WOODLINE
PARQUETRY

Installation requirements for 5G Engineered hardwood flooring

Our engineered hardwood floors are environmentally friendly. Our wood is responsibly sourced and certified. It may surprise you to know that we use timber more efficiently, and with less impact on the environment than a traditional timber floor.

***Please ensure packaging remains sealed until installation.** Engineered hardwood flooring should be the last work completed in any renovation or build.
All exterior walls, windows, and doors must be installed.
All wet work such as painting, drywall, masonry, and concrete must be completed and allowed ample time to dry.

***Do NOT start installing floor until other works are completed**, painting and tiling can affect moisture levels. Freshly plastered rooms will require a dehumidifier to draw excess moisture out prior to storing flooring in the room.

Pre-installation

Storage and care: The packs of engineered hardwood flooring must be stored indoors out of direct sunlight in a dry, cool environment at least 20cm/8" off the ground.
Packs must be kept completely flat and well supported with an ambient room temperature of 18°–25°C/64°-75°F.

Acclimatisation: the floorboards will need at least 48 hours to acclimatise to the temperature of the room where they will be installed. Do NOT open the packs until the day of installation to avoid moisture affecting the floorboards.

Subfloor preparation: Ensure the subfloor is dry, level and clean prior to installation.
Any uneven areas exceeding 3mm over 1m/3' in any direction needs to be levelled prior to installation.
Self levelling compound can be used but must be allowed to completely dry-out prior to installing the flooring.
The surface temperature of the subfloor, should be a least 15°C/59°F but does not exceed 27°C/81°F.
Check moisture levels prior to installing floor. Most new builds have high relative humidity. Ideal conditions are less than 35-55% relative humidity, but never below 30% or above 60%.
Ensure room temperature is a minimum of 15°C/59°F and maximum of 27°C/81°F.

Basements or crawl spaces must be dry and well ventilated.
Crawl spaces must be a minimum of 45cm/18" from the ground to the bottom of the joist. Dirt floors in crawl spaces should be covered with a 0.2mm/6-10mil black plastic lining to reduce moisture migration. Seams should overlap and sealed with waterproof tape.
Perimeter crawl space cross ventilation should equal 1.5% of total area, vents must remain open year-round.

Underlay: Age resistant polythene membrane plastic sheets (0.2mm thickness) are vapour barriers and are necessary for a floating floor installation, as well as sound insulation. Ensure vapour barrier has sufficient overlap of at least 20cm/8" and use a suitable vapour barrier adhesive tape to seal overlap.

Acoustic underlay such as a natural rubber underlay may also be used if noise from footsteps is an issue (sometimes in high rise buildings) but this should never exceed 4mm in thickness (foam or natural rubber) and should still be applied over a suitable vapour barrier.

A moisture barrier is required on subfloors:
Concrete ground-supported slab
Subfloors located in areas of humidity i.e. above heating systems or laundry rooms
Structural floors above ventilated crawl-spaces
Lightweight subfloor structures of concrete
Underfloor heating

Opening packs: Open 3 to 5 packs at a time, and loose lay the floorboards to ensure colour and wood characteristics are suitably mixed prior to fitting. Each floorboard should be carefully checked prior to installation. Never install a damaged or unsuitable floorboard. **Installation is considered acceptance of each floorboard.**

N.B. If floorboards are damaged, please notify your distributer immediately - claims must be raised prior to installation. All claims must be made in writing, and must include evidence of the purchase date, the identity of the original purchaser and the installation location. Without this information, no warranty coverage will apply.

Wood is a natural product with natural variations of colour, grains and characteristics these attributes are NOT defects.

Engineered Floor installation with underfloor heating

Prior to installation, ensure the underfloor heating system has been thoroughly tested. For new heating systems, they should be tested for 2 weeks prior to the floor installation, this allows for any excess moisture to evaporate before installation of engineered floor.

Engineered flooring can be used with underfloor heating only under specific and specialised conditions. Both electrical and Hydronic underfloor heating systems can be used. However, certain parameters must be established prior to installation and while running the heating system.

The floor heating system must be switched off 48 hours prior to installation and switched on one week after completion, with a gradual increase in temperature.

The heating system MUST have the heat evenly distributed throughout the whole floor. Spot heating, or specific area heating within a larger floor is not permitted. Excessive heat concentration in one area may cause deformation or movement in the engineered floor.

N.B. Hydronic underfloor heating systems offer a more even heat distribution whereas electrical systems can have “hot spots”.

The heating system must have sensors with memory capabilities, set in at least 2 locations. An in-floor direct contact temperature sensor and an outside temperature sensor.

The heating elements and its heating temperature must be lower than 27°C/81°F. The engineered floor surface temperature must not exceed 27°C/81°F.

No heavy textile floor covering should be placed over the heated floor. If light carpets or rugs are used, the temperature under the textile floor covering must not exceed 27°C/81°F.

Caution:
Heating system should not exceed 60 watts/m² or 3sq ft

The following wood species are NOT warrantied for use with underfloor heating - **Jatoba, Iroko,** and Australian timbers - **Jarrah, Sydney Bluegum, Blackbutt, and Spotted Gum**. Any claims arising from using these species on underfloor heating will NOT be honoured.

Planning installation

All engineered floors expand and contract with humidity. Expansions gaps are required on all sides of the room. **Failure to provide adequate expansion space in any single location can cause damage to the entire floor.**

Layout of Floorboards lay your floorboards lengthwise against the longest wall of the room, starting at the furthest corner from the entrance.
Measure and plan the floor prior to installation, calculate the first and last floorboard width.
Plan carefully to allow for expansion gaps of a minimum of 15mm/ ⅝”
To ensure a completely level floor throughout its lifetime, a minimum of 50cm/20” distance between one head joint and the head joint of the next row should be allocated when preparing the installation layout.
Always randomly stagger end joints.
The width of the floorboard in the last row should not be less than 50mm/2”.
Ensure the first row is completely straight using a laser line as most walls rarely run straight

Expansion allowance of 2mm for every 1 metre/3’ is required with a minimum of 15mm/ ⅝”. The floor needs to be able to expand at all thresholds, pillars, door frames and transitions to other tiled or parquet surfaces. For all fixtures and fittings, ensure that they are fitted prior to installing the floor. We recommend movement joints around fixtures e.g. kitchen islands or wall partitions. Use spacing wedges during the installation to assist in maintaining consistent expansion gaps.

Larger rooms (e.g. halls, assembly rooms, dance floors) will require greater allowance for expansion, we recommend an expansion joint in the middle of the room. For floating installations, exceeding 9m/30’ across the width of the floorboards or 15m/50’ along the length of the floorboards, you will need an expansion joint midway through and cover with T-molding.

Installation of Floorboards with 5G profile locking system

The 5G system allows the parquet to be joined together without glue or being nailed down to the sub-floor.

Moisture barrier and possibly Acoustic sound barrier (if needed) as detailed above

Underfloor heating, the vapour barrier is laid as close as possible to the engineered floor. There should be NO space between the vapour barrier and the flooring to prevent easy exchange of moisture.

Flooring must be installed as tightly as possible to the subfloor. There should be NO gaps or separation from the subfloor, air spaces may lead to the floor drying out (see note above re subfloor deviation/tolerance)

First floorboard, first row the groove side of the floorboard faces the wall.

Spacers are required between the wall and the first row to help achieve the required expansion gap. Use laser or string line level to check the wall for deviations and adjust/trim flooring as required to achieve a perfectly straight first row.

Floorboards are joined together with the 5G locking system which will engage with the short end of floorboard:
Hold second floorboard against the first at approximately a 20°- 30°angle
Once in place, tap firmly down until an audible click is heard and the floorboard is flat. This will ensure the floorboards are locked together.

Installation of floorboards with 5G profile locking system - continued

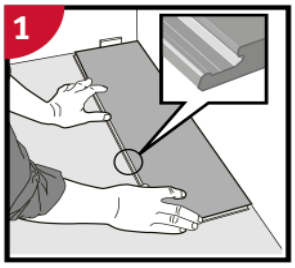
A **wooden tapping block** must be used against the tongue side to knock the floorboards together, do not use force to join the boards or hit directly with a hammer. Joining by hand without the use of a tapping block may seem to work but the profile will not engage properly and may cause the floor to squeak at certain times of year when the humidity levels alter.

Allow a minimum distance of 50cm/20” between one head joint and the head joint of the next row .

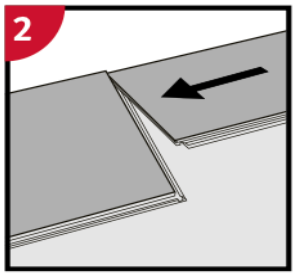
After installation remove spacing-wedges and fill visible joints with a sealant or apply a profile above and secured only to the wall such as quarter round or skirting board. Never fix to the flooring, as the floor must be allowed to move under the profile when expanding or contracting.

Skirting boards must be fixed directly to the wall, and NOT onto the floorboards. The skirting boards should not press down on the flooring as it may impede natural movement. (Climate variations are easily concealed with skirting boards).

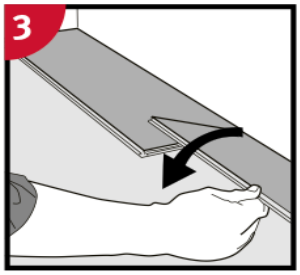
Diagrams for 5G profile locking system installation



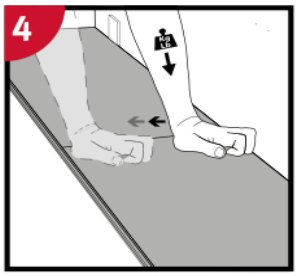
First floorboard, first row:
Place a spacer of 15mm or ⅝” thickness to the left and position the floorboard against the wall.
After 3 rows, you can easily position the flooring against the front wall with distances 15mm / ⅝”



Second floorboard, first row:
Place this floorboard gently and tight to the short end of the first one.

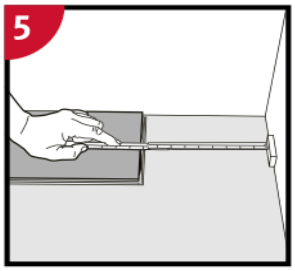


Fold the floorboard down in a single action movement.
During the fold down, make sure the floorboards are tight against each other.
Afterwards press down or slightly tap down at the short end till it clicks. No major force is required.

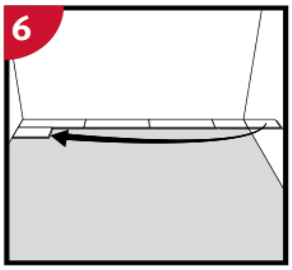


Press slightly along the short end just installed.

Diagrams for 5G profile locking system installation

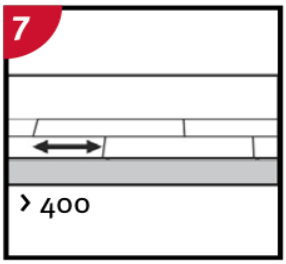


At the end of the first row, place a spacer of 15mm/ ⅝" to the wall and measure the length of the last floorboard to fit.

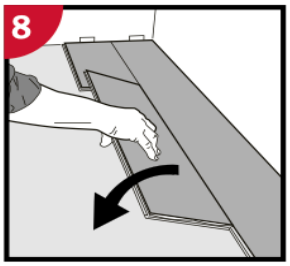


Starting the Second row

First floorboard should be a minimum length of 50cm/20". Place a 15mm ⅝" spacer against the wall and measure the last piece. If it is shorter than 50cm/20" a new starter piece should be used.
Insert the floorboard at an angle into the previous row and tap (on the long side) it in using a tapping block till flat.

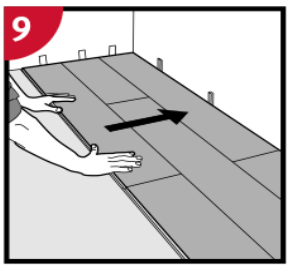


Distances between short ends.
Minimum distance between short ends of floorboard in parallel rows shall not be less than 50cm/20". This is for stability of the floor.



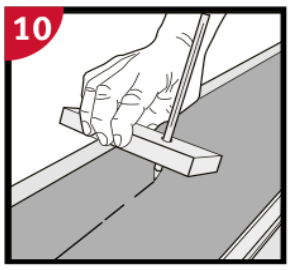
Second floorboard, second row:

Place the floorboard at an angle into the groove of the previous row making sure that the end of the floorboard is tight/flush to the short end of the previous floorboard.



After 2-3 rows:

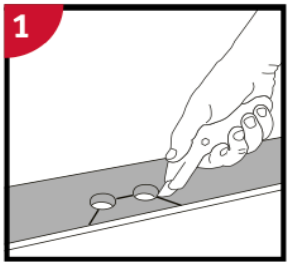
Adjust the distance to the front wall by placing spacers 15mm ⅝". Once the adjustment is done against the main wall, continue to install until the last row.

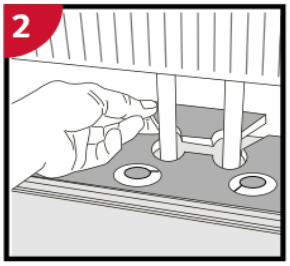


Last row (and perhaps also first row).

The Minimum width of the last floorboard should be NOT LESS than 50mm/ 2".
Remember distance to wall is 15mm/ ⅝".
Tip! Put a spacer before measuring. Cut the floorboard lengthwise and glue the short ends. See instructions above

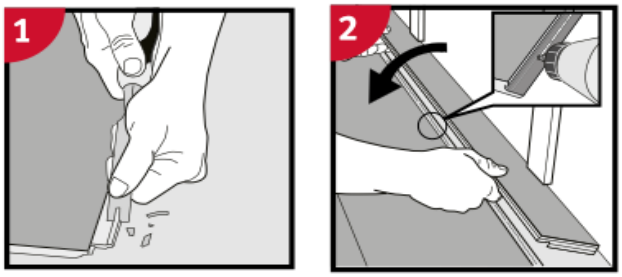
Installation around radiators or heating pipes





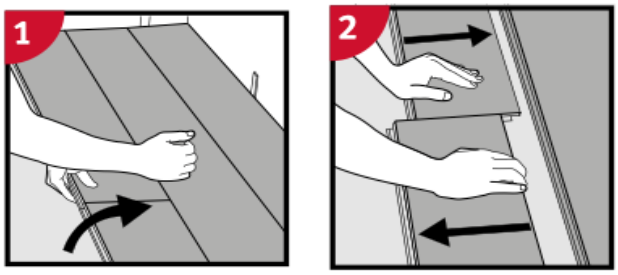
Drill holes 18mm/ ¾" larger than the diameter of the pipes. Cut out the floorboard (with the thinnest blade possible). Install the floorboard, glue the cut out piece back in place.

When angling is not possible - small angle widths



Cut the tongue at the same time you cut the length of the floorboard and install as shown above. Please note that the smallest width of a floorboard is 50mm/2" in the last row. If it is not, the first row width must be adjusted. This can easily be calculated when measuring the room width before installation.
Cut off the locking element with a chisel, push the floorboards horizontally together. If necessary, place some spacers between the last floorboard and the wall to keep the floorboards together during the curing time of the glue.

Dismantling panels



Your floor can very easily be dismantled, which enables replacement during and after installation. Separate the whole row by carefully lifting and slightly knocking just above the joint. Fold up and release the long side. Disassemble the floorboards by sliding horizontally. (Do not fold up, as this will damage the profile)

Post installation

Should further works continue, a moisture impermeable cover is recommended to protect the floor such as polythene sheeting (do not use waxed products).

Direct sunlight can alter the colour of the wood floor and care should be taken to cover the entire floor.

Ensure the room is adequately ventilated to maintain an **ideal humidity which should be between 35% to 55% but never below 30% or exceed 60%.** Humidity levels below 30% or above 60% may cause movement in the floor, gapping between floorboards, cupping or cracking. Use of a humidifier or dehumidifier may be required to maintain constant humidity levels, particularly over radiant heat.

If dust is present, vacuum immediately, do not mop. Moisture can set plaster dust into the low grain of the wood making it very difficult to remove.

The floor needs to acclimatise for one week prior to switching on the underfloor heating or air conditioner, with a gradual increase or decrease in temperature.

To assist in maintaining even heating throughout the room, draught proofing around windows and entrances is recommended.

Floorboards which crack or cup due to excessive or rapid heating, or failure to maintain the recommended humidity levels will NOT be covered by warranty.

Care and maintenance

Your premium quality flooring has been coated with a **formaldehyde-free, UV lacquered or UV Oiled finish,** which is ready for installation and does not require any special treatment directly after installation. However, you should be aware that engineered hardwood flooring will naturally get worn; therefore some regular maintenance is recommended to protect and to preserve your floor's beautiful surface:

Please ensure that a healthy **room climate with 35%-55%** air humidity and 20°-25°C/68°-77°F in temperature. These attributes in a climate is good for both your health as well as for the well being of the engineered hardwood flooring.

Ensure that any **moisture spillage is immediately cleaned** and dried up. Do not allow any moisture to pool on the surface, as this will cause damage to the floor.

Regular cleaning should be done with a gentle vacuum cleaner (with felt pads fitted to avoid scratching as well as NO rotating brushes), a static mop or a smooth floor-broom. Any sand or dirt should be immediately removed because they may scratch and damage the floor surface.

Any **cleaning** should be done using only well wrung mop. Never use a wet cloth. When mopping with a damp mop, ensure that the residual water evaporates within one minute. If it takes longer, then there is too much moisture on the mop.

If required, the floor surface can also be cleaned with a damp mop or a special liquid soap to remove stains, grease, shoe tracks etc. Never use traditional wax or steel-wool on your lacquer-finished engineered hardwood floor.
TIP: Always test a small hidden area when using a new cleaning product prior to committing to the whole floor

Wood is also affected by UV light and will change colour when exposed for long durations. Floor coverings such as rugs and mats should not be placed immediately after laying. **The floor should be allowed to stabilise for a few weeks.**

It is highly recommended that you place felt pieces under any furniture bases or chair legs etc. to protect the floor surface. For high traffic entrance areas of halls or corridors a good floor mat is also recommended and will help preserve your floor.

Additional lacquering is not recommended.

In case of any damage to the lacquer-surface (e.g. by furniture movement), seek the advice and assistance of a qualified installer or tradesman who is knowledgeable about engineered hardwood flooring.

If the installed floor is UV Oiled finished, we recommend that the floor is recoated with an oil refresher product (e.g. Bona) every 3-6 months depending on the condition of the floor. Please follow the product manufacturers instructions prior to applying to the floor. Testing should be done on a hidden area first (for example in walk-in wardrobe or cabinet) to ensure suitability and adhesion of the product. TIP: Always test a small hidden area when using a new refinishing product prior to committing to the whole floor.

Wood is a natural material, which swells when moisture or humidity levels rise and shrinks when moisture or humidity levels fall. These not only show that your floor is a natural product but can also lead to some irreversible deformation of the floor if the room climate and humidity is left too high or too low for an extended period of time. This can particularly happen if, for example during winter, the relative humidity in a heated room falls below the specified 35%. In this case you should install an air humidifier in order to prevent damage to your floor. The same may also be necessary with an air conditioned room.

APPENDIX – Types of Subfloors

Plywood and composite subfloors

Use a moisture metre to check the moisture content, of a specific wood types. Moisture readings should not exceed 10%.
CDX plywood should be at least 15mm/ ⅝" thick for joist spacing up to 40cm/16" on center, minimum 18mm/ ¾" thick for joist spacing greater than 40cm/16" on center (50cm/19" maximum).
Oriented Strand Board - OSB at least 18mm/ ¾" thick, PS 2-92 rated or PS 1-95 rated.
Grade particleboard with a minimum density of 18kg/40lbs can be used for Floating Floors.

Concrete subfloors

Must be fully cured, poured at least 2 months prior to installation, and should have minimum 0.2mm/6-10 mil poly-film between the concrete and ground.
Lightweight concrete can hold more moisture and may take longer to dry out to an acceptable moisture content.

Wood, ceramic, vinyl or tile subfloors

Should be well installed. Failure of the subfloor is not warrantied. Wooden Subfloors should be fixed using screws every 150mm/6" - replace subfloor panels/floorboards as necessary to eliminate movement and squeaking.
Ceramic tile must be well-adhered with a tolerance less than 5mm/ 3⁄16" over 3m²/10sq ft.
Vinyl and tile must be non-urethane-coated, and well-adhered to the subfloor.