

# Installation Instructions

## Installers Responsibility

It is the installers responsibility to carry out the final inspection of the floor to ensure the **colour, grade, quality** and **finish** are acceptable.

The **inspection** needs to be carried out before it is installed by eying across each piece as you put the floor together to pick out any potential defects such as **large variation in colour, large knots that may be unsightly to the eye, gloss variation, gaps appearing in the floor** as you install it.

The installer must use reasonable selectivity and hold out pieces that should not be installed or cut off any deficiencies whatever the cause.

If the product is deemed not acceptable for any reason, do **NOT** install it and contact your supplier immediately. The product must be checked when accepting it from your retailer that the colour is correct as per customers invoice, also check with the end user that the right product has been supplied.

Once a product has been installed and any of the above warnings mentioned are not done correctly then no financial assistance can be given nor can the product be returned.

Wood is a natural product with natural variations of colour, grain and characteristics, this is not a defect.

## IMPORTANT!!

Timber floors are **Hygroscopic by nature** so to make sure that the floor is kept in excellent condition from **cupping, doming, gapping, telegraphing shrinking and expanding** it is **IMPERATIVE** that the humidity level be controlled at all times, from delivery to installation and during the years to follow after the floor is installed.

The **OPTIMAL HUMIDITY** is between **40% - 60%** if humidity drops **below 40% and above 60% please either humidify or dehumidify** the home or environment where the floor is installed. Maintaining a consistent and correct in home environment is very important so the timber will not face any dimensional changes.

With the use of a Hygrometer in the home and with the correct use of air conditioners, heaters and good air flow within the home, these all play a part that will help maintain a stable environment for your floor. (**NOTE:** If you are unsure about the correct use of these devices for correct humidity control contact your retailer.) The **TEMPERATURE** should be maintained between **18 - 24 Degree Celsius**.

**NOTE:** Not every **location** is the same through out **Australia**, so please understand the environment you are installing the floor in, the perimeter expansion will need to be adjusted accordingly. **E.G** Coastal seaside areas are known for very high humidity during certain seasons therefore more expansion will be required this can be done by undercutting the plaster where you will pick up another extra 10mm.

If the floor area across the width of the floor is excessive expansion joints need to be fitted to compartmentalise the large floor area into smaller ones so they will move independently of each other.

**NOTE:** different products will move at different rates due to their different structures and genetic properties, this also needs to be taken into consideration when allowing the right expansion, so if you are unsure about the product and how it will respond to the environment then please contact the manufacturer for guidance.

Flooring should never be stored outdoors, on a cement floor, in a garage or in any damp conditions. Care should be taken to store the packs flat; packs should never be lent against a wall.

Engineered flooring does not need to be climatized on site its moisture content will range from 6-8% MC, but upon delivery check the wood flooring moisture content before installation with a moisture meter to be certain that the flooring is reading correct as warehousing storage and transport can alter the correct MC content of the flooring after it has left the site of manufacturing.

All flooring contractors should possess a moisture meter for the timber flooring and concrete sub-floors.

A waste factor of 5-10% should be taken into account when installing a floor, expansion required around the perimeter of the room and all fixed internal objects will vary on the type of product being installed, as a general rule we recommend at least 10-15mm expansion gap be allowed. Please also be aware that over 12 l/m in the width of the floorboard, expansion joints should be installed to compartmentalised the total width into smaller moving areas.

Expansion joins come in many forms and colours please consult with the retailer if you require them.

**Doorways:** At doorways the door jam needs to be undercut well and all material removed for the timber floor to slide under and move freely if required.

Doorways are also a very good place to insert expansion trims if required.

**Stairs:** Flooring on stairs must be glued to the existing tread & riser, matching stair nosing to bet fitted on the front edge of each step. Also please make sure that the stair nosing meets the slip test guidelines for each state in Australia.

**Underlay:** Their are many cheap underlays on the market please use a quality underlay for a solid feel and enjoy a quiet floor to walk on. Also be aware that the moisture barrier on the cheaper underlays will be ineffective against high moisture within the concrete slab. therefore it is strongly advised that you first install 200um plastic moisture barrier sheet first on the concrete and then the underlay.

Over lap the plastic moisture barrier sheet by at least 150mm and tape joins fully with a moisture proof tape, also tape the joins of the underlay you choose to install before you install the timber floor.

**Heat:** In areas where the flooring comes into contact with a fire place, stove, heating system or direct sun light the floor will have a tendency to dry out more in these areas which may cause some shrinkage and gaps appearing. If possible protect the floor with blinds or a mat to help reduce excessive moisture lose.

- The sub-floor should be dry and clean, absolutely flat and free of any cracks.
- Irregularities on the sub-floor should not exceed 3mm over 1 l/m in all directions uneven floors give you a bouncy feel when walked on and also possible squeaking will occur.
- Incase their is a need to level the concrete sub-floor use a reputable cement based levelling compound.
- Polyethylene membrane plastic sheet (0.2mm thickness) for vapour barrier are recommended for floating floor installation.
- It is highly recommended that a dense quality underlay be used to reduce the sound for foot steps.
- Should the RH of the sub-floor be above 95%, no flooring should be installed, **This Is Strictly Prohibited**
- An allowance of 10-15mm on all edges should be allowed for expansion but this is relative to the width of the area and the environment that the floor will be installed if unsure contact your retailer.
- Engineered flooring is designed to move as one continuous sheet, not like sold timber strip flooring which moves as individual boards.
- When installed as a floating floor system, it's extremely important that expansion gaps are allowed around all perimeters and fixtures to allow for the floor to expand or contract when exposed to changes in humidity.
- Humidity changes throughout the seasons, and through unusual weather patterns, coastal locations, outback desert environments and mountainous areas which collects higher levels of rain fall leaving moisture environments of high humidity. Air conditioners can compound and severely worsen a floor if the wrong type is used such as Split Systems, Refrigerated Conditioners & Evaporative Air Conditioners. Please check with your retailer & air conditioning compony of choice to understand the effects that they can have on timber flooring.
- Engineered flooring requires a perimeter expansion gap, the flooring must be cut parallel to all wall lines so that the floor will evenly accommodate any dimensional changes as a result to changes of in-house relative humidity. Fitting a Hygrometer in the central part of the home is a MUST to understand what is happening in the environment of your home.
- Kitchen Cupboards & Island Benches MUST never be installed on top of a floating floor system, this will easily restrict the overall movement of the flooring.

The correct installation process is to remove the kitchen kickers and finish the last board 5-10mm under the front edge of the kicker this cannot be effected by the weight of the cabinetry, or cut 10mm short of the kitchen kickers and finish with a beading to cover the expansion gap.

- Fit expansion joints in appropriate areas to compartmentalise larger areas of floor a simple formula for floating floor installation across the width of the installed floors is allow 2mm expansion for every 1 l/m of flooring
- We recommend that all flooring be laid lengthwise against the longest wall of the room within the home.
- **REMEMBER** check your floor continuously during installation for defective boards or any situation that seems not normal such as excessive noise when walking on the floor or even bounce vertical movement.
- When installing 5Gc Click flooring always use a tapping block to set the click properly so no squeaking occurs.
- When using Tongue & Groove locking system apply a bead of **Cross Link PVA Glue** to the top lip of the groove make sure you apply a good even bead the full length of the groove and also apply glue to the short side being the end of the board in the groove as well.

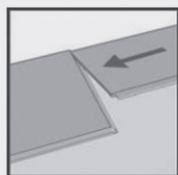
## Under Floor Heating

- When installing over under floor heating system, ensure that the instruction of heating procedures is obeyed, before laying the floor.
- **Please Note:** We advise that due to the nature of the following timbers; **Kempas, Maple, Jatoba, Iroko, Beech, Jarrah, Sydney Blue Gum, Blackbutt, Tassie Oak and Spotted Gum** that these species are not recommended for flooring with under-floor heating.
- Floating floor laying instructions must be followed and plastic sheet/vapour barrier must first be fitted. The surface temperature from the underfloor heating must not exceed 27 degrees Celsius and the wattage should not exceed 60 watts/m<sup>2</sup>.
- Turn on the heating system for at least 3 weeks prior to laying the floor and run at the desired temperature then switch off 48hrs before installation, the heating system can be started 1 week after the floor has been installed with gradual increases by 2 degrees increments each day until you reach the correct temperature and when turning off the heating system go down gradually by 2 degree increments each day until off.
- With 5Gc Click install with a good size bead of **Cross Link PVA Glue** applied to the large click.
- With Tongue & Groove apply a bead of **Cross Link PVA Glue** to the top & bottom lip of the groove.

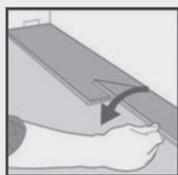
## Laying the TUFF LOC 2G+5G System



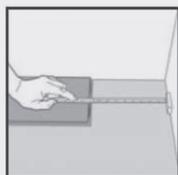
**Fig 1.** First plank, first row. Place a spacer of 15mm thickness to the left and position the plank against the wall. Later, after 3 rows, you can easily position the flooring against the front wall with distances  $\approx$  15mm.



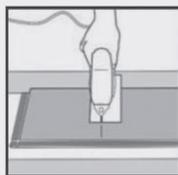
**Fig 2.** Second plank, first row place this plank gently and tight to the short end of the first one.



**Fig 3.** Fold the panel down in a single action movement. During the fold down, make sure the panels are tight against each other. Afterwards press down or slightly tap down at the short end just installed till it clicks. No major force is required.



**Fig 4.** At the end of the first row, put a spacer  $\approx$  15mm, to the wall and measure the length of the last plank to fit.

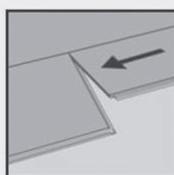


**Fig 5.** Cut with a jig saw - hardwood turned down to eliminate/reduce damage to the face of the panel. Or if cutting using a hand saw, cut it with the hardwood visible face up. Then install it as previous plank.

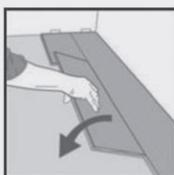


**Fig 7. General distances between short ends**

Minimum distance between short ends of planks in parallel rows shall not be less than 500mm. This is for stability of the floor.



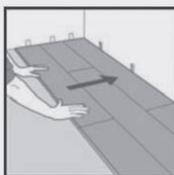
**Fig 8a.** Second plank, second row place the panel at an angle into the groove of the previous row making sure that the end of the panel is tight/flush to the short end of the previous panel.



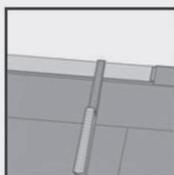
**Fig 8b.** Fold the panel down in a single action movement with a slight press to the left to the short end of the previous panel. Again using the tapping block tap it against the long end into the previous row. During the fold down, make sure the panels are tight against each other.



**Fig 8c.** As it flattens itself to the floor, press or gently tap the top of the short end of the installed panel until it clicks. Finish installing this plank by tapping it with a tapping block on the long side to ensure secure installation.

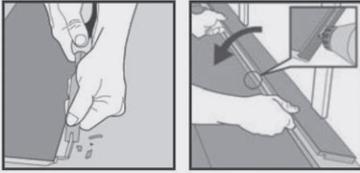


**Fig 9.** After 2-3 rows, adjust the distance to the front wall by placing spacers  $\approx$  15mm. Once the adjustment is done against the main wall, continue to install till the last row.



**Fig 10.** Last row (and perhaps also first row). The minimum width of the last plank should be NOT LESS than 50mm. Remember distance to wall is 15mm. TIP: Put a spacer before measuring. Cut the panels lengthwise and glue the short ends. See instructions below.

## Special Instructions



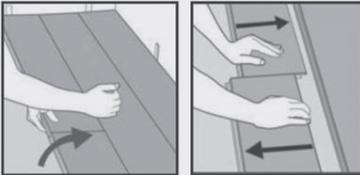
### Special Installations - Small Panel Widths

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



### Radiator Pipes

Installation at radiators. Drill the holes 20mm larger than the diameter of the pipes. Cut out the panel (with the thinnest blade possible) as per diagram. Install the plank as per normal. Glue the cut out piece back again.

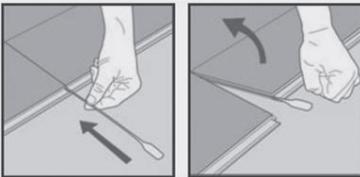


### Disassembling (without tool)

Your floor can very easily be disassembled, which enables replacement during installation and also during use.

**Fig 11.** Separate the whole row by carefully lifting up and slightly knocking just above the joint. Fold up and release the whole long side.

**Fig 12.** Disassemble the panels by sliding horizontally. (Do not fold up).



### Disassembling (with tool)

**Fig 13.** Place a special Vålinge Release Tool into the joint.

**Fig 14.** Keep the left plank down to the floor and release the right plank - fold it up.

## Maintenance Instructions

- Please ensure that an ideal room climate with the relative humidity range from 40-60% and 18-24 degrees celsius is provided. This climate is good for both your health as well as the floor.
- Please confirm with your retailer if the floor surface is UV Lacquer or Oil as the cleaning products are very different and the application is also different.
- Use the correct cleaning solution for the correct surface being Bona or Woca and use a well rung out mop so excessive moisture is not left on the floor surface.
- Daily cleaning should be done with a vacuum cleaner or broom, any sand or dirt should be immediately removed because they can cause surface scratches.
- Fit self adhesive felt pads under all your furniture straight after the floor is installed.
- Use protective mats at all external doors and inside the door as well to remove foreign material from your shoes to reduce the risk of scratches.
- Never slide or roll appliances across the floor as this will cause bruising and scratches to the surface.

**Wood is a living material that swells if the moisture or humidity is raised and also shrinks if the moisture or humidity is lowered. This not only shows 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 extended periods of time. This can particularly happen if e.g in winter time the humidity (RH) in a heated room goes below the specified 40%. In this case you should install an air humidifier in order to prevent damages to your floor. The same applies for for High humidity (RH) with air conditioned rooms or coastal and mountainous areas.**