



INSTALLATION GUIDE

Hardwood floors are a product of nature and therefore not entirely free of typical timber features such as grain variation and knots. Every piece of wood has different grain, colour and texture. These natural appearances are part of the unique beauty of timber products, which mean that two wooden floors are never the same in appearance.

All products in the Plank collection are manufactured according to industry standards which permit tolerances in dimension by no more than 7%.

Timber is a living product is subsequently affected by differences in moisture content, shrinking when dry and expanding when wet. This is a continuous process throughout the life of the product. Colour variation is normal because no two planks are the same, and exposure to direct sunlight will cause discolouration over time.

Prior to Installation:

Prior to commencing installation, check the relative air humidity in the room. Humidity should be in the range of 50-60%. The supplier is not responsible for any defects arising from climatic changes within the room. Where installing Plank flooring in a new building, ensure that sub-floor moisture is measure before installation. For measuring concrete or anhydrite floors, the measurement must executed following the CM method. In this instance Plank recommends the advice of a specialist installer.

NASH TIMBERS

02 9337 6800

INFO@NASHTIMBERS.COM.AU

WWW.NASHTIMBERS.COM.AU



Installer / owner responsibility:

Care has been taken during the manufacturing process of Plank timber floorboards to compose boards of the same colour and grain variation, however no two boards are the same. Colour, grain and gloss variation may occur from batch to batch due to the nature of the product and the manufacturing process. It is recommended that the boards are laid out prior to installation to judge the colour and grain variation throughout the entire floor. Installation should commence according to a predetermined floor plan. Note that different batches of timber floors may have colour and grain variation and that due to the aging process, newly installed additions to a floor will have substantial colour variation. This variation should disappear over time depending on the exposure to the intensity of the UV component in light.

The installer is responsible for the final inspection of boards and must check quality prior to installation. Examine for: color, finish, milling, machining and quality. If the supplied material is not unacceptable, do not install and contact the place of purchase immediately.

The installer must determine prior to installation whether the site environment and sub-floor involved meet or exceed all applicable standards and recommendations. The moisture content of sub-floor and the climatic conditions of the site should be verified, recorded and should conform with the applicable standards and manufacturer's recommendations. Use of stain, filler or putty for defect correction during or after installation should be accepted as normal.

Any piece of timber which is doubtful as to grade, manufacturing quality or factory finish should not be used by the installer and counted as waste material. Remove any pieces with defects or cut them off, regardless of the cause. In the case of doubts regarding the classification, manufacture or finish of the product, do not commence the installation and contact place of purchase immediately.

Should a proportion greater than 5% of the total material ordered be deemed as "unacceptable" and the installation cannot be completed as a result, photographic evidence is required in order to make a claim. Please note that an incorrect installation will affect the warranty. Once the floor has been installed, it is deemed inspected and acceptable by the installer and homeowner, regardless of whether the homeowner is present at the time of installation. It is the sole responsibility of the installer to ensure that the site, sub-floor and installation tools meet applicable industry standards. Plank accepts no responsibility for issues arising from incorrect or inadequate site preparation or improper installation techniques.

Responsibility lies with the owner/ installer to establish whether the subfloor and the circumstances of the work location are structurally and environmentally suitable for laying the floor.

Subfloor Preparation

Preparation of the surface for laying the sub-floor include but are not limited to:

- The subfloor must be dry, clean and level before installing the wooden floor
- Remove all irregularities larger than 3mm within 3000mm perimeter. Unevenness greater than 3mm must be filled with a suitable filling compound.
- A high relative humidity can have a negative influence on the floor. The critical moisture content for the subfloor is less than 5% for concrete sub-floors and between 10-12% for timber sub-floors.

Note that timber engineered floors cannot be installed over carpe, carpet tiles or any other soft tissue.

Concrete sub-floors

Concrete sub-floors must be dry, level (max. difference of 3mm in a perimeter of 3000mm) and free of structural flaws. Remove loose, flaky concrete by scraping it off by hand or with grinding disk. The concrete sub-floor must be cleared of all paint, oil, glue, grease, wax, dirt, sealants and hardening paste. These products may be removed chemically or mechanically, however caution must be taken to never use caustic products on a solvent base. Residues of solvents may deteriorate the correct binding of flooring adhesives. It is critical to ensure that glue, concrete and wood adhere perfectly. Where there is doubt about the floor remaining sufficiently dry, always apply a moisture barrier and ensure that seams are absolutely watertight.

Wooden sub-floors

Moisture content of the subfloor should not exceed 12%. Boards which are not level must be sanded, patched, or re-installed within the level tolerance indicated above. All existing boards should be fully fixed. No nails or screws may protrude beyond the top layer of the boards. All boards must be properly fixed to battens at 300mm-450mm intervals. Loose boards must be securely fixed and it is essential that all protruding nails are nailed below the level of the sub-floor surface. Loose or creaking floorboards will lead to a squeaking floor after installation. Existing carpet and underlay must always be removed prior to installation. The timber sub-floor must be dry and structurally sound without loose boards, vinyl tiles, OSB-boards and/or plywood. Timber sub-floors must be cleared of all paint, oil, glue, wax, and grease. Chipboard is not an ideal sub-floor when nailed or screwed down, however may be used when glued.



Ceramic, terrazzo, slate, marble and other tiled floors

The moisture content of the sub-floor should not exceed 5%. Tiles must be checked to ensure that they are securely fixed to the sub-floor and addressed where necessary. All grout joints and broken corners which exceed 25mm must be filled with a cementitious leveling compound. Where a surface has a glazed finish, it is imperative that it be ground to a rough finish to allow for the glue to adhere sufficiently to the surface.

Sub-floors with under floor heating

The moisture content of concrete sub-floors should be less than 5% where underfloor heating is to be used. Always consult your flooring retailer about the suitability of sub-floor heating. The temperature on the surface of the subfloor may be maximum 26°C. If the sub floor heating system is newly installed, the system must be switched on at least 2 weeks prior to the laying of the floor. Switch off the heating system 48 hours prior to installation and turn the heating system on again 1 week after the flooring installation is completed, with a gradual increase of temperature of no more than 1°-2°C per 24 hours.

Floorboards must be glued directly onto the subfloor surface.



Site inspection & acclimatisation

Applicable to all installation types: Glue, Float and Nail

Boxes of timber floor boards shall be stored in a dry place, protected from wind, rain, sun and other adverse weather conditions. The product shall be delivered and stacked horizontally and flat. Do not stack directly on concrete or stand up along the walls.

Packaging to only be opened immediately prior to the commencement of installation. This is particularly relevant during winter and periods of high humidity.

- Flooring products must acclimatise in the space for a minimum of 48 hours prior to installation.
- Boxes must remain closed.
- Under NO circumstance open the ends of boxes as this may cause tapered ends in the flooring.
- All concrete work must be completed at least 60 days prior to the delivery of hardwood.
- In new construction, timber should be the final element installed in order to prevent damage.
- Relative humidity must be within 50-60% for a minimum of 7 days prior to install.
- Moisture content of the subfloor and the timber flooring must be within 2% of each other.



Expansion joints

Timber floorboards are a natural products. Under the influence of moisture in the air and daily temperature and humidity variations, timber floorboards will expand and contract. This process is normal and to be expected. Although all oak structural engineered timber floors are more stable than solid timber floors it is recommended to take into account a sufficient expansion gap on either side of the width of the room. This will allow the floor to expand and contract as a whole evenly and will avoid but not entirely prevent gaps appearing.

In order to cater for normal expansion and contraction, installers must leave a gap of 10mm between the edge of the floor and the wall or any other solid surface it meets. This gap should be covered by an appropriate trim after the timber floor is installed. A similar gap should also be left around other permanent fixtures such as kitchen cabinets or door frames and where flooring meets tiles, carpet or any other floor covering. An expansion joint in the sub-floor must be provided with a matching expansion joint at the same location on the timber floor installed above it.

Installation: Glue method

In gluing the timber directly to the sub-floor, the sub-floor must be flat and free of any bumps. See Sub-floor preparation above. Use only PU (Polyurethane) based glues to adhere the boards to the sub-floor. Never use water based glues! Use of other glue types will void the manufacturer's warranty. Always use a proper moisture seal between the sub floor and the timber floor to be installed. Ask your retailer or distributor for full advice. Only use a single component, (solvent free) moisture curing polyurethane timber flooring adhesive as glue for adhering the boards. If glue with a high water content is used, boards will expand uncontrollably. In areas where there is a concern with moisture, use a proper moisture seal. Ask your retailer or distributor for full advice.

Once you have chosen a starting wall, snap a chalk line to determine straightness of the wall. After the adhesive is spread and the first row of planks are installed and secured, this will serve as an anchor for the subsequent rows of planks, which will be pushed snug against it. An expansion joint is also needed (see above).

plank

Using a trowel according to the adhesive manufacturer's instructions, hold the trowel at a 45 angle to the sub-floor to obtain the proper ridges. Begin spreading adhesive at the starting wall and cover an area approximately 300mm wide along the length of the wall. The spread rate of adhesive and timing for installation should be according the adhesive manufacturer's instruction. Never spread excessive amounts of glue at one time, never the entire floor, and always work in sections.

Proper placement of the first row of planks is very important. The tongue side of the plank will face away from the starting wall. Lay the first row parallel to the wall, ensuring that it is absolutely straight and tight relative to the starting wall.

Use wedges to maintain an expansion gap and keep the first row of planks in place. The tongue and the groove at all sides of the boards may be glued with a PVA D3 cross linked timber adhesive with a pointed tubular applicator, in order to increase the moisture penetration and stability of the floor. If you choose to glue the tongue and groove of the boards, always apply the glue to the top inside edge of the groove of the board (including the groove at the head joint) in a continuous line. Never apply the adhesive in a broken line as this will cause the floor to squeak excessively. Any excess of adhesive should be immediately wiped off with a damp cloth, followed by a dry cloth.

For the following row hold the plank at a 45° angle, engage the side tongue and then press into the adhesive and slide lengthwise until the end tongue fits into the previous row. Never use planks which are less than 450 mm in length to prevent "clustering". Use the tapping block to tap with a hammer and tighten the fit. Continue laying planks until the entire spread adhesive has been covered. Always ensure that there is adequate glue on the sub-floor to cover the entire plank. Ensure as you work that the planks are straight, otherwise the entire installation will be out of alignment. Avoid installing according to the "brick-laying" method. It is important that contact be made between the adhesive and the planks. A roller may be used after each section is laid or by standing on the planks with a rubber sole in a sliding motion in the direction of the anchor row in the starting wall to tighten the fit. Either manner is acceptable as long as good adhesive transfer is obtained shortly after installing the flooring.

Do not hammer the top of boards ensure that the "anchor" row does not move. If necessary use some weight(s) to hold the planks tight to the sub-floor until the glue has properly bonded.

Furniture, equipment and traffic should be kept off the flooring until the adhesive is firmly set, usually approximately 24 hours (see adhesive instructions). After adhesive is set, mineral spirits or acetone for final cleaning of the surface may be used. Never flood the floor, clean with a mop/rag.



Finishing

Once all laying procedures are complete and glue is sufficiently dry (see information on adhesive bottle), all spacing wedges should be removed. Any visible joins or gaps along the boards or at the ends where two boards meet shall be filled with a filler to match the colour of the timber or a cork strip/compound. Always test the filler on a leftover piece of plank to check for reaction (if any). Skirting-boards or scotia may now be installed by nailing, screwing or gluing directly to the perimeter walls or existing skirting. Never fix directly to the installed floor.

Installation - Floating method (Mezzano & Basso only)

Sub-floor shall be clean and free from dust. Use a broom or vacuum cleaner. The sub-floor should not be washed or exposed to water prior to installation, always ensuring that the floor is fully dry prior to installation. Lay a moisture barrier such as a polyethylene (builder's plastic) film of at least 0.02 mm thickness as a moisture protection barrier between the sub-floor and the underlay. Overlap parallel sheets by at least 200mm and tape with waterproof tape. Run the moisture barrier around the perimeter of the floor area up the wall by 50mm. Cut excess material to the height of the top of the boards and remove after the flooring has been laid. Next spread out the underlay over the moisture barrier (see sub-floor preparation) or an appropriate and approved combination product. Always begin the installation with the groove side of the board facing the wall. This is in order to avoid tapping the groove side of the board, as tapping is always at the tongue side.

Allow for an expansion gap of approximately 10mm between the first row of boards and the wall by using spacing wedges regularly along the length of the wall. Commence laying the flooring at the corner of the starting wall with the tongue of the first row of boards facing away from the wall. Start the next row with the piece left from the previous row or a board with a length which is at least 450 mm shorter or longer than the first board in the first row. The end joints of adjoining boards should be staggered by at least 450mm. Do not install according to the "brick-laying" method.

Glue the boards along all joins including end joins. Use only a cross-linked D3PVA wood adhesive. Never use regular wood glue as this will avoid normal expansion and contraction and will lead to cracks and other defects.



Apply the glue to the top inside edge of the groove of the board (including the groove at the head joint) in a continuous line. Never apply the adhesive in a broken line as this will cause your floor to squeak and will lead to a deficient performance of your floor and avoid normal protection against moisture penetration via the joints. Any excess adhesive should be immediately wiped off with a clean damp cloth. Wipe dry with a dry cloth to avoid smearing.

The first board of the next row is pressed into position and tapped into the other board using a rubber mallet and a tapping block. Never strike the board directly with the mallet. This will increase the risk of damaging the board. If you notice that the boards do not fit together entirely (open gap between boards), check whether the correct amount of glue has been used. Excess glue will prevent your boards from closing due to a vacuum effect.

Cut door frames to the correct height so that the planks can be laid underneath. Often the last row will be less than the width of the boards which will require cutting along the length of the board. Take the expansion gap into account when installing the last row of boards and thus cut the timber to the width of the gap of the last row minus the expansion gap of 10mm. See above for exact width of the expansion joint, and do not include the tongue in this width. Apply the adhesive in the groove and put the boards into place with the spacing bar and wedges using a protective piece between wall and tool, and between spacing bar and boards. Place the timber as low on the wall as possible and with the spacing bar force the board into position. Do this as many times as necessary to close the gap. Remove all spacing wedges once all boards are glued and fitted and the glue is sufficiently dry (see advice on glue bottle).

Finishing

Once all the laying procedures have been completed and the glue is sufficiently dry (see information on adhesive bottle), all spacing wedges should be removed. Any visible joints or gaps along the boards or at the ends where two boards meet should be filled with a filler to match the colour of the timber or a cork strip/compound.

Always test the filler on a leftover piece of plank to check for reaction (if any). Skirting-boards or scotia may now be installed by nailing, screwing or gluing directly to the perimeter walls or existing skirting. Never fix directly to the installed floor.



Important considerations

1. It is essential that all glue residues are removed immediately after laying each pre-finished board. If using Bostick Ultraset, use Bostick Wipes or a solvent suitable to the glue being used. Always test solvents first on an off-cut to establish that the solvent does not affect the colour or finish.
2. Once floors are laid on a building site it is essential that the floor be protected using 2mm foam underlay and 3mm or 4mm MDF sheeting securely taped together (do not apply tapes to the finished floor). This protection must be maintained until all works have been completed. Avoid plaster dust on the surface of the floor. If dust is present vacuum off immediately, do not mop. Moisture can set the plaster dust into the low grain of the timber making it extremely difficult to remove.
3. We recommend that upon completion of installation, an additional coat of OSMO Polyx Oil/WOCA Hardwax Oil be applied. This will give your floor an outstanding finish which helps prolong the maintenance of your floor.
4. Plank recommends cleaning with OSMO Wash and Care Soap/WOCA Soap or Lacquer Soap as per instructions on a weekly basis. Please refer to our Maintenance and cleaning guide for further information.

NASH TIMBERS 02 9337 6800 INFO@NASHTIMBERS.COM.AU WWW.NASHTIMBERS.COM.AU

