor in the same manner you would perform maintenance on a regular hardwood floor.

What to do:

- Vacuum or sweep floor regularly.
- Remove spills promptly.
- General cleaning with a solvent-free floor cleaner is suggested. Grass Elements recommends "SIMPLY FLOORED!" by Better Life™. Visit www.cleanhappens.com for a list of retailers in your area. Simply Floored! is the safest product for your floor and your family.
- Place mats at exterior doors to trap sand and grit. Use area rugs in high traffic pathways, at the end of steps and near doorways. Avoid rubber backing or non-ventilated rugs.
- Use protective caps or pads on the feet of furniture.
- Maintain humidity in your home between 45% and 55%. Excessive humidity can cause wood floors to swell, creating cracks in the finish.

What not to do:

- Don't let sand, dirt or grit build up. They can act like sandpaper and actually abrade and dull your floor finish.
- Don't wet mop bamboo floors. Too much water can cause the floor to swell or warp.
- Don't let your pets' claws go untrimmed. Proper claw trimming helps avoid scratches and gouges.
- Don't walk on your floors in high heels, and keep heels in good repair.
- Don't use wax, oil soap or other household cleaners on polyurethane finished floors. They can dull today's floor finishes and make refinishing difficult.

Additional references:

- (1). National Wood Flooring Association, Hardwood Flooring Installation Guidelines. Phone 800-422-4556.
- (2). National Wood Flooring Association, Technical Publication No. A100, Water and Wood.
- (3). The Hardwood Council, www.hardwoodcouncil.com/tips.