

INSTALLATION INSTRUCTIONS

Our collection of beautiful hardwood floors are a product of nature and therefore not entirely free of special features.

All floors in this collection are manufactured according to international standards such as AS 2796 and to accepted industry standards which permit tolerances in dimensions by no more than 5% generally.

Installer / owner responsibility:

- The installer has responsibility for the final inspection of the boards and has to check the quality prior to installation. Examine for: color, finish and quality. If the material is not acceptable, do not install and contact the seller immediately.
- The installer must determine prior to installing the floor whether the site environment and sub floor involved meet or exceed all applicable standards and recommendations involved (see further). The moisture content of sub floor and the climatic conditions of the job-site should be verified and should confirm 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 that is doubtful as to grade, manufacturing quality or factory finish should not be used by the installer.
- Please note that a non-correct installation will affect the warranty.

Natural characteristics of timber and wood in general:

- Timber is a natural product. Under the influence of moisture in the air and the daily temperature and humidity variations, the timber floor planks will expand and contract. This phenomenon is normal. Although plywood based engineered timber floating floors are generally more stable than solid timber floors and lumber core based engineered 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) to a great extent gapping.

- Good care has been taken during the manufacturing process of the timber floor boards, to compose boards of the same colour and grain variation. However no two boards are the same: colour, grain and gloss variation can happen from batch to batch due to the nature of the product and the manufacturing process. We recommend that you lay out the boards before installation and judge the colour and grain variation throughout your entire floor. Make a floor plan, and only then start the installation.
- Note that different batches of timber floors can have colour and grain variation and that due to the aging process, newly installed additions to the 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.
- All species of timber have colour and grain variation. This variation is tentatively described in grading standards. We work to and follow these gradings. Complaints on colour and grain variation are not accepted.
- For grading of timbers, we refer to the NHLA and American Hardwood Export Council grading rules and tolerances and AS 2796.2-2006.
- A natural characteristic of some species of timber is the possibility of surface checks or cracks. This is considered normal. This characteristic is described in AS2796.1-1999 and cannot be considered a valid complaint.

Pre-installation procedure:

- Read this installation advice and if you have any questions contact your reseller.
- Do not install timber floors in wet areas such as bathrooms, showers, washrooms, saunas, etc. .
- Check the condition of the sub floor (see further)
- Stack the timber boxes in the area to be installed and let it acclimatize. For solid timber floors it is imperative to have the material acclimatize in the area to be installed for at least 6 to 8 weeks or as long as it is necessary to reach the appropriate EMC (Equilibrium Moisture Content).
- Put the boxes flat on a smooth surface and do not put too much on top of each other.
- Leave enough space between the boxes for natural

ventilation (approx. 5-10 cm).

- Permanent air conditioning and heating systems should be in place and operational
- Allow approx. 5% extra material above the surface area to make your installation look professional and cater for waste and short pieces..

Installation Conditions:

- The boxes of timber floor boards should be stored in a dry place protected from wind, rain, sun and other adverse weather conditions and the packaging should only be opened just before the start of the installation.
- Particularly during winter time and high humidity periods, the timber floor boards in their original unopened packaging should be acclimatised to the room temperature for at least 48 hours (for solid timber floors at least 6-8 weeks).
- The surface temperature of the sub floor, at the time of installation, should be at least 62° F (17° C), with the ideal relative humidity of 55%.
- Open the boxes as work progresses to minimise their exposure to humidity. Check that the boards are sound before fitting them.
- Each board should be carefully checked prior to installation; never install any damaged board or board of sub standard quality.
- Always take the boards out of several different boxes alternately during installation.
- Should any obvious mistake, damage etc. to the boards be found when opening the package, a claim must be raised immediately, before any installation is started..

Sub Floor Preparation:

- Please consult appropriate available Standards or enquire with appropriate Authorities (e.g. NFWA and others).
- All sub-floors (concrete, existing floorboards, plywood, particleboard etc.) must be level, clean, pressure resistant and dry.
- Deviations in any sub-floor level must not exceed 0.12 (3 mm) under a 5' (1.5 m) straight edge. Unevenness greater than 0.12 (3 mm) must be filled with a suitable filling compound or lumps removed by grinding or other methods.

- Place straight floor board on its edge to see if there are any gaps greater than indicated above.
- Note that timber engineered floors cannot be installed over carpet or carpet tiles or any other soft tissue.

Concrete / Cement floors

- (with or without existing floor covering such as vinyl, linoleum, asphalt, cork, etc.)
- Check all existing floor coverings to ensure they are securely fixed to the sub-floor. Where poor adhesion exists, secure if possible, otherwise remove the floor covering completely.
- It is essential that the moisture content of the sub floor complies with the relevant Standards. For US conditions we recommend <1% in all cases.

Existing timber / particleboard / plywood based floors

- (with or without existing floor covering such as vinyl, linoleum, asphalt, cork, etc.)
- The moisture content of the sub floor should not exceed 3%.
- Boards, which are not level, must be sanded, patched up or re-installed within the level tolerance indicated above. All existing boards should be fully fixed. No nails or screws can stick out above the top of the boards.
- All boards must be properly fixed to the battens every 1 to 1.3 ft (30-40 cm). 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 floor boards will lead to a squeaking floor after installation.
- Existing carpet and underlay must always, be removed before installing the timber floor.

Ceramic, Terrazzo, slate, marble and other tiled floors

- The moisture content of the sub floor should not exceed 1%.
- The tiles must be checked to ensure they are securely fixed to the sub floor and addressed where necessary.
- All grout joints and broken corners that exceed 1 must be filled with a cementitious levelling compound.

Sub floors with under floor heating

- The moisture content of concrete sub floors should be less than 1% when underfloor heating is to be used. Always consult with your floor retailer about the suitability of sub floor heating.
- Ensure that the instructions of heating procedures are followed before laying the floor boards. The temperature on the surface of the subfloor can be maximum 80° F (26° C). If the sub floor heating system is newly installed, the system has to be switched on at least 3 weeks before laying the floor. Switch off the heating system 48 hours prior to installation. Turn the heating system on again 1 week after the floor installation is completed, with a gradual increase of temperature in accordance with the heating system regulations (approx. 1° - 2° Celsius per 24 hour time period).
- The floor boards have to be glued down directly onto the sub floor as well as in the conventional way i.e. at the tongue and groove of the long side and the head-joint.
- Solid timber floors can never be installed over subfloor heating without the risk of serious deformation of the boards. We recommend to choose either engineered timber floors or accept the potential risk of deformation of boards (gapping, peaking, twisting, etc.).

Installation - expansion gaps:

- In order to cater for a normal expansion and contraction, you should leave a gap of 9/16 (15 mm) 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, doorframes etc, and where the flooring meets tiles, carpet or any other floor covering. Large or very long rooms will need bigger allowances for expansion joints.
- The formula to calculate the expansion gap across the width of the installed floor is 5/64 (2mm) expansion for every (1 metre) of floor width with a minimum of 9/16 (15 mm).
- An expansion gap over the entire width or length of the floor is always necessary for any length/width of installation greater than 26 ft (8 meters).
- When laying the timber floor through several

adjoining rooms, expansion joints must also be provided at every doorway.

- An expansion joint in the sub floor has to be provided with a matching expansion joint at the same location on the timber floor installed above it.

Installation - glue-down 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 (Poly Urethane) based glues to glue the boards to the subfloor. Never use waterbased glues! Use of any other type of glue will make any warranty claims nil and void.
- Always use a proper moisture seal between the subfloor and the timber floor to be installed. Ask your retailer or distributor for full advice.
- Once you have chosen a starting wall, snap a chalk line to see how straight it is. After the adhesive is spread and the first row of planks is installed and secured, it will serve as an anchor for the subsequent rows of planks, which will be pushed snug against it. An expansion joint is needed (see above).
- Use the trowel according to the adhesive manufacturer's instructions (different types and different teeth heights are available).
- Hold the trowel at a 45° angle to the sub-floor to obtain the proper ridges.
- Begin spreading adhesive at the starting wall and spread an area about 1ft (30 cm) wide along the length of the wall. The spread rate of adhesive and timing for installation should be according to the adhesive manufacturer's instruction. Never spread out too much 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 making sure it is absolutely straight and tight relative to the starting wall. Use wedges to keep an expansion gap and keep the first row of planks in place.
- The tongue and the groove at all sides of the boards can be glued with a PVA D3 cross linked wood adhesive with a pointed tubular applicator, in order to decrease the moisture penetration and stability of the floor.
- If you choose to glue the T&G 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 your floor to squeak excessively.
- Any excess of adhesive should be immediately wiped off with a damp cloth, then a dry cloth.
- For the next 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 that are less than 19 ½ (500 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 adhesive that was spread has been covered. Always make sure that there is enough glue on the sub-floor to cover the entire plank. Make sure as you work that the planks are straight or 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. You can use a roller after each section is laid to make sure of this or you can step 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 planks on the top into the glue and make sure 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 about 24 hours (see adhesive instructions).
- After it sets you can use mineral spirits or acetone for final cleanup of the surface, however never flood the floor, use a mop/rag.

Note:

- When laying the parquet floor through several adjoining rooms, expansion joints must also be provided at every doorway.

- Any expansion joint of the sub floor has to be provided with a matching expansion joint at the same location on the parquet floor installed above it.

Finishing off:

- Once all the laying procedures have been completed and the glue is sufficiently dry (see information on adhesive bottle), all the spacing wedges should be removed.
- Any visible joints or gaps should be filled with a non silicon based 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).
- Skirtingboards or scotia can now be installed by nailing, screwing or gluing directly to the perimeter walls or existing skirting. Never fix them directly to the installed floor.

Installation - nail down or staple down method:

- Prepare the subfloor as indicated above.
- Note: particle board is not a suitable subfloor for nail-down or staple-down installation unless the floor boards can be nailed into the joists supporting the particle board. Use of longer nails / staples is required in order to guarantee fully seated nails.
- The clean subfloor should be covered wall-to-wall with 15lb (6.8 kg) resin paper, overlapping 4 (101.6 mm) along the edges or a similar sound insulating underlay.
- We refer to the appropriate Standards for installation of solid timber floors.
- Boards with a width of <4 (100 mm) can be secret nailed; timber boards wider than 4 (100 mm) need to be top nailed (2 nails equally spaced over the width of the board, every 1 ½ ft (450 mm) over the length of the board).
- We recommend to combine nailing and the use of an appropriate glue for a perfectly secured installation.
- We recommend to nail the boards across the longest side of the plywood sheets.
- If plywood is used as a subfloor to nail the timber boards onto, we recommend ¾ (19 mm) thick plywood of a merchantable quality.
- Always use a moisture barrier under the plywood

and check the sound insulating requirements for your site or for units, make enquiries with the relevant Authorities or Authorised Body.

- To determine a straight first starting row, use a snap line the width of a few boards plus 3/8 (9.5mm) expansion space from the wall. To keep first rows straight and in place, nail a straight 1x2 or 1x4 holding board on the first snap line. For nailer or stapler use correct shoe based on thickness of flooring. For pneumatic staplers or guns, set the compressor pressure to the recommended PSI and adjust accordingly using a practice board. Check for surface and tongue damage before proceeding with installation.
- Begin installation with several rows at a time, tightening boards as necessary to reduce gaps before fastening. Attach each board placing fasteners every 6 -8 (152.4mm 203.2 mm) and 3' (76.2mm) from the ends. The last 1-2 rows will need to be face nailed where clearance does not allow blind / secret nailing. Brad nail or face nail on tongue side. Rip the final row to fit and face nail. If the final row is less than 1 (25.4mm) width, it should be edge-glued to the previous row, before installation. The two joined rows can be face nailed as one board.
- Go back to the starting of the wall, remove the starting block and complete the final rows using 2 (50.8mm) 6d nails, counter sunk and filled.
- The installation instructions herein are to be used as a guide for a successful installation and that specific site conditions will require specific solutions, preparation and installation techniques.

Installation - floating method:

- The sub floor should 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 make sure the floor is fully dry prior to installation.
- Lay a moisture barrier such as polyethylene (builder's plastic) film of at least 1/100 (0.02 mm) thickness as a moisture protection between the sub floor and the underlay. Overlap different parallel sheets by at least 200 mm and tape with waterproof tape. Run the moisture barrier around the perimeter of the floor area up the wall by 2 (50 mm). 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 in case of an appropriate and approved combination product.
- Always begin the installation with the groove side of the board facing the wall. This is to avoid that you will tap on the groove side. Tapping is always at the tongue side!
- Cater for the expansion gap of approx. 9/16 (15mm) (see for exact dimensions above) between the first row of boards and the wall by using spacing wedges regularly along the length of the wall.
- When laying over existing wooden floor, the to be installed floor boards should be laid crosswise.
- 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. Begin the next row with the piece left from the previous row or a board with a length that is at least 20 (500 mm) shorter or longer than the first board in the first row. The end joints of adjoining boards should be staggered by at least 20 (500 mm). Do not install according to the brick-laying method.
- Glue the boards at the end joints together. Use only a cross linked D3 PVA wood adhesive. Never use regular wood glue since this glue 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 of 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 by using a rubber mallet and a tapping block. Never hit the board directly with the mallet. This will increase the risk of damaging the board. If you notice that the boards do not go together entirely (open gap between boards) check whether you have used the right amount of glue. Too much glue will prevent

your boards from closing due to a vacuum effect.

- Saw door frames to the right height so that the planks can be laid underneath (generally thickness of board + thickness of plastic and underlay + 0.12 (3 mm)).
- Chances are that the last row will be less than the width of the boards so you will have to cut it 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 (min.9/16 (15 mm) see above for exact width of the expansion joint) (don't 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 the spacing wedges once all boards are glued and fitted and the glue is sufficiently dry (see advice on glue bottle),
- Install the trims by nailing or gluing directly to the perimeter walls or existing skirting. Never attach them directly on the installed floor.

MAINTAINING AND CARING FOR YOUR TIMBER FLOOR

Maintenance:

- Remove dust, grit and sand to prevent the floor from scratching or dulling of the finish;
- Wipe up spills or spots immediately;
- Do not use an abrasive or a solvent based cleaner, an ammonia based cleaner, abrasive pads, steel wool, sand paper or any other substances that might scratch and/or damage the floor and never pour water directly or indirectly on the floor;
- Stains can be removed with methylated spirit or soft PH neutral soap and hot water with a damp cloth.

Keeping your floor in a fine condition:

- We recommend to use mats or rugs at entryways, high traffic areas (e.g. walk ways, under tables, in front of lounges etc); use castor chair protective

mats under castor chairs. Make sure they are large enough to cater for the entire radius of the chair;

- Rugs on timber floors may result in colour variation between covered and exposed areas of the floor. This variation is caused by the natural reaction of the timber with UV light, the so called aging process. In this case we recommend that you uncover the affected areas and leave exposed. The variation will gradually reduce. The timing will depend on the light intensity shining on the floor;
- Avoid direct sunlight on your floor by using window protection;
- Use wide, non staining glides or castors under the legs of furniture and heavy appliances to avoid indentations and scratching;
- Furniture and appliances can be moved by sliding them on a clean piece of carpet upside-down, a purposely created device or by lifting the items;
- Trim the nails of your pets to avoid scratching the floor;
- You can repair the factory applied lacquer if scratching or damage might occur. Smooth the affected area with a 120 to 150 grid sandpaper then touchlacquer the damaged area. To judge the expected result, test the lacquer on non visible area of the floor prior to full application;

WARRANTY

General Conditions:

- The Manufacturer guarantees that the goods will be free from manufacturing defects from the date of installation for a period of 10 years. This warranty is valid for the First Purchaser only and when installed in a normal domestic environment. This warranty is only valid when the product has been installed and maintained according to the manufacturer's recommendations and all applicable norms, practices and standards have been observed.
- This warranty is in addition to, and in no way limits statutory warranties enjoyed by the First Purchaser.
- The warranty covers the original purchase by the first purchaser and the original installation only and is non transferable;
- A valid claim under the guarantee should be lodged at the store where you purchased the

* manufacturing defects, see website.

material from. In order to substantiate your claim, original proof of purchase and a description of the damage is necessary.

- When a floor has been installed and subjected to a longer period of use, the value of compensation in terms of material will be deducted by 10% per annum (after the first year) and will be in relation to the remaining term of the warranty period. E.g. a valid claim made in year 5 after installation will give a compensation of $90 - (5 \times 10\%) = 40\%$ of the original material value.
- The Manufacturer or any of its Representatives has the right to inspect the floor and, if necessary, remove samples from the installed floor without compensation whether or not the defect in the floor is due to a manufacturing defect.
- The warranty conditions should be read together with the Installation Instructions and the Care and Maintenance advice and form integral part of this warranty and its terms and conditions.

Replacement

- When the claim is considered valid by the Manufacturer or its Representatives, the customer shall be provided with a replacement timber board from the current range.
- Compensation will be limited to material costs and will not cover transportation, installation, inconvenience etc.

Actions that make your claim null and void:

- Sub floor preparation other than indicated above or other than according to the during time of installation applicable standards, norms and/or practices;
- Problems in the floor caused by improper or defective installation i.e. installed in a different way than described in the installation instructions and changes after the initial installation to the floor or conditions of the site;
- Moisture rising from the sub-floor or through walls in the area of installation or adjoining areas or lack of a proper moisture barrier between the sub floor, the wall and the underlay or as indicated by the Manufacturer;
- Moisture penetration in the product through adverse weather conditions, water/liquid spillage

or excess water used to clean the product;

- Use of a glue other than a cross linked D3 PVA with a solid content of at least 50%;
- Installation in extreme or uncontrolled climatic conditions such as a tropical environment or regions subject to extreme temperature and humidity variations unless the site is permanently climate controlled. For normal climate control, the average relative humidity should be between 45% and 65% and the average temperature between 59° F and 77° F (15° and 25° C);
- Gaps between boards due to seasonal temperature and humidity changes ;
- Under floor heating not installed to the instructions above;
- Non-residential installation or other than domestic use where extreme traffic conditions and use may lead to abnormal, accelerated wear and tear;
- Installation of residential products in commercial applications;
- Failure to follow and routinely protect and maintain the floor (see above);
- Use of steam cleaners, heated cleaners, high pressure cleaners all with or without the use of special detergents, different pressure levels or approval from its manufacturers;
- Indentations from stiletto heels, golf or 'pointed' shoes or damaged shoes, dropping of items and permanent indentations due to heavy furniture;
- Damage due to: improper use, re-coating or repairs, exposure to excessive moisture, heat, water or excessive sunlight;
- Use of heating mats under rugs or directly laid on the timber floor;
- Surface damage caused by: excessive traffic vehicular traffic (including bikes, rollerblades, roller shoes, skate boards etc.) abnormal or abusive use normal wear and tear poor or improper maintenance sand, grit or gravel outdoor applications direct sunlight too high or too low humidity or excessive moisture - use of castor chairs without appropriate protective mats;
- Spillage of urine, ammonia, corrosive liquids, bleach or acidic liquids and substances onto the floor;

- Scratching, indentation or damage from impact, lack of proper maintenance, misuse, negligence, accidents;
- Damage caused by factors beyond the Manufacturer's control (e.g. flooding, burn marks, adverse weather conditions including cyclones, accidents, leaking or broken plumbing and leaking washing machines, dishwashers etc., household alterations, pets and insects &), flooding, fire and other natural disasters and Acts of God;
- Drying out of the timber and e.g. gaps, cracks, splits etc. And other damage due to direct exposure to: open fires; radiant heat panels and other heat sources etc.;
- Use of steam cleaners or other devices that add heat, steam or alter the balance of the moisture content in the product directly or indirectly;
- Damage caused by vacuum cleaner beater bar or hard heads;
- Reduction in gloss, scratches or indentation due to sand, pebbles and other abrasive materials;

- Colour and grain variation between samples and delivered material, naturally occurring variations in timber;
- Changes in colour due to exposure to sunlight and ageing.

RIGHTS AND ADVICE

- The manufacturer or its representative reserve the right to change product specifications, product dimensions, available colours and designs and other information in this leaflet.
- When handling (and working with) timber products dust and other particles are released. Prolonged and frequent exposure to those particles can lead to health issues. We recommend that you always wear appropriate dust-masks, eye protection wear and appropriate clothing and follow the guidelines, advice and ruling of Work and Health requirements, any State and/or Federal laws and rulings relating to this issue.