

Solid Tongue & Groove Bamboo

Full Installation Instructions

General Guidelines

All instructions and recommendations are based on the most recent information available. They should be followed for an ideal installation. They should also be read in conjunction with the relevant sections of the current British Standards BS 8201, and any referenced standards within this standard.

1. NEVER install outdoor, or in areas subject to water and high humidity.

2. Stable temperature and humidity within acceptable limits.

- A stable atmosphere prevents stress to the Bamboo. Stable means keeping the temperature steady within $\pm 3^{\circ}\text{C}$ and the air relative humidity within $\pm 5\%$ RH but above 45% RH and below 65% RH. An ideal atmosphere is ambient temperature between 17°C (62.6°F) to 22°C (71.6°F) and relative humidity 45% RH to 65% RH. Quick and large changes of temperature should be avoided, as this will negatively affect the Bamboo.
- The sub-floor temperature is also important and should be at a minimum 15°C (59°F) maximum 27°C (81°F).
- The Bamboo and room should be kept at a steady temperature 48 hours before, during and 48 hours after installation, including overnight.

3. Acclimatisation

Acclimatise the Bamboo in the climate-controlled location(s) (as described above) for a minimum of 48 (ideally 72) hours, before starting the installation. Keep in the packaging and store flat at no more than 6 packs high, away from direct sunlight and not against radiators or tight against walls. If underfloor heating is present, store the packages off the floor (on battens, providing the packs are fully supported) this will reduce the bottom packs from heating up to a higher degree, than those at the top of the pile. The acclimatising period will depend on the pre-delivery storage conditions. The cooler the storage prior to delivery to site or during delivery, will increase the acclimatising time.

4. Preparation

- Only deliver and install after the jobsite has been cleaned and cleared of debris, that could potentially damage the Bamboo prior to or the finished installation. The site conditions must also be within acceptable tolerances, see above.
- Bamboo is a natural product that has a variation of shade. It is advised to mix the boards from several different cartons to blend their natural shade characteristics. The installer is responsible for the final selection, and should select carefully to give a good overall appearance. If you have any questions, please contact your supplier. We will not accept a claim for poor appearance based on the selection and distribution of boards in the installation.
- Bamboo is manufactured to high quality standards, and is carefully inspected prior to

leaving the manufacturer. Occasionally however, defects are not detected. If you notice a visible defect with the Bamboo you are installing, discard the affected board or use for a cut, removing the offending fault. An extra 5% allowance to cover these points and any errors created during fitting when calculating is a normal procedure. If you find a number of defects, stop the installation and contact your supplier. Visually obvious defects that could be seen during installation will not be accepted as a complaint.

7. Areas over 10m in length and 8m in width should incorporate an intermediate expansion. This can be achieved by leaving a small gap between the long joints. Please consult your supplier for advice on large areas.

8. Do not fix furniture (kitchens etc) through floating floors as this will eliminate the expansion and natural movement.

5. Check the suitability of the area to be installed

Prior inspection of the areas is vital to the performance and longevity of the product! Main points to consider during the inspection which are not exhaustive: -

Flatness of the sub-floor

Uneven sub-floors will affect the stability of the Bamboo. British Standards and manufacturers state the sub-floor should be measured using a 2m straight edge placed in contact with the sub-floor, and measuring any gaps underneath which should be less than 3mm. Isolated ridges or dips should also be considered. Any undulations should be smoothed out using an appropriate compound, and ridges should be ground off on solid sub-floors. Always consult the smoothing compound manufacturer for a specification. See section 12 for wood sub-floors. As an extra check you can dry lay a few boards and walk over them in different positions checking for any bounce. Do not level a floor with the adhesive!

Cracks in the sub-floor

There are many reasons for cracks, including stress and settlement. All cracks must be attended to prior to applying a smoothing compound and they must be investigated to ensure the movement has not fractured the membrane under the screed. Just filling the cracks could lead to longer-term problems with movement and moisture. If in doubt seek professional advice.

Dry sub-floor

Sub-floors solid or wood need to be dry. British Standards state a screed should be tested using Hygrometry as described in annex A in the standards. The maximum permissible level of relative humidity in the screed for floating installations or nailed to batten / joist systems, incorporating a vapour check membrane is 75% RH. For floors which are to be directly stuck down with full-spread adhesive without a vapour check membrane 65% RH. There are many manufacturers of moisture testing equipment such as Tramex and Protimeter, who's instruments can be used to identify areas for further testing with a hygrometer. These instruments can also be used to check the relative humidity to British Standards. The duration of the test will depend on the sub-straight. Sand and cement will normally require 2 to 3 days, power floated screeds will require at least 7 days. Never test floors with underfloor heating or artificial drying aids (de-humidifiers) switched on. Switch off for at least 4 days prior to setting the hygrometer, and they should remain off during the test period. Any test should be logged and preferably witnessed so that if there is a problem this evidence can be produced to help to resolve potential issues.

- As a guide a new sand and cement screed will dry at a rate of 1mm per day for the first 75mm, and 0.5mm per day up to 100mm. Thickness greater than 100mm can take considerably longer (150mm up to and over 1 year) given ideal drying conditions 20°C and 65% RH. Calcium Sulphate (Anhydrite) screeds dry at a similar rate providing the surface laitance has been sanded off to allow evaporation, or treat as power floated.

- Some types of (not all) sub-floors can be coated with a liquid damp proof membrane to prevent excess moisture affecting the Bamboo. Always consult the DPM manufacturer for suitability. DPM's are not always compatible with underfloor heating, so please contact the DPM manufacturer for suitability.

- Rooms below ground level are particularly vulnerable to high moisture and humidity levels see section 9 below.

- Wood sub-floor moisture also needs to be checked. This can be done using the equipment described above, with a spike attachment. These work by pressing the spikes into the wood with the spikes (2) in line with the grain. The maximum moisture level is 15%, although ideally as stated in British Standard 8201 the maximum moisture content of existing boards should be within $\pm 2\%$ MC of the Bamboo being installed. Moisture levels above 17% need to be investigated. High levels could be caused by poor or no ventilation under the suspended sub-floor. If in doubt seek expert advice.

6. Contaminated sub-floors for example, oil, wax, varnish, adhesive, paint etc.

All contamination should be removed prior to applying damp proof membranes, smoothing compounds and adhesive, (do not apply a DPM on wood based sub-floors). Some preparation manufacturers have products that will adhere to small amounts of adhesive residues, but please check with them for suitability. Oil is a serious problem that may require the removal of the screed or to use an isolating floating membrane (this is only suitable for floating floor installations).

7. Building movement join(s)

Movement joins are required to be left clear and should be bridged over with a suitable cover strip (not the Bamboo floor!). These can affect the aesthetics of the Bamboo floor, but with prior consideration they can be designed into the installation.

8. Underfloor heating suitability

Unfortunately this bamboo is not suitable for use with underfloor heating. If you would like further information regarding our range of bamboo flooring that is suitable, then please call 0116 2741050.

9. Structurally sound sub-floor i.e. minimal vertical movement and firm screed

- Excess vertical movement can cause stress to the Bamboo. Measuring this is not easy, but as a guide place a straight edge across the floor and walk next to the straight edge. If the sub-floor dips by more than 5mm you should consider strengthening. Also if you walk with one foot either side of a join in the sub-floor and the joins move independently this will affect the stability of the Bamboo flooring. Wood sub-floors can be over-laid with plywood with at least a 6mm thickness, and should be laid at right angles to the run of the board long joins.

We recommend applying a primer to the plywood when fully bonding Bamboo to the sub-floor, to give a better bond (follow primer manufacturers instructions). Solid sub-floors such as sand and cement with day joints or cracks could be stitch bonded to stabilize the movement. If in doubt seek expert advice.

- Laitance can be present on new screeds particularly Anhydrite screeds, and should be removed by sanding or grinding. To check for laitance or a friable surface of a screed, scratch the surface with a hard sharp object such as a nail, awl, knife or similar (a "tear" device guarantees a constant pressure when scratching the screed). Scratch two lines approximately 10mm apart horizontally and vertically crossing each other. The appearance of the edges (for example, jagged or clean) provides a hint about the surface firmness of the screed, as does the de-lamination of the surface between the lines. Be careful with Anhydrite screeds as laitance can form to a hard finish if not sanded within two to four weeks of laying the screed. This surface may appear firm but may de-laminate with time and usage.

10. Below ground level areas

- These are not recommended or ideal areas for Bamboo installations! If you proceed we cannot give a guarantee. If proceeding, ensure these areas are suitably ventilated to prevent a build up of humidity and to reduce the risk of condensation. These areas should be constantly monitored for humidity levels that should be between 45%RH to 65% RH. Always consider installing a humidity controlled re / de-humidifier.

- Moisture can penetrate the walls as well as the sub-floor, and could affect the stability of the Bamboo. Always check the moisture level using a suitable instrument or seek expert help.

11. Existing floorcoverings

- Ceramic tiles should be checked for full bond to the sub-floor and made smooth / level by applying a suitable smoothing compound or repair mortar. If gluing over ceramic tiles, scuffing and or priming is normally required. Always follow the manufacturers instructions.

- Do not install Bamboo by full adhesion above old resilient (vinyl) flooring, as the adhesive could be affected by plasticiser migration that will de-grade the adhesive.

- Do not fit wood on top of old textile (carpet) floorcoverings and do not use the old or new carpet underlay.

- Do not fit wood over wood block floors.

- Do not fit wood over floating wood or laminate.

WARNING:

Do not sand, dry scrape, bead blast or mechanically pulverize existing resilient flooring, backing or lining felt. These products may contain asbestos fibres that are not readily identifiable. The procedures described above can create asbestos dust. The inhalation of asbestos dust may cause asbestoses or other serious bodily harm.

12. Wood based sub-floors

Floorboards, chipboard and OSB need to be flat. Ideally overlay with plywood of at least 6mm in thickness which should conform to a suitable standard and should include the following.

- Exterior quality complying with BS EN 314-1:2004 Class 3 (commonly referred to as WBP).
- Be resistant to both static and impact indentation.
- Be of uniform density and thickness.
- Have a written warranty for suitability and performance from the panel manufacturer or have a history of proven performance.
- Plywood should be securely fixed to the sub-floor by either mechanically fixing using a suitable fixing such as ring shank nails, screws, serrated staples, divergent staples all of which need to be of a suitable gauge (not small electric staples even though they are divergent) set at minimum 100mm intervals 12mm in from the edge and 150mm centres in the main area of the panel or by full adhesion using a suitable adhesive. All joints should be sanded to smooth out any variation in the panel thickness. Note: Always acclimatise the plywood prior to installation. Priming plywood when fully bonding Bamboo to the sub-floor to give a better bond (follow primer manufacturers instructions).

Installation

Setting out / planning the area

- Determine how you want the flooring to run. Typically planks run the length of the room. There may be exceptions since it is all a matter of preference. Running planks across small width areas (less than 1.25 meters), can sometimes give the impression that the area is smaller than it is, and can affect the bond strength of the flooring.
- Plan the area, ensure you have at least half a width of plank against the wall opposite the start wall and or against focal points such as fireplaces. The length is not so critical, but try to avoid small cuts of less than 200mm in length. Rooms that are not square should be set off the main focal point, but with full discussion with the end user.
- Expansion gap. All Bamboo products regardless of method of installation, require an unfilled expansion gap. A minimum 12mm gaps should be allowed for nailed and fully bonded installations, and a minimum 12mm gap for floating floors up to 8m wide (board width). This includes doorways and each room should be fitted individually. Areas above this size should be calculated at 1.5mm per meter width for nailed and glued and 2mm per meter width for floating installations. Large areas (above 80 sq m) may require intermediate expansion between the boards, please contact your supplier for advise.

Installation fully bonded

- Undercut the architraves to allow the Bamboo to slide underneath, leaving an expansion gap. Never undercut the newel post, as this is a structural part of the stairs. There are a number of electric and manual undercut saws to carry out this task. The thickness of the cut is important, so as not to leave a gap between the board and architrave. Tip: measure the thickness of the Bamboo and either set the saw to the correct depth, or use a spacer for

manual cutting to achieve the correct height.

- Open at least three packs and spread out the boards to check for natural shade compatibility, with the adjoining board. Bamboo is a natural product and will show variations in shade detail that is not a manufacturing fault! The installer assumes all responsibility for the final selection that may require input from the customer. If you find lighter or darker boards that do not blend easily, use these for cuts or in an area of minimal view. You should allow a 5% wastage factor into your planning so that any obvious variations or accidents when cutting can be discarded.

- Dry lay out the first row of boards with the grooves facing the wall, cutting the last board to size allowing for the expansion gap. Check the boards are in line using a straight edge or string line. Scribe the boards into the long wall ensuring there is at least half a board width at the opposite side of the room. Tip: always check the width of the boards in front a fireplace or other visually obvious walls. Cut the boards using a suitable instrument such as a jigsaw. Continue to dry lay the first three rows using the off cut the previous row to start the next row, proving the length is at least 200mm. Stagger the header joins by at least 200mm for the best aesthetics.

SAFETY:

Always work on a suitable bench and clamp the Bamboo prior to cutting. Ensure the cutting equipment has been electrically tested (P.A.T.) and wear suitable work wear that does not have loose tags etc that could catch in the saw blade or any other moving part. Remove or secure all jewellery. **Safety is your responsibility!**

- Mark a line on the sub-floor along the edge of the third row (adhesive line). Remove the boards and place in order away from the adhesive line. Apply adhesive up to the marked line using a suitable adhesive and notch trowel, check adhesive manufacturers instructions for suitability and trowel to use. Once applied, lay the boards into the wet adhesive placing wedges to keep the expansion gap. When placing the boards, apply a little lateral movement and downward hand pressure to ensure good transfer of adhesive. Tip: lift an occasional board to see if there is good transfer of adhesive (minimum 80%). If the transfer is not good, change the size of trowel and re-check. If the boards do not fit together easily, use a knocking block and knocking bar for the ends. It is not usual to need tension straps, but if required use them. Ideally leave the first three rows for at least 1 hour to allow the adhesive to grab the boards, that will reduce the possibility of moving them when fitting the rest of the flooring. Continue installing the rest of the floor marking a line for the adhesive. This line should be slightly less than the width you can easily reach when placing the boards, and the size of area is small enough so that you do not leave the adhesive open for too long (the adhesive could skin over giving minimal or no transfer to the back of the board). Always work off the boards never on top, unless you distribute your weight using plywood or similar (protect the Bamboo from scratching). If the installation is over more than one day, clamp the boards in place overnight using either tension straps, blocks screwed to the floor or wedge a few pieces of wood off the opposite wall and do not walk on the flooring. Continue with fitting the rest of the floor, placing wedges at the ends of all boards to keep an expansion gap. Remember to keep the header joins random and at least 200mm apart. Check that you are not creating a stair case effect with the joins. Aesthetics are an important part of the installation. Leave the wedges in place for at least 24 hour allowing the adhesive to dry / cure.

- Keep foot traffic off the floor for 24 hours. If foot traffic is required due to location, place plywood or similar over the Bamboo to distribute the weight. Check the plywood is smooth with no debris underneath, possibly lay some underlay underneath to prevent scratching. Never cover Bamboo flooring with plastic. This will make the floor sweat affecting the adhesive curing and stability of the Bamboo.

Installation nailed

(not click type or strand woven)

- Undercut the architraves to allow the Bamboo to slide underneath leaving an expansion gap. Never undercut the newel post, as this is a structural part of the stairs. There are a number of electric and manual undercut saws to carry out this task. The depth of cut is important so as not to leave a gap between the board and architrave. Tip: measure the thickness of the wood and either set the saw to the correct depth or use a spacer for manual cutting to achieve the correct height.
- We recommend covering wood floors with building paper (bitumen middle layer and paper each side) to reduce the risk of moisture affecting the Bamboo flooring.
- Open at least three packs, and spread out the boards to check for natural shade compatibility with the adjoining board. Bamboo is a natural product and will show variations in shade detail that is not a manufacturing fault! The installer assumes all responsibility for the final selection that may require input from the customer. If you find lighter or darker boards that do not blend easily, use these for cuts or in an area of minimal view. You should allow a 5% wastage factor into your planning so that any obvious variations or accidents when cutting can be discarded.
- Dry lay out the first row of boards with the grooves facing the wall, cutting the last board to size allowing for the expansion gap. Check the boards are in line using a straight edge or string line. Scribe the boards into the long wall, ensuring there is at least half a board width at the opposite side of the room. Tip: always check the width of the boards in front a fireplace or other visually obvious walls. Cut the boards using a suitable instrument such as a jigsaw. With battens, ensure the header joints are positioned over a batten or fit an extra batten for support.
- When fitting in large areas in excess of 12 m wide (nailed installations only), start in the middle of the area with both grooves facing each other, placing a false tongue in the grooves. These boards will have to be face nailed and filled. You then work off these boards in both directions. The reason is boards tend to move more in the direction of the tongue, and by running the boards in different direction from the middle the movement is equalised, reducing the effects of the boards only moving in one direction.

SAFETY:

Always work on a suitable bench, and clamp the Bamboo prior to cutting. Ensure the cutting equipment has been electrically tested (P.A.T.) and wear suitable work wear that does not have loose tags etc that could catch in the saw blade or any other moving part. Remove or secure all jewellery. **Safety is your responsibility!**

To fix the first row, drill pilot holes near to the wall that can be covered by the skirting board or quadrant / Scotia at 300mm centres. Check the row of boards are straight and drive in a nail or screw. Do not use adhesive in the joins. (Alternatively use adhesive to fix the first two rows to the sub-floor, allowing time for the adhesive to dry). Now drill pilot holes through the tongue section at maximum 300mm centres or above a batten at an angle of approximately 45°, and drive cleat nails (these can be removed from your nail gun) into the holes using a nail punch to fully drive them home and to avoid the risk of damage to the surface of the board. Tongue screws are an alternative fixing. Continue to fit the second row that will normally require pilot holes to be drilled into the tongue because the nail gun is too long to use until at least the third or fourth row. Stager the header joints by at least 200mm for bond strength and the best aesthetics. Continue fitting the Bamboo ensuring you nail at a maximum of 300mm

centres, and do not nail within 50mm of the header join to avoid fracturing the tongue. When you get to the last two rows you may find your nail gun will not fit, so drill pilot holes and hand drive nails into the penultimate board and face drill the last board, driving nail or screws to fix the last row. Again adhesive can be used to fix this row. The nail should be in accordance with BS 8201, but as a guide the nail / cleat should be of sufficient gauge for strength and the length should be 2.5 times the thickness of the Bamboo (minimum 50 mm length) but must have at least 19mm driven into the sub-floor. Most floorboards are a minimum of 18mm in thickness so when the nail / screw is driven in these should not penetrate the board (nails are angled). Always check for services under the floor. The fitter is responsible for checking this detail!

When fitting on top of composition boards such as chipboard and OSB, it is advisable to use tongue screws to avoid structural damage to the underside of the board and to give strength to the fixing which nails / cleats do not provide in this type of sub-floor as they can work loose.

Installation Underlay/Floating

(tongued and grooved)

- There are many types of underlay for use under Bamboo flooring including fibre board and rolled types. An underlay will normally reduce the footfall noise when walking over the flooring, and can either be insulating to add warmth (high tog rated) or low tog rated for under-floor heating. Only use underlay that is designed for Bamboo flooring. Do not use carpet underlay, as these are too soft. Underlays are either designed with a built in foil or not. Foils are not a damp proof membrane! Always tape the joins on underlay with foil using waterproof tape, taping the foil side and laying the foil side to the sub-floor. The foil should be lapped up the wall but this is slightly difficult as the thickness of the underlay will reduce the expansion gap. One solution is to use plastic cut approximately 200mm wide, and tape this to the foil side of the underlay lapping it up the walls. For underlay without a foil or in addition to foil underlay, lay a plastic slip membrane (1200 gauge) on top of the sub-floor (solid sub-floor only) overlapping the joins by at least 200mm, tape the joins with waterproof tape and lap the plastic up the walls by at least the height of the flooring (to prevent moisture laterally travelling above the plastic). This will be trimmed off at a later stage of the installation. Underlay should ideally be laid at right angles 90° to the run of the Bamboo flooring.

- Prior to fitting the underlay undercut the architraves to allow the Bamboo to slide underneath, allowing for an expansion gap. Never undercut the newel post, as this is a structural part of the stairs. There are a number of electric and manual undercut saws to carry out this task. The height of cut is important so as not to leave a gap between the board and architrave. Tip: measure the thickness of the Bamboo and either set the saw to the correct depth or use a spacer for manual cutting to achieve the correct height.

- Open at least three packs and spread out the boards to check for natural shade compatibility with the adjoining board. Bamboo is a natural product and will show variations in shade detail that is not a manufacturing fault! The installer assumes all responsibility for the final selection, that may require input from the customer. If you find lighter or darker boards that do not blend easily, use these for cuts or in an area of minimal view. You should allow a 5% wastage factor into your planning so that any obvious variations or accidents when cutting can be discarded.

- Dry lay out the first row of boards with the grooves facing the wall, cutting the last board to size allowing for the expansion gap. Check the boards are in line using a straight edge or string line. Scribe the boards into the long wall ensuring there is at least half a board width at the opposite side of the room. Tip: always check the width of the boards in front of a fireplace or other visually obvious walls. Cut the boards using a suitable instrument such as a jigsaw.

SAFETY:

Always work on a suitable bench and clamp the wood prior to cutting. Ensure the cutting equipment has been electrically tested (P.A.T.) and wear suitable work wear that does not have loose tags etc that could catch in the saw blade or any other moving part. Remove or secure all jewellery. **Safety is your responsibility!**

Place the first board against the wall using wedges (minimum 12mm), to keep the expansion gap (these will be removed later) and then apply adhesive (WPVA) to the header join groove of the second board. Application of adhesive should be a continuous bead applied to the top corner of the groove. Tip: To check sufficient adhesive has been applied, use two spare pieces of board to check the adhesive application. Apply the adhesive, place the two boards together and then separate. The adhesive should be wrapped around the tongue. If the adhesive oozes up to the top of the board apply slightly less, alternatively if the adhesive has not covered the tongue apply a little more. This method can be used to check your installation for example on every fourth row at one join. Checking now prevent long term problems that can be more difficult and expensive to correct.

After applying the adhesive, push the two boards together (wipe off any excess adhesive with a moist cloth (wet wipes are good)). Make sure the long edges are aligned and the joint is tight together. If required, use a knocking block to fit the boards together. Continue with the first row placing wedges against the walls and the end wall. If the last board need to be knocked together use a knocking bar placed over the end of the board. Using the off cut from the first row, assuming this is at least 200mm long and the header join is at least 200mm away from a header join in the first row. Apply adhesive as described above along the header and long join grooves, and push the board into place using the spacer to keep the expansion at the left hand wall. Adhesive is an hydraulic and could push open the joint if not held together. We recommend using ratchet straps to hold the boards together whilst the adhesive settles and stops pushing against the joint (ratchet straps have two plates, one that is placed over the edge of the Bamboo against the wall and the second plate which is adjustable along the webbing tape is placed over the leading edge of the board. The ratchet mechanism on the second plate is then ratcheted back and forwards until tension is achieved on the boards. Do not over tighten the straps. To release, pull the small locking plate in the mechanism pulling on the webbing once released). Fit the second board applying adhesive as above ensuring the joints are tight together. Use ratchet straps to keep the joint tight together as above. Continue fitting the second row, scribing to the end wall. Once fitted place a wedge to keep the expansion gap and tension on the header joints.

TIP: if you feel resistance when pushing the boards together, check there is not too much adhesive or if there is any debris in the joint. If you find the joints do not push together without considerable force, stop and investigate. Force could split the board that might not be instantly obvious, but can cause longer-term problem. Continue with the third row but due to adhesive being a hydraulic (will push the boards slightly apart until the adhesive has finished moving) use the tension straps to hold boards together whilst the adhesive is drying. These clamps can be moved when fitting subsequent rows. Also if the installation is over more than one day leave the clamps in place overnight and do not walk on the flooring. Continue with fitting the rest of the floor, placing wedges along all walls. Remember to keep the header joints random and at least 200mm apart. Also check that you are not creating a stair case effect with the header joints.

Aesthetics are an important part of the installation. Leave the wedges in place for at least 24 hours to allow the adhesive to dry / cure. Keep foot traffic off the floor for 24 hours. If foot traffic is required due to location, place plywood or similar over the wood to distribute the weight. Check the plywood is smooth with no debris underneath, possibly lay some underlay underneath to prevent scratching. Never cover Bamboo flooring with plastic.

This will make the floor sweat and will affect the adhesive and stability of Bamboo.

Radiator pipes (all methods of installation)

- Mark their location and cut a hole 16mm larger than the pipe (15mm pipe = 31mm hole) to allow for expansion. Once drilled cut from the wall to the hole using a hacksaw (thin blade). Cut through the board leaving a gap of at least the width of the pipe at an angle of 45° both vertically and horizontally so that the cut off piece will rest on the angle and not fall away, and can be pushed towards the pipe to close up the cut gap. When the board is installed glue the cut off piece and use masking tape to hold in position until the adhesive dries.
- Always leave an expansion gap of at least 12mm between all rooms. This expansion gap should not be filled with the base of the profile.

Finishing the job

- Glued and floating installation: after 24 hours remove the wedges, with nailed installation the wedges can be removed once the whole floor is finished. For floating installations, cut the plastic slip membrane or building paper just above the level of the Bamboo floor, and then either fit skirting boards or quadrants / scoria's. Also fit radiator pipe covers over the expansion around pipes.
- Glued and floating installation: Keep the room temperature constant for 48 hours after completing the installation, that includes through the night. Allowing the temperature to drop overnight could and in many cases does cause the Bamboo to move and lift off the adhesive, or separate the joints on floating installations. Any void under the Bamboo will prevent a bond causing longer-term problems. Nailed installation would also benefit from keeping the temperature constant, to allow the Bamboo to condition to its new environment. Do not wash the floor for a minimum of 48 hours after installation. When cleaning only used special purpose mops and cleaners, and ensure any mop or cloth is well rung out.
- Glued and floating installations: Check and remove any excess adhesive immediately with a wet wipe (adhesive wipes are available). Dried adhesive should be removed with a suitable non-flammable cleaner. Do not use solvents as these can affect the surface finish. Always try a test area on a spare piece of Bamboo or in an inconspicuous place. Dried adhesive may be difficult to remove, take care when removing the adhesive. Do not use a scouring pad, use a natural cloth with no dye as this could transfer to the Bamboo. If using a liquid, read the instructions carefully as some may be too aggressive and damage the surface of the Bamboo.
- Always sweep or vacuum prior to wiping with a cloth to reduce the risk of scratching. Tip: Although a well rung out cloth / mop can be used, wet wipes are a good idea as these do not leave excess water on the surface. Wipe the floor inline with length of the board to reduce leaving dirt deposits in the joins.

Bamboo floors are durable, but eventually the surface will require maintenance. There are a number of products that can be used as a regular treatment (follow manufacturers instructions) or when the time comes, the Bamboo can be sanded and re-lacquered. A professional should carry out this task. The time scale will vary depending on usage but as a guide if the surface start to look dull (sad) consider re-treating.

Care & Maintenance

Preventative and regular maintenance

1. Use protective mats in front of external doors to remove dirt and water from your shoes. Ideally place a grill plate / matt outside which will help to remove grit, that can damage the surface of the Bamboo. Always clean these mats regularly! Rubber backed mats can create staining on the Bamboo, always check for suitability with the mat manufacturer.

2. Fit felt pads to the bottom of the legs of chairs and tables to reduce the risk of damage from scratching. Clean the felt pads regularly to remove any grit or build up of dirt that may have become embedded. Care must always be taken when moving furniture to avoid scratching and damage to the surface of the Bamboo. Always lift and not drag these items. Safety! Care must be taken with heavy and or awkward shaped items.

TIP: Use a wheeled trolley, a piece of carpet upside down or there are special Teflon type skids that will move over the surface reducing the risk of damage. In addition place a piece of board over the Bamboo and slide the furniture over this (check the board is free of debris or other items that could damage the surface of the Bamboo).

3. Do not place heavy items on newly installed glued or floating Bamboo floors, for at least 24 hours after completion to allow the adhesive to cure. Do not fix furniture (kitchens etc) through floating floors as this will eliminate the expansion and natural movement. Furniture with small castors could indent into the Bamboo which will leave a permanent mark. Use special cups to distribute the weight.

4. To keep your floor looking its best, dust mop or vacuum your floor at least twice per week. Do it more often on floors with heavy traffic. Do not use a household dust treatment chemical of any kind, as this may cause the floor to become slippery or dull the finish. Simply sweep the floor as required.

5. Do not pour water on your floor to clean. Excessive water can cause damage to your Bamboo floor and possibly the sub-floor. Use a bucket, and ring out the mop to remove excess water. There are special purpose mops for cleaning Bamboo floors. If a liquid cleaner is to be used, spray the liquid onto the mop head and not the floor which will reduce localised wetting.

6. Do not allow pets with unclipped or sharp nails to scurry across the floor. It could cause severe scratching to the surface.

7. Clean up food spills by removing any excess food, and then clean as described above. We do not recommend powdered cleaners, oil soaps, dishwashing detergents, or other dusting products. Some products leave residues that could affect the performance of the Bamboo floor.

8. Shoe marks and scuffs can be removed by using a wet wipe or cleaner as described above.

9. If your floor has been exposed to excessive water, for example by accident or flooding, remove the water as soon as possible, by moping and ventilate the room. A dehumidifier should be promptly turned on in the room to reduce the moisture level to normal. Do not dry the room below the normal moisture level that existed previously. Once the excess water is removed monitor the Bamboo to see if there is any distortion (cupping, crowning or lifting). We would recommend advising your insurance company of a potential problem so they can log the incident which could save time and problems afterwards, as any problems could take a

few weeks to manifest themselves.

10. If accidental deep scratches or damage occurs, repairs can sometime be undertaken by either using filler or replacing a board. Always keep spare boards but keep them dry and lay flat. Suggestion, under a bed or on top of a wardrobe, never in a garage or shed as these can be damp areas. Consult The Bamboo Co for advice on how to carry out repairs.

11. Bamboo flooring subjected to excessive heat will dry out the natural moisture level of the Bamboo, and cause distortion such as cupping or crowing. Use precautions to minimize, reduce or eliminate the potential effects on the Bamboo from strong sunlight. Windows can be coated with film to reflect UV rays from the sunlight or with new windows they can be designed with built in protection. Windows can be coated with film to reflect UV rays from the sunlight or with new windows they can be designed with built in protection.