

RADIAL TIMBER PRODUCT SPECIFICATIONS *REV: Sep 2009 1.0*

Internal Lining – 19mm Tongue & Groove (T&G) Flooring

1.0 PRODUCT

Radially sawn Tongue & Groove (T&G) Flooring is machined from re-sawn radial wedge sections to produce back sawn flooring boards. Radially back sawn boards behave consistently and can be identified by the alignment of growth rings, which are basically parallel to the broad face of the board. T&G Flooring is generally air seasoned then kiln dried to between 10 and 12% moisture content and machined in compliance with AS2796.2 – 1999 (Timber-Hardwood-Sawn and Milled Products – Part 2).

2.0 SPECIFICATIONS

2.1. Species:

Radial T&G Flooring boards are generally sawn from regrowth or plantation grown hardwoods such as Silvertop Ash or Blue Gum (Class 2 - 3 durability). Other hardwood species may be available as a special request.

2.2. Sketch/Sections:



Figure 1
(uni-nail T&G Flooring in cross section)

2.3. Profiles:

Radial T&G Flooring is typically supplied as a series of 19mm thick boards machined in a secret or “uni” nail profile and end matched (ie. tongue & groove joint on the ends of each board). Standard end matched boards are either 85mm or 108mm wide however, other profiles and conventionally sawn flooring may also be available on request.

2.4. Lengths & Availability:

Only a limited amount T&G Flooring is generally kept in stock and large orders may require up to 12 weeks lead time. Flooring is typically supplied in random lengths of between 1.2m and 5.1m (av. lengths 2.7 to 3.6m but wider profiles will contain more shorts). Most Radial Timber flooring will be supplied as “standard” grade or better (feature grade boards may be supplied by *Radial Timber Sales* as a special request). A 20% surcharge may be applicable to all special orders.

3.0 FIXING & GUARANTEE

3.1. Fixing Recommendations:

Setting up & Acclimatisation: T&G Flooring can be laid over an existing timber floor, concrete slab or directly on joists. Kiln dried timber will still be affected by the local atmospheric conditions in each location (ie. excessive heat or moisture may result in subsequent shrinking or swelling). *As a result, it is essential that in all circumstances, tongue & groove boards be allowed to acclimatise to local conditions by laying them out in the location where they are to be laid for up to 14 days.* It is important that the location is well ventilated so air is able to circulate around each board during the acclimatisation process (poor ventilation, extreme or abnormal climate conditions may result in the need for longer acclimatisation). A moisture metre can be used to test that the timber has reached equilibrium with the “normal” moisture content of the room. If being stored outside, packs of flooring should be suitably covered to prevent wetting and water staining. If wetting does occur, timber should be allowed to air dry before commencing acclimatisation period (a timber cleaner may be required to remove any water stains).

Installation & Fixings: Once acclimatised, boards should be sorted into similar lengths and set out so that end joints are staggered. End matched boards do not have to join over a joist/batten and should be pushed/tapped tightly together (straight end boards will have to be cut so they join over a joist/batten). Typically, a 10 to 12mm gap should be left between the edge of each board and the wall all the way around the room to allow for expansion.

Boards can be fixed to battens, joists or an underply by “secret” with a suitable gun “top” nailing by hand/gun. Secret nail guns fire nails or staples at a 45 degree angle and in the process, push boards together without mechanical cramping (secret nailing is not recommended for boards wider than 85mm). Top nailing by hand or with a conventional nail gun requires the boards to be pushed together with mechanical floor cramps. It is recommended that a “tapping block” (or off-cut) is used and at least 9 to 10 boards are cramped together at a time to avoid overstressing the boards.

When laying T&G Flooring over a concrete slab, care should be taken to ensure the slab is flat and free from extreme variations (a self levelling floor compound or floor grinding may be required for very uneven slabs). Underply or timber battens can be fixed to the slab and should be sized to suit the fixing method. If using battens, they should be fixed at 450mm centres with appropriate masonry anchors (batten should be a min of 20mm thick for secret nailing or 35mm thick for top nailing). If the slab is less than 12 mths old or has a moisture content higher than 5%, a suitable moisture barrier between the slab and timber flooring is recommended.

When fixing T&G Flooring straight to timber bearers and joists, it is important to ensure that there is good sub floor ventilation and that air can circulate from all four sides of the room. Joists should be sized correctly, level and generally not more than 450mm apart (packing or planing of joists may be required to achieve a level sub floor frame).

When fixing T&G Flooring direct to an underply, it is recommended that boards are nailed and glued with an approved timber adhesive (adhesive should be applied in accordance with manufacturers recommendations). It is also important to ensure that the underply is dry enough so that moisture is not absorbed by the T&G Flooring (ie. less than 15% MC).



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Storage: All Radial Timber flooring products should be stored in a dry location and installed in accordance with the above guide. Radial Timber Sales has no control over the on site handling, storage or installation of any flooring products and therefore any guarantees do not cover claims resulting from on site conditions or installation.

3.2. Guarantee:

Radially sawn T&G Flooring is generally air seasoned, kiln dried and then machined in compliance with AS2796.2 – 1999 (Timber-Hardwood-Sawn and Milled Products – Part 2). Timber is a natural product and such, colour, grain and features will vary depending on the growing conditions of the tree as well as the milling process. Specific grades of flooring are not always available and should be requested when placing an order. Extreme variation in local climatic conditions can affect the behaviour of timber flooring and therefore should be avoided.

Radial Timber Sales guarantees to replace any floor boards that are deemed to be outside compliance tolerances allowed in the above code within a twelve month period from the date of delivery, where it is agreed or can be proven that the non compliance is a direct result of the product processing or handling prior to delivery (replacement refers to the supply of floor boards only and does not include any labour costs).

3.3. Suggested Applications:

Radially sawn T&G Flooring has been used internally in a wide variety of applications. Projects include houses, apartments, wineries & office buildings.
For images of T&G Flooring visit: www.radialtimbers.com.au

4.0 FINISHING

Internal timber linings can be left natural or finished with a variety of stains or varnishes. It is normal for timber to darken in colour if exposed to direct sunlight or once a finish has been applied. The degree of finishing depends largely on personal preference but best results are typically achieved by using the services of a professional tradesman.

There are many different types of finish and each should be selected according to performance criteria but we typically recommend natural oil based stains or water based finishes. Before the application of any finish, it is important to putty all gaps or nail holes and sand the timber to remove any marks or minor blemishes. All finishes should be applied strictly in accordance with the manufacturer's instructions. For more detailed information, please refer to Radial Timber "Finishing Recommendations" at: www.radialtimbers.com.au or phone: 03 9768 2100.