General Installation Instructions

Good web sites to check out that may assist you are:

- For gluing engineered boards over timber chipboard/particle board/ yellow tongue:
  - https://www.youtube.com/watch?v=BPyfR373tl8
  - https://www.youtube.com/watch?v=KTbXKGQurjQ

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 Smarter Timber Flooring 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 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 of approx 10mm. This will allow the floor to expand and contract as a whole evenly and will avoid (but not entirely prevent) to a great extend 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

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375

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.

Pre-installation procedure

- Read this installation advice and if you have any questions contact Smarter Timber Flooring.
- 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.
- Permanent air conditioning and heating systems should be in place and operational.
- Allow approx. 7% extra material above the surface area to make your installation look professional and cater for waste and short pieces.

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375

TONGUE AND GROOVE ENGINEERED FLOORBOARDS GLUED DOWN ON TIMBER SUB FLOOR INSTALLATION GUIDE

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 17 C and at the most 28c, 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.

Sub floor preparation

- Please consult appropriate available Standards or enquire with appropriate Authorities
- 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) over 2 metres. 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.

Existing timber / particleboard / plywood based floors

- The moisture content of the sub floor should not exceed 10%.
- Sub floors, 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.
- Sand off any existing coating on existing timber subfloor
- 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.

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375

Installation - expansion gaps

- In order to cater for a normal expansion and contraction, you should leave a gap of approx 5-10 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.

  .

Installation - glue-down method

- In gluing the timber directly to the sub-floor, the sub-floor must be flat and free of any 'bumps"., dust, plaster and paint free. 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 warranty claims nil and void. Always use the same brand moisture barrier and the glue you are using.
- Always use a proper moisture seal between the subfloor and the timber floor to be installed. Check floor with an accredited moisture meter.
- Only use a one component, (solvent free) moisture curing polyurethane timber flooring adhesive as glue for gluing the boards down. If you use a glue with a too high water content, the boards will expand uncontrollably.
- In areas where there is a concern with moisture, use a proper moisture seal. Ask Smarter Timber Flooring 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 the adhesive manufacturer's instruction. Never spread out too much glue at one time, never the entire floor and always work in sections.

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375

TONGUE AND GROOVE ENGINEERED FLOORBOARDS GLUED DOWN ON TIMBER SUB FLOOR INSTALLATION GUIDE

- 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 increase 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. You may also secret nail into the tounge of the boards at a 45 degree angle. Only minimal secret nail. Max. 4 nails/staples per board. Make sure the nails/staples you are using are countersunk into the tounge before you install the next row. Test your nail/staples on scrap piece of floorboard.
- Secret Nail with a Secret Nailer hammer or air pressure stapler (70-75 PSI). These may be available to hire at your local Hire Shop (Kennard's) or buy at flooring accessories specialist. Staples (Approx 30mm length) or Nails (10mm crown width, 20mm leg length)
- 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. Stagger the joimns of the boards at least 450mm apart, allowing for an overall blend effect finish.
- 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)

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375

TONGUE AND GROOVE ENGINEERED FLOORBOARDS GLUED DOWN ON TIMBER SUB FLOOR INSTALLATION GUIDE

- ***It is vital that all glue residues are removed immediately after laying each pre-finished board. If using "Bostick Ultraset" to glue down use "Bostick Wipes" or a solvent suitable to the glue being used. Always test solvents first on an off-cut to establish that the solvent does not affect the colour or finish.***
- **Once floors are laid on a building site it is essential that the floor be protected using 2mm foam underlay and 3mm or 4mm MDF sheeting that is securely taped together (do not apply tapes to the finished floor). This protection must be maintained until all works have been completed. Avoid plaster dust on the surface of the floor. If dust is present vacuum off immediately, do not mop. Moisture can set the plaster dust into the low grain of the timber making it extremely difficult if not impossible to remove.**
- Cleaning, we recommend the use of a good quality wood soap (Bona) with microfiber-type swivel cleaning pad for daily/weekly cleaning sprayed.

Note:

- When laying the engineered flooring to adjoining rooms up to carpet or tiles an aluminum cover trim/senior end/ C Trim is recommended to go over the floorboard where it meets carpet/tiles to protect it and allow for some expansion. These can be purchased at Bunnings or other hardware stores.

Finishing off:

- Once all the laying procedures have been completed and the glue is sufficiently dry (see information on adhesive packaging), 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).
- Skirting-boards 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.

Smarter Timber Flooring. (Also trading as Smarter Floorworld) **312A Bay Rd. Cheltenham Vic Ph. 03 9584 3314**
Email: sales@smartertimberflooring.com.au Website: www.smartertimberflooring.com.au Fax. 03 9584 3375