

INSTALLATION TOOLS

You will need:

tape measure
pencil
chalk line
hand saw (power saw also helpful)
tapping block (trimmed piece of flooring)
crow bar or pull bar
bamboo or plastic spacers (1/4")
hammer
drop saw
chocking wedges

Important Pre-Installation Notes

The following information provided by Venus Bamboo is intended to serve as a reference guide only. Please carefully read Venus Bamboo's installation, maintenance and warranty documentation prior to installation.

Venus Bamboo offers in house technical support as a courtesy to our customers. Consult with one of our bamboo flooring experts to find answers to your specific installation questions unique to your application. Contact us by email: venusflooringnz@gmail.com;

Determine the best installation method that suits your application. Venus Bamboo floors may be Floated (not secured to the subfloor), Glued, or Nailed. Follow the instructions designated for the most suitable installation method for your project.

Upon ordering of wood floor material consider adding an additional 10% to allow for cutting waste (7%) and grading allowance (3%).

Venus Bamboo flooring is manufactured in accordance with accepted industry standards, which permit manufacturing, grading and natural deficiencies not to exceed 5%. If more than 5% of the material is unusable, do not install the flooring. Immediately contact Venus Flooring or the distributor/retailer from which the flooring was purchased. No claim will be accepted for materials with visible defects once they are installed. Installation of any material serves as acceptance of the material delivered.

Installer/Owner assumes all responsibility to inspect all flooring before installation. Boards deemed unacceptable in appearance can be placed in closets, near walls or simply not be used. Pieces with glaring defects that can be seen from a standing position should be cut off or not be used as use constitutes acceptance. The use of putty, filler sticks or markers to touch-up flooring during installation is considered normal practice.

As bamboo is a natural product, natural variations in color may occur within and between individual flooring planks. To visualize the range of colors within the flooring style you are considering, compare your samples. During installation, work from several cartons at a time to achieve a uniform appearance across the entire floor. Mix and mingle planks when dry-laying the floor for maximum aesthetic appearance. Blend moldings to planks that have

similar color. Natural variations in color are not covered under warranty.

It is the responsibility of the installer/homeowner to determine if the job site conditions, environmental conditions and sub-floor are acceptable for the installation of Venus Bamboo flooring. Prior to installation, the installer/owner must determine that the jobsite meets. Venus Bamboo does NOT warrant against failure resulting from or connected with subfloor, job site damage, or environmental deficiencies after installation.

Venus Bamboo makes no warranty or guarantee of the quality of the chosen installer's work or of a particular installation performed by him or her.

Controlling flooring moisture content is important for success. Bamboo, like all hardwood flooring species, is hygroscopic; its size and shape changes naturally with the absorption or release of moisture. The amount of movement varies depending on the preventative steps taken at the time of installation (i.e. acclimation, moisture barrier application, etc.) and the stability of the home environment thereafter. Care should be taken to control fluctuating levels of moisture indoors, and to maintain humidity levels within the recommended 40-60% relative humidity range.

Floor noise is normal and will vary from one installation type to the next. Occasional noise is due to structural movement and may relate to sub-floor type, flatness, deflection, and/or related to the fasteners, changes in environmental conditions, relative humidity and the amount of topside pressure applied to the flooring. For these reasons floor noise is not considered a product or manufacturer defect.

Venus Bamboo flooring is intended for installation on or above grade only. Flooring installed below grade is not covered under warranty.

The subfloor should be dry, clean, level and free of any cracks.

Irregularities on the subfloor should not exceed 2mm every 1 meter in all directions. Uneven subfloor will effect the performance of the product and may lead to product failure. Uneven floor can also cause noise. The product cannot be installed over carpet and/or carpet underlay.

Moisture Testing Bamboo Floor:

Use a reliable moisture meter that is acceptable for bamboo flooring. Strand-woven bamboo moisture readings must be converted to achieve accurate results. Contact the meter manufacture to verify substitute settings for bamboo. Meters that have adjustable species settings and conversion tables for strand-woven bamboo are most accurate. The flooring moisture content should vary less than 3% from the subfloor moisture content.

Moisture Testing Subfloor:

General: Test the subfloor for moisture content before installation. If high moisture readings are found, identify the moisture source and correct the problem. Extend acclimation time and increase ventilation until the proper conditions have been met. Apply a moisture barrier. Please note that test results are only applicable the day of testing and will not ensure that moisture will not fluctuate with seasonal changes. Regardless of subfloor moisture content, the use of a moisture barrier is required

for all installations. Venus Bamboo does not warrant against moisture related problems. If results show moisture vapor at or exceeding 12%, determine its source and correct problem before installation.

Wood Subfloors: Use moisture meter to test wood subfloor moisture content. If results show moisture vapor at or exceeding 12%, determine its source and correct problem. Do not install the floor without a vapor barrier. Venus Bamboo always recommends using a moisture/vapor barrier, especially if the moisture content of the flooring and subfloor vary greater than 3%.

Concrete Subfloors: Concrete subfloors must be tested for moisture vapor pressure in more than one place for consistent readings. If test results show moisture vapor exceeds the minimum requirements below, do not install the floor without an impermeable vapor retarder with a perm rating of less than .13 designed to permanently block this moisture.

Calcium Chloride Test: Maximum vapor emissions cannot exceed 3lbs/1000SF in 24 hours

Tramex Concrete Moisture Encounter: Moisture readings should not exceed 4% on upper scale

In-Situ Probe Method: Relative Humidity levels should not exceed 75%

Moisture Barrier Requirements:

General: Unexpected changes to subfloor moisture content may cause dimensional changes to the floor. To ensure a lifetime of satisfaction, it is strongly recommended that Venus Bamboo® flooring be installed over a moisture barrier or vapor retarder (following manufactures guidelines) per the following specifications:

Wood Subfloors: For best results, use a moisture barrier with a perm rating between 0.7 and 50 Install as recommended by the manufacturer. Examples of acceptable moisture barriers for wood subfloors include: Asphalt laminated paper and: Asphalt-saturated kraft paper.

Concrete Subfloors: For concrete applications, a moisture barrier/vapor retarder should be chosen based on concrete moisture content. For unlimited moisture protection, use Moisture Control System. Install as recommended by the manufacturer.

Acclimation & Conditioning of Flooring

The goal of acclimation is to allow the moisture content (MC) of the flooring to fully adjust to its new surroundings before installation.

1. Determine Normal Living Conditions - Ideal interior environmental conditions vary from region to region and jobsite to jobsite. It is the installer's responsibility to know what the "ideal" climate conditions are and customize the acclimation of the floor around those conditions. For a general view of moisture content averages by region, see the map below.

2. Control Home Conditions Accordingly - Acclimation should occur at normal living conditions. Before opening the cartons, the indoor environment should reflect the room temperature and relative humidity levels expected to be present before, during, and most importantly, after

installation. Operate temperature / humidity control systems as normal. Allow normal ventilation through rooms.

3. Cross-Stacking Flooring Planks - For maximum stability, Venus Bamboo recommends cross-stacking the flooring at the installation site while it acclimates. Remove the flooring from boxes and cross stack planks at least 4” off the subfloor with even spacing between planks to allow for complete and even air-circulation around the flooring.

4. Acceptable Areas for Acclimation - Acclimate the flooring as close to the center of the installation area as possible. Do not store flooring next to outside walls, in direct sunlight, near air vents or under conditions that don't reflect the normal home environment. Garages, and exterior patios, for example, are not acceptable areas to store wood flooring during acclimation.

5. Determine Appropriate Acclimation Time Frame - Venus Bamboo flooring should be allowed to acclimate on the job site for a minimum of 3 days. Extended conditioning may be necessary depending on the climate. For regions or conditions that are extremely dry, humid or highly-fluctuating, 2 or more weeks may be necessary for acclimation.

General Guidelines:

- Follow Venus Bamboo Maintenance & Care Guidelines to keep your floor looking its best after installation
- Save extra flooring for future repairs.
- Do not install flooring under permanent or fixed cabinetry.
- Floor should be installed from several cartons at the same time to ensure good color, shade and appearance.
- Most installation failures result from jobsite moisture. Do not deliver flooring to the jobsite until problems are corrected.
- Venus® flooring is intended for installation on or above grade only. Flooring installed below grade is not covered under warranty.
- Since bamboo expands with any increase in moisture content, we require leaving at least 10mm expansion space between flooring and all walls and vertical objects, such as walls, cabinets, pipes, etc. If the installation flows into other rooms and continuous runs in excess of 9 meters, a greater expansion is required, approximately 16mm for every 3 meters. NEVER install any floating floors against any vertical fixed object such as fireplace, columns, floor outlets, etc. Failure to follow this guideline may result in tenting or buckled floors.
- During installation, it is the installer's responsibility to document all jobsite conditions and measurements including the installation date, flooring moisture content, site relative humidity, temperature, and subfloor moisture content. This information must be retained by the installer and left with the property owner as a permanent record.
- Depending on the application, Venus Bamboo flooring can be installed over an approved underlayment to provide greater thermal insulation and sound isolation qualities. Venus Bamboo recommends using premium 3 mm underlayment, which offers several benefits that include step noise reduction, increased walking comfort, and longlasting durability.

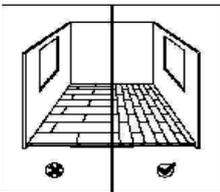
Expansion Space Is Required

- Since bamboo expands with any increase in moisture content, we require leaving at least 10mm expansion space between flooring and all vertical objects (walls, cabinets, pipes, etc.). If the installation area exceeds 9 meters, a greater expansion space is required; approximately 16mm for every additional 3 meters. If the floating installation flows into other rooms, a T-molding must be

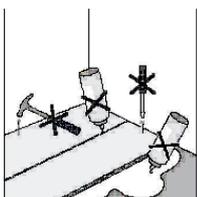
used in doorways and openings between rooms (halls, archways, etc.) to allow separate areas to move without interference.

- Note that proper expansion space depends not only on the size and flow of the installation, but also on expected seasonal changes in temperature and humidity that may cause the flooring to gain or lose moisture content over time. For example, if an installation takes place when humidity conditions are low, it's likely that the wood flooring will gain moisture and expand later during humid seasons. In those cases, incorporate additional expansion space through use of spacers or transition moldings.
- Hardwood floors must be able to expand/contract without interference. NEVER install flooring against any vertical or fixed object such as fireplace, columns, islands, door jambs, floor outlets, etc. Failure to follow this guideline may result in tenting, separation or buckled floors. Do not install cabinets or other permanent fixtures on top of the floor. Never nail or screw anything through a FLOATED floor.
- To cover your expansion space, Venus Bamboo carries matching bamboo flooring moldings that include T-moldings, baseboards, quarter rounds, thresholds and vent registers. Matching stair parts are also available; including stair nosing, treads and risers.
- Undercut door casings and jambs. Remove any existing base, shoe mold or doorway thresholds. These items can be replaced after installation. When undercutting door casings the installer should confirm there is the recommended expansion space. The floor must have 10mm clearance under the door casing to be able to float freely without vertical restriction. The installer should ensure that the plank can move freely under the door jamb.

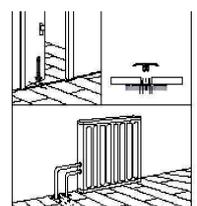
Focus Points



Always lay the product down the length of the room to minimize the number of joints across the width.



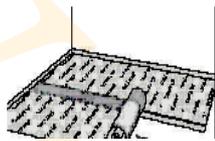
Click is a revolutionary system for installing floating floors without using glue. The planks can be clicked together easily.



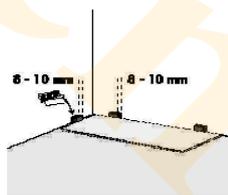
Bamboo is the main component of this floor. Because room humidity can vary between summer and winter—it is vital that the floor is able to expand and contract. That's why you must leave an expansion joint all sides of the floor of minimum 8-10mm, also around pipes, under doors and at doorsteps. In any case, make sure there is an expansion joint between

different rooms. These expansion joints are covered with a profile attached to the subfloor. Our bamboo floor is not suitable for use in damp spaces like bathrooms and sunas.

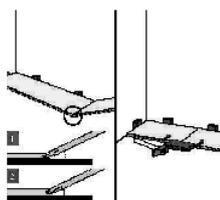
Installation



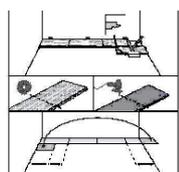
First lay the underlay across the breadth of the room and then gradually as you lay the planks. It is vital that you use a leveling underlay to smooth away any unevenness in the floor base.



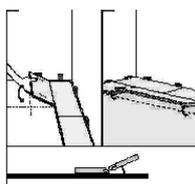
Put the plank with sawn off sides against the walls. Put spacers from the installation kit between the planks and the wall. This will ensure that your expansion joint is wide enough: 8-10mm. depending on the environment the floor may require more room to expand or contract than the standard 8-10mm.



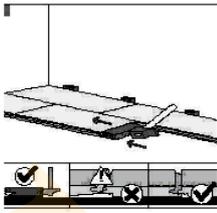
Position the panel to be installed at an angle of 20 to 30°. To the panel already laid. Move the panel gently up and down and at the same time exert forward pressure. The panels will automatically click into place. Position the click tapping block over the short joint between the panels and tap carefully until the panels fully align.



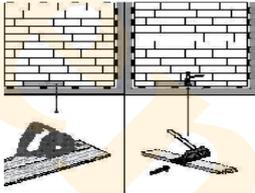
Of course you also need to saw the panels. To obtain a clean cut, the top surface should face down when you use a jigsaw, or circular handsaw and up when you use a handsaw or a crosscut saw. Ensure that the end joints of the panels in tow successive rows are never in line. Always ensure that joints are staggered by minimum 150mm.



Click the first panel of the second row in the previous row. Also click the second panel of the second row in the previous row.

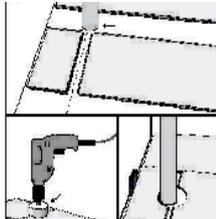


Tap the cross joint between these panels snugly together using the tapping block. Make sure both panels are level on the subfloor and that you position the tapping block as indicated in the diagram to avoid damage.

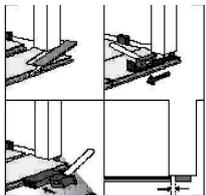


There must also be an 8-10mm expansion joint between the last row and the wall. Keep this in mind when sawing the last row of panels. In places where it is too difficult to install the planks with the tapping block, you can tap them together using the Double_side_prybar

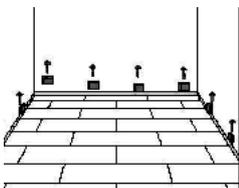
Obstacles



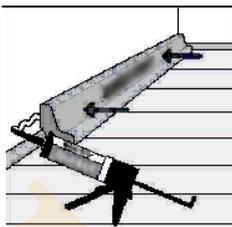
In rows where there is a pipe, make sure the pipe falls exactly in line with the joint between two panels. Take a drill bit with the same diameter as the pipe plus 20mm. click the panels together on the short side and drill a hole centre on the joint between the two panels.



When sawing the panels ensure that the expansion joint under the door is at least 10mm. If you cannot lift the panel, use an adapted tapping block or crowbar and hammer to tap the panels together.



Remove all spacers.



Install the skirting-board never attach the skirting-board to the floor. This method allows the floor to expand and contract under the skirting-board.

Finally, any gaps at the floor perimeter that could not be covered with skirting or profiles can be filled with a caulking compound in an appropriate colour.

Disclaimer:

Responsibility lies with the person who is installing to determine if the sub-floor is acceptable for the bamboo flooring installation. Venus Flooring Ltd is not responsible for bamboo flooring failure due to sub-floor deficiencies or lack of preparation. Venus Flooring is a natural product. Therefore natural variations in colour, tone and grain are to be expected. Again, it is the responsibility of the person installing to inspect each Venus board carefully before installation. Venus Flooring Ltd does not take responsibility for boards with visible defects once they are installed. Venus Flooring Ltd will not take any responsibility for moisture issues caused by the subfloor, trades people or faulty appliances. Venus Flooring Ltd can not be held liable for any installation related potential issues e.g. expansion, uneven subfloor or moisture issues