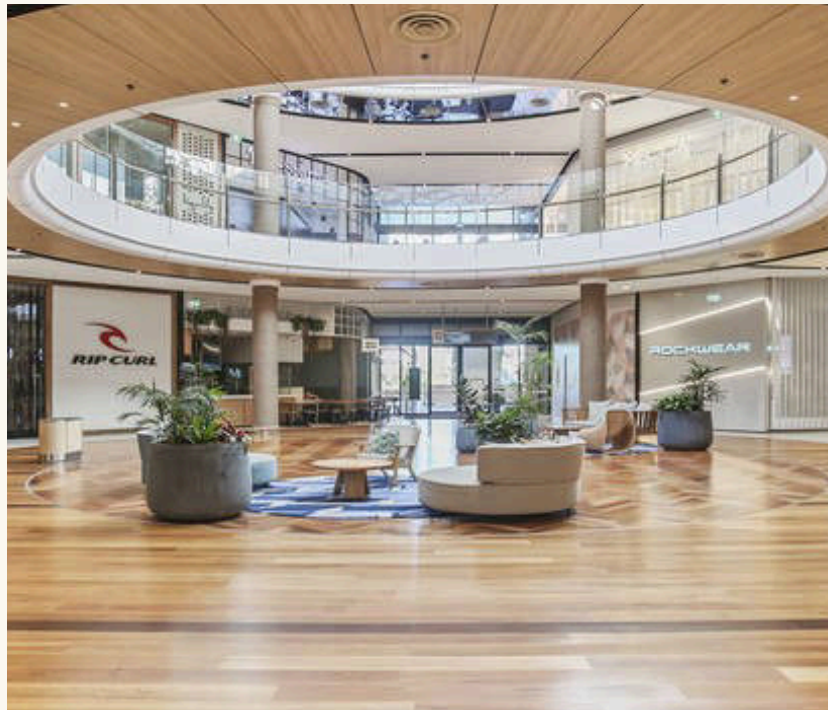




HARMONY
TIMBER FLOORS

INSTALLATION GUIDELINES

AUSTRALIAN SPECIES



www.harmonytimberfloors.com



HARMONY FLOORING INSTALLATION GUIDELINES

Harmony Flooring Installation Guidelines are to be read in conjunction with the recommendations outlined by The Australasian Timber Flooring Association. The Australasian Timber Flooring Association (ATFA) | www.atfa.com.au



NOTE: The Harmony Flooring Installation Guidelines are applicable for engineered timber flooring, bamboo flooring, hybrid vinyl flooring and laminate flooring. Please note that bamboo flooring, hybrid vinyl flooring and laminate flooring cannot be installed via the Glue-Down Method of Installation. **For installation instructions for solid timber flooring, please consult the ATFA website (www.atfa.com.au).**

STEP 1: PRE-INSTALLATION PROCEDURES

Please handle, transport, and unload the flooring with care. The flooring should be stored in a dry place, with at least a 100mm air space under cartons. The flooring should not be delivered to site until the building has been closed in with windows and doors, and until cement work, plastering, painting, and all other materials have thoroughly dry. If possible, acclimatize the flooring for at least 48 hours (preferably 3-4 days) prior to installation commencing. This is not always necessary and if you have any questions in this regard, please contact the supplier. In addition, the heating or cooling system should be operating and controlled at 40°-60° RH for at least 48 hours before and during the installation process, as well as maintained after installation has been completed. Do not install the the flooring in areas that are subject to extreme seasonal temperature changes, where you cannot control the temperature.

STEP 2: MOISTURE TEST

Before installing the flooring over a concrete or a particle board sub-floor, check the floor for moisture in several areas using an appropriate qualified commercial moisture meter.

Prior to installation commencing it is critical to check the moisture content of the sub-floor.

For concrete slabs, the moisture reading of the sub-floor should around 2.5% for an older concrete slab and no more than 3.9% for a new concrete slab. Check the floor for moisture in several areas using an appropriate qualified commercial moisture meter. If the moisture contents fall outside of this range, additional drying of the sub-floor will be required. It is advisable that if the moisture content of the sub-floor falls outside of the recommended ranges that the sub-floor be sealed with an appropriate sealant that is compatible with the adhesives to be used.

Please note that the sealants only act as a vapor barrier and not a moisture barrier or waterproofing membrane.

STEP 3: SUB-FLOOR PREPARATION

The sub-floor must be structurally sound and level to within 3mm over 3 lineal meters. Movement and squeaks to the sub-floor should be well fastened with ring nails or screws to the floor joists. If utilizing the Glue-Down Method of Installation, it is critical that the sub-floor be clean and free of paint, old adhesives or any other potential contaminants. If present these need to be removed prior to installation commencing. If sealing the concrete slab, it is critical to seal it with a sealant that is compatible with the adhesive to be used (please refer to manufacturer guidelines). With regards the levels, high spots must be sanded/ground flat and low spots must be filled with a leveling compound recommended by your supplier. When installing over existing timber flooring it may be necessary to install the engineered timber flooring in the opposite direction to the existing timber flooring and is only applicable for the Glue-Down Method of Installation. It would also be advisable to install relief cuts to the existing timber flooring.

STEP 4: BEFORE INSTALLATION

Unpack 80% of the required flooring that you will be installing on the day, sort out the floorboards into colours/shades and lengths, as most engineered timber flooring comes in packs with an approximate mix of 50-70% full length, with the balance random lengths. Prior to installation of the flooring, set it out by roughly placing the floorboards out in a manner that is pleasing to the eye, ensuring a random mix of colours/shades and lengths. Our quality control procedures at the factory ensure that very few, if any boards are defective when delivered to the consumer. However, it is important to remember that all flooring comes in a range of colors/shades and the installer should inspect each floorboard prior to installing them for potential defects, damage, colour/shade etc. and if any are found, these should be removed and returned to your supplier to be exchange if found to be defective. Alternatively, these floorboards can be installed in areas such as under the dishwasher or fridge or in cupboards, where often these defects can be cut out.

Please note that not all jobs are the same and some consumers have specific requirements that they want meet. If the consumer has any specific questions they wish addressed, please feel free to ask your supplier prior to installation commencing. Furthermore, if the consumer wants to install their flooring outside the parameters of the manufacturer guidelines, they need to consult the manufacturer prior to installation commencing and obtain clarification in order to ensure that all warranties are upheld. If the consumer fails to work within the manufacturers guidelines, this could have an impact on the warranties and failure to comply fully with them will result in the product warranty being null & void in part or in full.

INSTALLATION METHODS

<u>FLOATING METHOD OF INSTALLATION</u>	<u>GLUE-DOWN METHOD OF INSTALLATION</u>
<ul style="list-style-type: none">● more cost effective, as long as the levels are correct● the ideal installation method for people who have trouble walking on harder surfaces due to arthritis etc. and provides better insulation● quicker and easier to install and is ideally suited for the DIY market● perfect to install over existing flooring finishes such as vinyl, timber or tiles that the client does not wish to remove● tends to expand more than those installed via the Glue-Down Method of Installation. As a result, the expansion requirements are more stringent for the Floating Method of Installation● they can easily be removed should they get damaged	<ul style="list-style-type: none">● can be installed directly over existing tiles as long as they are stable and is keyed up with a grinder to ensure that the adhesives adhere to the tiles● employing the Glue-Down Method over existing timber flooring will need to be keyed up with a sanding machine and the newly installed engineered timber flooring installed in the opposite direction to the existing timber flooring● quieter and more solid under foot than the Floating Method of Installation● levels do not need to be as precise as for the Floating Method of Installation because adhesives can be used to rectify levels to a certain degree● if the levels are not precise, you are fixing the engineered timber flooring to the sub-floor, thus eliminating the likelihood of vertical movement of the engineered timber floorboards. This is not to say that the levels are not to be checked or rectified should they fall outside the scope of being able to be rectified with adhesives. It is ideal to work within the guidelines that the level are not out further than 3mm over 3 lineal meters

1. FLOATING METHOD

Use **2mm** or **3mm** foam or rubber padded underlay. We advise using **Harmony Silent Step**, which is a high-density acoustic underlay. Where multi-storey residences are concerned, please consult your Body Corporation in order to work within their requirements. There are a number of other underlays available on the market that can be used should higher acoustic readings be required. If any acoustic engineering reports are required, these are to be arranged and paid for by the consumer. It is the responsibility of all unit owners to seek and obtain Body Corporate approval prior to work commencing. It is important when installing the underlay that the joins are tight and if necessary taped together with duct tape or similar. Leaving gaps between the underlay, could cause the floorboards to move excessively, allowing gaps to open up between floorboards. Tight joins in the underlay will also assist in holding out any excess vapor present in the sub-floor from affecting the floorboards and also ensure better sound insulation.

Prior to installation commencing it is critical to check the moisture content of the sub-floor. For concrete slabs, the moisture reading of the sub-floor should be around **2.5% for an older concrete slab** and no more than **3.9% for a new concrete slab**. Check the floor for moisture in several areas using an appropriate qualified commercial moisture meter. If the moisture contents fall outside of this range, additional drying of the sub-floor will be required. It is advisable that if the moisture content of the sub-floor falls outside of the recommended ranges that the sub-floor be sealed with an appropriate sealant that is compatible with the adhesives to be used. Please note that the sealants only act as a vapor barrier and not a moisture barrier or waterproofing membrane.

When installing the flooring via the Floating Method of Installation, one must use a **D3 PVA adhesive** suitable for flooring. This is only of relevance to engineered timber flooring with a tongue and groove system, not a clip-lock system. The D3 PVA adhesive must be placed on the upper top edge of the groove and applied to both the long and short side of the engineered timber floor boards. This is done by turning the engineered timber floorboards with the face pointing down, applying the D3 PVA adhesive to the groove, then turn the engineered timber floor board around and is ready to install. Use a tapping block if necessary, to gently tap the boards into place. A tapping block can be made with a 150mm off-cut of the engineered timber flooring. Do not tap on the tongue or groove directly, as you will damage the engineered timber floorboards. Be sure to remove all excess glue as quickly as possible, as once it dries it may be more difficult to remove. You can use a watered damp cloth when removing the D3 PVA adhesive. Note that it is critical to use sufficient D3 PVA adhesive, otherwise excessive movement or squeaking may arise between the engineered timber floor boards. Finally, in order to ensure that any residual moisture in the sub-floor is blocked out, the underlay must be installed tightly at the joins, with the overlapping foil lifted and adhered to the adhesive tape.

It is critical to leave expansion of **10mm-15mm** around the perimeters of the flooring, depending on the size of the area. If possible, cut and remove the base of the gyprock approximately 20mm from the sub-floor in order to gain an extra 10mm expansion. For larger areas it may be necessary to compartmentalize the floor to ensure sufficient expansion is allowed for by installing expansion joints. Please contact your supplier for clarification in this regard.

When installing the flooring, it is critical that the butt joins are spaced out at least **25-30 cm apart**.

For further hints and guidelines relating to the installation of flooring via the Floating Method of Installation, please feel free to visit the ATFA website: <https://www.atfa.com.au>.

2. GLUE-DOWN METHOD

Method A: Snaking or “S” Method

This method is done by applying a continuous bead of adhesive on the back of the engineered timber floorboard, with the bead of adhesive being **no more than 70mm apart**. An overall adhesive coverage of 70% is required. Where the levels are not perfect, a thicker bead of adhesive can be applied in order to take up any unevenness in the sub-floor. Once the adhesive has been applied to the back of the engineered timber floorboard, it is then turned around and fixed to the sub-floor, ensuring that it is firmly pressed down in order to ensure a strong adhesive bond to the sub-floor. It is critical that sufficient adhesive is used at all times, with a suggested **overall adhesive coverage of 70%**. Failure to do this could result in excessive drummy spots and squeaking of the engineered timber floorboards. Please note a certain degree of drumminess can be expected. Be sure to clean up any adhesive on the surface immediately, as once it dries, it may be very difficult to remove.

It is also critical to remove any of the adhesive from the surface of the engineered timber floorboards before it sets, as it can be extremely difficult to remove once it has set. Always follow the adhesive manufacturer guidelines and instructions for their adhesive warranty to be in effect. The adhesive to be used, are to be specific to engineered timber flooring.

We suggest using **Flexible Polyurethane adhesive**. There are a number of other adhesives available on the market. It is however critical that these adhesives be flexible. Once again, always follow the adhesive manufacturer guidelines and instructions for their adhesive warranty to be in effect.

Prior to installation commencing it is critical to check the moisture content of the sub-floor.

For concrete slabs, the moisture reading of the sub-floor should be around **2.5% for an older concrete slab** and no more than **3.9% for a new concrete slab**. Check the floor for moisture in several areas using an appropriate qualified commercial moisture meter. If the moisture contents fall outside of this range, additional drying of the sub-floor will be required. It is advisable that if the moisture content of the sub-floor falls outside of the recommended ranges that the sub-floor be sealed with an appropriate sealant that is compatible with the adhesives to be used.

Please note that the sealants only act as a vapor barrier and not a moisture barrier or waterproofing membrane. It is critical to leave expansion of **10mm-15mm** around the perimeters of the engineered timber flooring, depending on the size of the area. Please contact your supplier for clarification in this regard. If possible, cut and remove the base of the gyprock approximately **20mm** from the sub-floor in order to gain an **extra 10mm** expansion. For larger areas it may be necessary to compartmentalize the floor to ensure sufficient expansion is allowed for by installing expansion joints. Please contact your supplier for clarification in this regard.

When installing the engineered timber flooring, it is critical that the butt joints are spaced out at least **25-30 cm** apart.

For further hints and guidelines relating to the installation of engineered timber flooring via the Floating Method of Installation, please feel free to visit the ATFA website: <https://www.atfa.com.au>.

Method B: Trowel Method

The adhesive is applied to the sub floor/concrete in small quantities at a time and spread with a **6mm notch trowel**. The adhesive needs to be spread evenly in order to ensure a uniform coverage. With the Trowel Method it will be necessary to apply weights to the engineered timber flooring in order to ensure a secure bond between the engineered timber flooring and the sub-floor. Packs of the engineered timber flooring can be used as weights as well as drums of water. Please note a certain degree of drumminess can be expected, particularly if areas are not weighted down.

Prior to installation commencing it is critical to check the moisture content of the sub-floor. For concrete slabs, the moisture reading of the sub-floor should be around **2.5% for an older concrete slab** and no more than **3.9% for a new concrete slab**. Check the floor for moisture in several areas using an appropriate qualified commercial moisture meter. If the moisture contents fall outside of this range, additional drying of the sub-floor will be required. It is advisable that if the moisture content of the sub-floor falls outside of the recommended ranges that the sub-floor be sealed with an appropriate sealant that is compatible with the adhesives to be used. Please note that the sealants only act as a vapor barrier and not a moisture barrier or waterproofing membrane.

It is critical to leave expansion of **10mm-15mm** around the perimeters of the engineered timber flooring, depending on the size of the area. Please contact your supplier for clarification in this regard. If possible, cut and remove the base of the gyprock approximately **20mm** from the sub-floor in order to gain an **extra 10mm** expansion. When installing the engineered timber flooring, it is critical that the butt joints are spaced out at least **30 cm apart**. Furthermore, depending on the size of the area, it may be necessary to install expansion joints at various points. Please contact your supplier for clarification in this regard.

For further hints and guidelines relating to the installation of engineered timber flooring via the Floating Method of Installation, please feel free to visit the ATFA website: <https://www.atfa.com.au>.

NOTES

- Care needs to be exercised when installing the flooring and the manufacturer guidelines need to be followed in order to ensure a successful outcome. If the flooring is installed in accordance with the manufacturer guidelines, the consumer will have many years of satisfaction from their flooring. It is important to check the credentials of your installer and where possible use a licensed installer. Please note that the above guidelines are to adhere to for warranty purposes. Should issues arise relating to the installation process, Harmony Timber Floors cannot be held accountable, unless installed by Harmony Timber Floors.
- Bending or bowed floorboards in length direction are not a defect. The floorboards might be a little harder to install, but will not be a problem once installed, or in the future. They will sit flat with the balance of the floorboards.
- Color variations may occur between engineered timber and bamboo floorboards as they are natural product. Australian species of timber, in particular, Spotted Gum are renowned for having a lot of variation. When installing the engineered timber flooring and bamboo flooring, careful positioning of the floorboards is advised.
- It is normal for flooring to expand and contract seasonally. During the summer gaps between the floorboards may close up and in winter gaps between the floorboards may appear. This is perfectly normal and not a defect. Furthermore, to reduce this from happening, it is advisable to control the relative humidity within the environment where the flooring has been installed between 40°-60° RH.
- Please note that engineered timber flooring, bamboo flooring, hybrid vinyl flooring and laminate flooring cannot be installed over battens.
- All flooring will scratch and dent, depending on individual living conditions. Certain species/types of flooring are harder than others. With regards the engineered timber flooring and bamboo flooring, free to look up their Janka Rating
- Please refer to the Care and Maintenance Instructions to understand how to look after your flooring in the correct manner

HANDY INSTALLATION TIPS

- **Read the instruction first** – Before commencing the installation process, read the instructions first and consult your supplier first if you are uncertain of anything.
- **Direction of the flooring** – Usually you will want to orientate the floorboards in the direction of the major source of incoming light, so that light is shining down the length of the floorboards or install the floorboards with the length of the room. Sometimes these two situations do not work in unisons, in which case the consumer will need to take into account things like expansion or the overall look they want to achieve.
- **Clamping** – Blue masking tape, available from most hardware stores, is ideal to hold the engineered timber floorboards in position until the adhesives set, as opposed to the clamping of the engineered timber floorboards, which is seldom required. Making the joins over tight by clamping them is not advised.
- **Moisture** – Take the environment in which you will be installing the flooring into account prior to installation. If you are aware of any moisture issues, get these rectified prior to installation commencing. Furthermore, check the moisture contents of the sub-floor prior to installation commencing.
- **Skirting** – A far more professional outcome is achieved when the skirting is removed prior to installation commencing and re-installed on completion of the installation process. It is also highly recommended to undercut the architraves. Where a client does not wish to remove the skirting, a timber beading or scotia can be fixed to the skirting. Never nail the timber beading or scotia to the flooring as this could cause expansion issues. When fixing the skirting or kickers etc. it is extremely important not to push hard down on the skirting. Gently sit the skirting on top of the flooring and fix to the walls. Failure to do this could cause expansion issues and the flooring may not be covered by the manufacture warranty.
- **Silicone** – It is not advisable to silicone the base of the skirting or around any built-in cabinetry if the Floating Method of Installation is used as there is a strong probability that when the flooring expands, the silicone bead will break. In fact, the silicone bead could actually cause an expansion issue; hence silicone work is not advisable for the Floating Method of Installation. Silicone to the base of the skirting or around any built-in cabinetry if the Glue-Down Method of Installation is used will not cause any issues and as a result can be installed.
- **Expansion** – It is critical to leave expansion of 10mm-15mm around the perimeters of the flooring, depending on the size of the area. Please contact your supplier for clarification in this regard. If possible, cut and remove the base of the gyprock approximately 20mm from the sub-floor in order to gain an extra 10mm expansion.
- **Creating a random look as opposed to a pattern** – To avoid creating a joint pattern in the flooring, it is necessary to begin installation using starter boards. To create a starter floorboard, cut the floorboard at 2/3 the length. Start with the 2/3 length, and then install the full lengths and continue across the room. Use the 1/3 length to start the next row and continue as above keeping at least a 30cm distance between the end joints. Cuts made at the opposite wall should be used for starter floorboards
- **Fixing of timber beadings or aluminum angles** – These need to be fixed with a flexible adhesive and where possible fixed to the actual sliding doors, windows etc. and not the flooring itself.
- **Waste Factor** – A waste factor of 10% needs to be allowed for, whilst a 15% waste factor needs to be allowed for when angles and curves are involved. With parquetry engineered timber flooring, generally a waste factor of 15%-20% needs to be allowed for.

- **Installing the flooring over existing floor finishes** – Check that the sub-floor is stable and level. When installing flooring via the Floating Method of Installation over existing floor finishes such as existing timber flooring or tiles, it is not necessary to key up the sub-floor as is the case for the Glue-Down Method of Installation. Flooring installed via the Floating Method of Installation can be installed directly over vinyl tiles and linoleum, as long as they are still securely fixed. Engineered timber flooring installed via the Glue-Down Method of Installation cannot be installed directly over vinyl tiles and linoleum. The vinyl tiles and linoleum needs to be removed first and the old adhesives removed. Flooring cannot be installed over existing carpet, which will need to be removed first. Please note when installing the flooring over tiles, it is important to note that the tiles need to be securely adhered to the sub-floor, but this is not a guarantee that this bond will not break further down the track. As a result, caution needs to be taken when installing flooring over existing tiles. This is even more critical when utilizing the Glue-Down Method of Installation as the tile adhesive and engineered timber flooring adhesives move at different rates. Speak to your supplier in this regard for recommendations in this regard.
- **Fixing items directly to the flooring** – Fixing items directly to the flooring may cause expansion issues and is not recommended. This includes the fixing of track, trims etc. by screwing them or adhering them with nonflexible adhesives directly on top of the flooring. This is particularly relevant to the Floating Method of Installation. The same is applicable when placing extremely heavy items directly on top of the flooring such as built-in cabinetry, a grand piano, billiard tables etc. Once again this is of particular relevance to the Floating Method of Installation. Exceptions may apply to engineered timber flooring installed via the Glue Down Method of Installation but is necessary to discuss this with your supplier for clarification. Failure to do this could cause expansion issue, which could cause stress fractures to the top wear surface of the engineered timber flooring or even cause the engineered timber flooring to buckle or twist. Expansion issues caused due to fixing items directly on top of the engineered timber flooring or by placing extremely heavy items on top of the engineered timber flooring will not be covered by the manufacture warranty.
- **Adhesives stuck to the surface of the engineered timber flooring** – Adhesives adhered to the surface to the engineered timber flooring can be removed with Methylated Spirits. Consult the supplier of the engineered timber flooring first, as some materials surface finishes differ. Furthermore, depending on the adhesives used, will depend on what can be used to remove adhesives adhered to the surface of the engineered timber flooring. Refer to the adhesive manufacturers guidelines with regards the cleaning requirements.
- **Purchasing of spare flooring** – It is strongly advised that the consumer purchase at least a spare box of the flooring that they have purchase, in case any future repairs are required. Harmony Timber Floors regularly change their profiling, dimensions and colours of their flooring etc. to meet the needs of the market. Hence, we cannot be expected to have stock of old flooring on hand for long periods of time. If a warranty repair is required and the original materials are not available, then the repairs will be carried out using similar flooring
- **Recommended areas of installation** – The flooring can be installed in all areas, excluding wet areas such as bathrooms, laundries, wet rooms, outdoors and areas exposed to excessive amounts of direct sunlight (refer to Care and Maintenance). If installed in the above-mentioned areas, it may void the manufacturer warranty. If you have any concerns discuss this with the supplier

These Installation Instructions are part of the Harmony Timber Floors Installation Instruction program and failure to comply fully with them will result in the product warranty being null & void in part or in full.

Harmony Timber Floors warranty the installation of flooring installed via the Floating Method of Installation for a period of 2 years from the date of completion of the works.

For timber flooring installed via the Glue-Down Method of Installation, the warranty period is in accordance with the QBCC requirements.

Please refer to the Harmony Timber Floors Care and Maintenance Information Sheet and the Australasian Timber Flooring Association website:

<https://www.atfa.com.au> , on how to maintain the correct climatic conditions within your home/interior space during the various seasons of the year and extreme weather events in order to avoid any potential shrinkage, expansion, cupping, crowning and potential fading issues.

If you have any questions or concerns, please feel free to visit our website:

www.harmonytimberfloors.com or calls us on 1300 725 257.

Please also visit the Australasian Timber Flooring Association website: **<https://www.atfa.com.au>** for further information on Installation Instructions for your flooring.