



Home Legend™

## BAMBOO FLOORING

### PRE-FINISHED SOLID BAMBOO INSTALLATION GUIDE

PLEASE READ AND REVIEW THE ENTIRE INSTALLATION GUIDE BEFORE PROCEEDING WITH THE ACTUAL INSTALLATION

#### **IMPORTANT NOTICE:**

**HOME LEGEND strongly recommends that its SOLID BAMBOO FLOORING be professionally installed by technicians competent in the installation of solid bamboo and hardwood flooring.**

**All solid bamboo flooring is naturally hygroscopic, just like wood, and as a result bamboo planks will react with the moisture in the environment and will expand (in width and depth) if the internal moisture of the bamboo increases or will shrink (in width and depth) if the internal moisture level of the bamboo decreases. Therefore, in order to prevent cracking and/or buckling of the floor due to expansion, and to prevent excessive spaces between the planks, due to shrinkage, it is absolutely essential that all potential sources of moisture in the environment be eliminated prior to installation of the bamboo floor and that all areas of construction must be completely dry before the floor is installed. In addition, the bamboo planks must be acclimatized to the normal living temperature and relative humidity for the rooms in which it is to be installed prior to the actual installation. All rooms must be maintained at ambient levels, that is, between 60-80 degrees F. with 35%-65% relative humidity. This condition must be initiated five days prior to the arrival of the bamboo and maintained during the acclimation process (min. 72 hours) and for the bamboo floor's life cycle.**

**All substrates must be structurally SOUND, FLAT and DRY. The surface must be free of all contaminants and loose material and any depressions, ridges, high or low spots (greater than 3/16" over 10', 1/8" in 6') must be filled / sanded prior to installation of the flooring or it WILL FAIL.**

**The moisture content of the sub-floor must be tested prior to the installation of the bamboo floor. The moisture concrete sub-floors must not exceed 3/lbs/1000 sq.ft./24 hours as tested by the Calcium Chloride test. Wood sub-floors must not exceed 12% moisture as tested with a properly calibrated moisture meter. Moisture contents in excess of the above must be rectified prior to the installation of the bamboo floor. Please seek advice from a moisture abatement specialist.**

#### **OWNER / INSTALLER RESPONSIBILITIES:**

SOLID BAMBOO FLOORING is beautiful and a unique product of nature, but it is not for everyone nor is it for every application. **HOME LEGEND SOLID BAMBOO FLOORS** are suitable for all interior rooms which are either on grade (at ground level) or are above grade (above ground) and which are not subject to excessive moisture or temperature/moisture variations. SOLID BAMBOO FLOORS are not suitable for any exterior space, such as, patios, or decks, or any space below grade, such as basements, garages, or sunken living rooms. They are not suitable for high moisture

areas such as full bathrooms. And, they are not suitable for any rooms that are not to be environmentally controlled year-round with regard to temperature and humidity.

Before beginning the installation of any bamboo or hardwood flooring product, the Owner, or the Installer acting on behalf of the Owner, must determine that the environment of the job site and the condition and type of the sub-floor involved is acceptable. They need to insure that they meet or exceed all requirements which are stipulated in the **HOME LEGEND SOLID BAMBOO FLOORS** installation instructions which follow.

**HOME LEGEND** declines any and all responsibility for job failure resulting from or associated with

inappropriate or improperly prepared sub-floors or job site environment deficiencies.

**When calculating the total square footage, a minimum of 10% allowance, depending on the layout (Diagonal Installations may require more.) for waste and footage to determine the total amount of flooring needed.**

#### **JOB SITE INSPECTION & ACCLIMATION**

- In new construction, **HOME LEGEND SOLID BAMBOO FLOORS** should be one of the last items installed.
- All work involving water or moisture (plumbing, plaster /drywall ceilings or wall finishes, painting, etc.) should be finished with ample time allowed for complete drying prior to bamboo flooring being installed.
- Check basements and under floor crawl space to be sure that they are dry and well ventilated to avoid damage caused by moisture. **HOME LEGEND** recommends a minimum of 6 mil vapor barrier be placed on 100% of the surface of the ground in crawl spaces not finished with cement.
- All substrates must be structurally sound, flat and dry. If Direct Gluing over concrete or Screed sub-floors, the sub-floor must be flat and level with no surface lumps or depressions in their surface. If this is not the case it must be leveled. To ensure even, uniform application of a liquid applied DPM (see Dia.1). The floor can be leveled up to a maximum depth of 3/16" with a good quality leveling compound. Only polymer modified cement based patches are suitable for use for this application, such as, Henry/Ardex floor patch leveler or Armstrong's S-184/5. **DO NOT USE GYPSUM** based patches. The material used must be allowed to dry out completely before applying the suitable moisture proofing material.
- The surface should be free of all contaminants and loose material. All possibilities of moisture, e.g. walls, drains, damp proof courses, plumbing, refrigerators, washing machines etc. **MUST** be thoroughly checked and repaired if found to be leaking.
- Concrete and plaster should be cured and at least 60 to 90 days. Concrete or screed base - In good drying conditions, allow 25 days per 1 inch of new screed / concrete to ensure it is dry. Further time may be necessary depending on site conditions.

- All sub-floors must be checked for moisture prior to the installation of solid bamboo flooring. This can easily be carried out using a properly calibrated moisture meter. For concrete sub-floors, the Calcium Chloride test must be performed. If the result of Calcium Chloride test exceeds 3 pounds per 1,000 square feet per 24 hours, or if the moisture meter reading exceeds 12%, the sub-floor contains excessive moisture. The moisture condition must be rectified prior to the installation of the bamboo floor. **Please seek advice from a moisture abatement specialist.**
- Heating and air systems should be fully operating maintaining a consistent room temperature at 60-80 degrees F. and a constant relative humidity range of 35%-65%, 5 days prior to bamboo acclimation.
- Flooring should not be delivered until the above guidelines are completed. The bamboo planks should be placed in the room in which they are to be installed to acclimatize for a minimum of 72 hours and should be stacked carefully to allow air to circulate. (See Diagram 2.)
- Store **HOME LEGEND SOLID BAMBOO FLOORING** flat with proper support on the ends and center sections in a dry place being sure to provide at least a four-inch air space under and around cartons. Stack the cartons 3-4 high to insure efficient acclimation.
- Do not store directly upon on grade concrete or next to outside walls. Cartons should be placed as close to the center of the installation area as possible, away from exterior walls, windows, and doors. Keep out of direct sunlight and away from air vents.

Diagram 1.

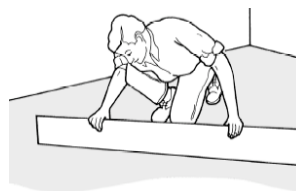
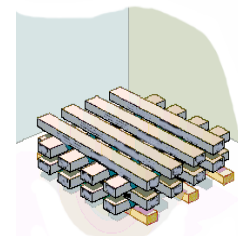


Diagram 2.



#### **Substrates:**

There are a number of acceptable methods for attaching solid bamboo planks to sub-floors. We recommend that the planks are nailed down using

the 'secret nailed' method as described below, but in certain circumstances solid bamboo planks can be directly glued to a concrete or screed substrate.

**IMPORATANT: Do not install HOME LEGEND SOLID BAMBOO FLOORS over particle board. HOME LEGEND will not provide any warranty for bamboo flooring installed over particle board.**

**Wooden sub-floor:** All substrates must be structurally sound, flat and dry. Bamboo planks can be attached directly onto prepared floorboards. If the existing floorboards are sufficiently flat, the new boards can be installed directly on to them at 90°. If the existing floor is not suitably flat then it must be flat and level by overlaying with WBP (water and boil proof) plywood. Loose boards must be secured or the new floor may squeak. **Please note: Care must be taken not to damage pipes or electrical cables beneath the sub-floor with nails or screws.**

**Concrete or screed sub-floors:** All substrates must be structurally sound, flat and dry.

**Secret Nailing:** Lay a suitable polythene vapor barrier onto the substrate, **THE HOME DEPOT SKU is 628-078 – Robert's 6mil Moisture Barrier**, overlap any seams by at least 8 inches and securely tape to provide a suitable seal. Lay  $\frac{1}{2}$  inch to 1 inch WBP plywood across the floor in the opposite direction to the length of the new boards, (Generally speaking, **HOME LEGEND SOLID BAMBOO FLOORING** should be laid lengthways towards the main incoming light source and, where possible, down the length of the room) to provide a material into which the nails can fix. The plywood sheets should be butted together allowing a  $\frac{5}{8}$  inch perimeter gap for expansion.

**Direct Gluing:** Concrete floors must be flat and level with no surface lumps or depressions in the surface. If this is not the case it must be leveled. To ensure even, uniform application of a liquid applied DPM (see Dia.1). The floor can be leveled up to a maximum depth of  $\frac{3}{16}$ " with a good quality leveling compound. Only polymer modified cement based

patches are suitable for use for this application. **DO NOT USE GYPSUM** based patches. The leveling material must be allowed to dry out completely

## Stage 2: Installation

before applying the suitable moisture proofing material.

**Other Sub-floors: Do not install any HOME LEGEND SOLID BAMBOO FLOORING using the glue down installation method over any vinyl asbestos flooring, vinyl composition tile, linoleum, asphalt tile, ceramic or stone tiles, carpet, or vinyl sheet products. These flooring materials should be removed prior to the installation of a new bamboo floor.**

**HOME LEGEND SOLID BAMBOO FLOORING** is not approved to be installed over any type of radiant heated flooring system.

**HOME LEGEND SOLID BAMBOO FLOORS are character by distinctive variations in grain and color. These natural variations in color and grain are not flaws, but are a part of the natural beauty and uniqueness of bamboo flooring. (These inherent variations are to be expected and serve to enhance the natural beauty and enduring charm of the floor.**

Installers typically work out of several cartons at a time. This technique tends to randomize the look of the finished floor. **HOME LEGEND SOLID BAMBOO FLOORS** are manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. These defects may be of a manufacturing or natural type. Typically, an Installer, using reasonable selectivity and will inspect and will cull out or cut off pieces with glaring defects. The shortened pieces, which result, are typically used to start or to end runs.

Since "Beauty is in the eye of the beholder" and since the Owner is the ultimate "beholder of the beauty" the Owner assumes the responsibility for final inspection of product quality. Typically, the Installer will work with the Owner to demonstrate the quality and color variation. This inspection of all flooring material should be done before installation. The Owner should carefully examine the flooring for color, finish and quality before permitting the installer to install it. **If material is not acceptable, do not install nor allow the flooring to be installed.**

**Attaching HOME LEGEND SOLID BAMBOO FLOORS on top of existing wooden floors:**

**STAPLE OR NAIL DOWN INSTALLATION METHOD**

## **JOB SITE PREPARATION**

- Always acclimatize the bamboo flooring product for 72 hours prior to installation.
- Verify that the floor is level and structurally sound. Repair as needed.
- Undercut door case moldings as needed.
- Remove any existing wall base, shoe molding, quarter round or doorway thresholds.
- Cover the clean surface, wall to wall, with 15 lb. black asphalt saturated felt paper. Butt the edges together.

**Note: Per National Wood Flooring Association: Red Rosin paper is not recommended. Red Rosin paper acts as a wick drawing the moisture closer to the planks, not acting as a water barrier.**

### **Tools required for installation:**

- Chalk line
- Level
- Tapping block – [The Home Depot SKU is 132-967](#)
- Rubber mallet
- Hand or electric jam saw
- Moisture meter
- Tape Measure
- Power Nailer
- V-Notch Trowel - [The Home Depot SKU is 256-440](#)
- Pull bar - [The Home Depot SKU is 131-967](#)
- Hand Plain
- Belt Sander
- 3M Blue Tape – [The Home Depot SKU is 400-742](#)
- Robert's 1408 Flooring adhesive
- **Flooring 1-2-3 book**

### **Step 1: ESTABLISH A STARTING POINT**

- A new bamboo floor should be laid at a 90 degree angle to the existing flooring. If the new boards are to be laid in the same direction as the old, ply wood sheets (with a minimum of    inch thickness) should be nailed or screwed to cover the existing floor. Remember to allow a 5/8 inch expansion gap around the perimeter of the room.

- Before beginning the actual installation, start a random layout of the flooring by arranging

**Note:** Typically the first few rows must be edge nailed by hand rather than with a nailing machine due to a vertical wall obstruction. When clearance allows, use the appropriate nail/staple tool, which drive fasteners, simplifying and speeding up the nail/staple process.

short and long lengths equally over the areas where the flooring is to be installed.

- Work out of several cartons at a time to insure proper color and shade mixture.
- Align the first row of planks to be sure you have a good straight line from one side of the room to the other. Snap a chalk line at the desired distance from the wall to help align the planks. The end joints of plank or strip flooring should be staggered to achieve the best appearance in the finished floor. (Minimum 6-8" for 3" planks.) NOTE: If the wall is not square, it may be necessary to scribe the first row.

**Important:** Leave the proper amount of expansion space next to the wall, in this case, a 5/8 inch space.

### **Step 2: INSTALLING THE FLOOR**

- Align the first piece on the chalk line. The groove side and end will be facing the starting wall. The tongue is to be facing into the room. To avoid splitting the wood, pre drill holes then drive 7D or 8D finish nails, or 2" pneumatic nails, into the face of the board every 12" approximately 1/3" - 3/4" from the edge closest to the starting wall and within 2" - 3" from the ends.
- Edge nail the plank by driving the same type fasteners at a 45 degree angle through the tongues of the planks in the first row of planks, spacing the nails every 8" - 10" and within 2" - 3" from the ends. This process should be repeated for each piece in the entire first row. Upon completion of the first row, go back and sink the face nails with a nail punch. If it appears that the holes will not be covered by the wall base or quarter round trim, fill the holes with wood filler designed to blend with the color of bamboo floor.



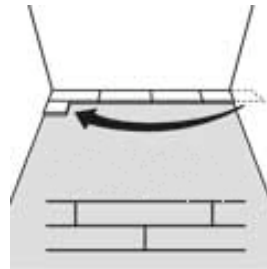
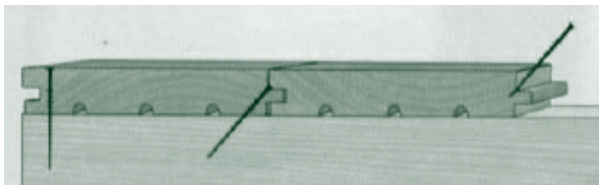


- Install each successive row of planks by edge nailing the tongue side every 8" - 10" to within 2" - 3" from board ends. Be attentive to staggering the ends of the boards appropriately in adjacent rows to avoid clustering end joints. Upon reaching the last row to be installed, the planks should be ripped to allow proper expansion space. The last rows must be fastened by nailing approximately 1/2" to 3/4" from the back edge of the board every 12". Use the same process of countersinking the face nails and applying wood filler as used on the starter wall. Make sure when the installation is complete that the 5/8 inch expansion space is covered with the correct molding.

Top nail at 8 to 10 inch intervals or onto every joist, and where possible within 3" of the end of each board.

Using the same spacing, of 8 to 10 inches, secret nail at a 45° to ensure a countersink through the tongue.

Fit the next run of boards groove to tongue and secret nail.

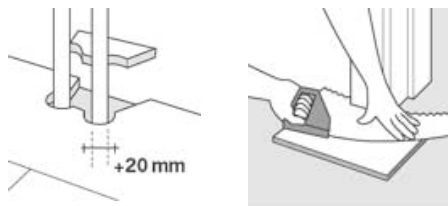


Continue to fit the boards from left to right. Always stagger the end joints by a minimum of 6 inches. Measure and trim the last board to fit, allowing for the 5/8 inch expansion gap. Where possible, use off-cuts to start the next row.

For the last row of boards you can use the sandwich technique to measure the width of board required, ensuring that the row is not less than 4 inches in width.

Top nail and countersink the last run of boards to finish.

All pipes, pillars, frames etc must be cut around to provide suitable expansion gaps of 5/8 inch.



## GLUE DOWN INSTALLATION METHOD

### JOBSITE PREPARATION

- Undercut door case moldings as needed.
- Remove any existing wall base, shoe molding, quarter round or doorway threshold moldings.

**Direct Gluing:** With this system glue is applied directly to the concrete screed sub-floor to adhere the planks.

### Step 1: GETTING STARTED

- Install the flooring parallel to the longest wall in the room. Measure out from the wall in

two places allowing the proper expansion space, 5/8 inch. Mark and snap a chalk line across the two marks. Glue the first row and place spacers against the walls to secure the row in place. Continue installing the floor from left to right.

- Spread only enough glue to install what can be set within 45 minutes that is, **15 minutes of OPEN TIME** and an additional 30 minutes for actual installation. It is the installer's responsibility to check the transfer of adhesive THROUGHOUT the installation process. If the adhesive no longer transfers to the back of the flooring material, it must be removed and new adhesive applied.
- **DO NOT WET LAY BAMBOO FLOORING INTO ADHESIVE (wet set), as Roberts 1408 Adhesive requires a minimum of 15 minutes of OPEN TIME at ideal conditions (72 degrees F. at 50% RH.) If the temperature is below 72 degrees F. the OPEN TIME must be extended, but not beyond 30 minutes.**
- Work your way out of the room.
- After the install is completed, keep the floor free from foot traffic for a minimum of 24 hours to allow adhesive to properly set.

#### **Step 2: SPREADING THE ROBERTS 1408 ADHESIVE**

- Always refer to the specific instructions on the Roberts 1408 flooring adhesive label.
- When using Roberts 1408 Adhesive, use a 1/4"x1/4" flat top V trowel, held at a 45 degree angle to the floor and proper coverage must be maintained.
- Frequently check to make sure the adhesive is transferring properly to the back of the flooring material.

**Step 3: STARTING THE INSTALLATION** The flooring should be installed from several cartons at the same time to insure proper color, grain and shade mix.

- The proper expansion spacing of 5/8 inch is required on all installations.

#### **Step 5: INSTALLING THE LAST ROW**

- Most often the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space. When this occurs, follow this simple procedure:

1. Lay a row of boards, unglued, with the tongue toward the wall, directly on top of the last row installed.
2. Take a short piece of the **HOME LEGEND SOLID BAMBOO PLANK** product that is being installed with the face down and the tongue side against the wall.
3. Draw a line with a pencil along the row moving down the wall. The resulting line gives the proper width for the last row which, when cut, can then be wedged into place using the pull bar.

- Working from the sub-floor and not on the bamboo from left to right, lay the next board and continue working towards the right until you need to cut a piece to complete the first row. Measure the size you need to complete the first row and cut to length. The balance of the piece you cut may possibly be used to start the next row, if the length is a minimum of 12". Do not forget the 5/8 inch space for expansion.
- Be attentive to staggering the ends of the boards correctly in adjacent rows to avoid clustering end joints.
- A tapping block/hammer can be used to tap the boards until they are in proper position. Lock the row in place using spacers against the wall in the expansion space.
- Once the first row of planks is correctly aligned and glued in place, weigh them down while the glue sets.
- Any surplus glue which may seep onto the surface of the floor must be removed immediately with a damp cloth.
- The glue should not be applied in the groove or the tongue of the flooring.

#### **Step 4: INSTALLING THE BAMBOO**

- Complete the rest of the installation by spreading enough adhesive to install.
- Make sure that there is 100% contact between the bamboo and the adhesive. Use a clean, smooth, 75 pound roller to roll the flooring immediately after installation and after every 150 square foot interval during the installation to insure proper adhesive transfer.
- The flooring should be tapped together during installation using 3M blue masking tape to keep the planks from moving during installation. The tape must be left in place for a minimum of 24 hours. Flooring straps can be used to pull boards together and hold them in place while the glue dries.
- At doorways, a door threshold strip should be used to protect the edges of the floor and to provide a decorative transition from one floor type to another.

4. You will need to use the Pull Bar with care to make the last row fit tightly and to allow for the proper expansion space of 5/8 inch.
  5. Leave spacers in the expansion space until the adhesive has cured, then remove.
- Keep the floor free from foot traffic, for a minimum of 24 hours or until adhesive has set securely.

**Finishing off** – Once the flooring is installed, the expansion gaps can be covered by re-fitting the Wall Base boards. Alternatively, if the base board has been kept in place attaching some Quarter Round trims to the base boards using glue or panel pins will also achieve the desired results.

fire-as/nzs 1530.3:199	Simultaneous determination of ignitability, flame propagation, heat release and smoke release			
	<b>Parameter</b>	<b>Mean</b>	<b>std error</b>	
ignition time		5.7	0.1	
flame spread time	30	3		
heat release integral (kj/m2)	194.2	3.9		
smoke release (log10d)	-1.632	0.151		
ignitability	0-20	14		
spread	0-10	8		
heat	0-10	7		
smoke	0-10	2		

For more information on Home Legend flooring and flooring accessories, please visit our website at [www.homelegend.com](http://www.homelegend.com) to see our selection of Area Rugs, Wood Flooring, Bamboo Flooring, Cork Flooring, Laminate, and complimenting products.

Thank you for choosing Home Legend floors!

