



Parkside Timber hardwoods are renowned for their strength, durability and versatility. When properly used Parkside Timber hardwoods are amongst the more robust, durable and easily handled of all building materials.

The following guide outlines aspects that should be considered prior to the installation of a Parkside Timber Floor. It includes aspects of storage and handling, evaluating the conditions in which the floor is to be laid and measures that may need to be taken prior to installation.

Timber is a natural “living” product

Timber has the ability to take up or lose small amounts of moisture depending upon its place of installation and ambient conditions (hot, damp, dry). As a result it moves, expanding and contracting with the weather to suit environmental conditions.

You must always bear this important fact in mind when deciding how to handle, store or install timber.

Timber standards and specifications

There is more to a piece of timber than meets the eye, especially seasoned hardwoods. At the timber mills and processing plants, green hardwood is seasoned to specific moisture contents, then carefully graded and classified for qualities such as strength, durability and density. Each piece of seasoned timber is skillfully prepared to meet clearly specified performance characteristics and you must always ensure that the timber you use for any purpose has the correct properties for the task at hand.

When ordering your timber be aware of the industry standards as set down by Standards Australia. For example the Australian Standard requires most seasoned hardwood products to be graded to provide one select face only.

Evaluating site conditions and the installation environment

All seasoned timber should be supplied to an equilibrium moisture content (EMC) compatible with the conditions in which it will serve, and it must be understood that this can vary from region to region (i.e. coastal plains to inland districts). It is recommended that you contact the Forestry Department or a similar body to establish the correct EMC for your area.

In air-conditioned or heated premises, the equilibrium moisture content may be 10% or lower and in naturally ventilated premises it may be as high as 15%. In considering the use of timber products, you should advise your timber supplier of windows, walls, heating, air-conditioning and any other conditions likely to lead to the movement of timber so that appropriate advice can be obtained.

In extremes of moisture or dryness due to heating or air-conditioners or due to poor ventilation, expansion and contraction of timber products may require particular precautions or installation techniques or make the use of timber inadvisable.

Transportation

Parkside Timber Flooring is carefully packed for protection during transportation. During transportation no other material should be placed on top of timber products. Suitable protective packaging should be used for all edges and faces to protect the material from normal handling, holding down straps and weather during transport.

Care should be exercised to ensure that face and edge protection is used also when lifting with any form of crane and that slings are properly positioned. Crane hire, when needed, is the buyer's responsibility and should be coordinated by pre-arranging the delivery time. It should be noted that the plastic protective covering is for transport purposes only and it is not intended to protect the timber during periods of yard storage.

Storage and handling procedures

Check your timber upon delivery

It is important that you examine timber delivered to you immediately and that you advise your suppliers immediately of any inconsistencies with your order or concerns about the quality of the material. Once delivery has been made it is the purchaser's responsibility to ensure that the material remains in the condition in which it was delivered.

Correct Site Storage is Vital

Seasoned timber should be stored flat and at least 200mm above the ground, evenly supported on bearers no further than 450 mm apart with good ventilation, allowing a free flow of air to all faces, and protection from all moisture. Avoid storage in builders' sheds or plastic covers exposed to direct sun as these limit air circulation and expose the timber to extremely high temperatures.

Any protective cover should not have the effect of trapping rising moisture (condensation) and thus defeating the purpose of the covering. Parkside package is designed to provide limited protection during transportation only. During any storage, check the material regularly to avoid the build-up of condensation. Before proceeding with on-site acclimatisation, contact your supplier or Parkside Timber for advice and correct methods.

Important:

The conditions of storage for the flooring should be equal to those that will prevail during the installation process. It is essential that the moisture content of the seasoned timber at time of installation be equal to the equilibrium moisture content (EMC) of the room in which the timber is to be installed. This should be verified by the use of a moisture meter suitable for this purpose.

Acclimatisation

Do not install flooring during or after extreme weather conditions

Parkside Timber Floorings are usually kiln dried to a moisture content of 9 %-14%. This has been found to be most satisfactory for the majority of installations under average weather conditions. Periods of excessive rain or dry heat before or during or after fixing will cause the timber to either gain or lose moisture. If a period of abnormal weather occurs between receipt of flooring material and time of laying or during laying, contact your supplier or Parkside Timber for advice before proceeding.

For further information on acclimatising flooring timber, Parkside recommend the viewing of ATFA's Information Sheet #25 Acclimatisation of Solid T&G Flooring.



Important:

Where abnormal conditions apply, including where permanent air conditioning or under floor heating is being installed, or in areas of unusual humidity such as dry inland areas or high humidity locations then Special Attention to on site acclimatisation is vital.

Adequate ventilation is critical

Sub-floor ventilation is probably the most significant design factor contributing to the unsatisfactory performance of a timber floor. Excessive humidity in the under-floor area may be caused by either a lack of sufficient cross-ventilation or from damp soil conditions arising from inadequate drainage. These conditions lead to swelling ('bulging' and 'cupping') of the flooring and possibly its eventual decay, plus an unhealthy mustiness within the house.

The Building Code of Australia (BCA) requires that suitable provision be made for sub-floor ventilation and lists various alternative methods to achieve adequate sub-floor ventilation. Also check with your local building authority for advice in regard to local site conditions and any sub-floor ventilation requirements additional to the BCA provisions. There is little benefit in providing excellent cross-ventilation if the sub-floor area remains wet due to poor drainage or seepage. Drainage must be improved if there is any indication of persistent dampness.

Sanding and finishing

The finishing of feature timber floors should be carried out by a professional floor sander and finishing contractor. After sanding is complete, the floor must be vacuumed or swept clean and carefully inspected for scratches and undulations, as these will be highlighted by the finishing coats.

Faults are easily found by looking across the surface towards the light from a window. The finish manufacturer should be consulted regarding the suitability of the finish for timber floors. Only products which do not glue boards together should be used.

General tips

Protect flooring from wet trades, weather and construction damage

Where possible, avoid fixing flooring until work by the wet trades has been completed. See previous notes on storage under a cover.

If a quality polished floor is planned, the flooring should be installed after the roofing and external walls have been completed. Problems which arise from weather exposure will remove the flooring manufacturer's responsibility for the flooring product.

Protect structural timbers during construction

Products such as floor joists, lintels and roof beams must be protected against full weather exposure to "roofed-in" stage by covering with a waterproof plastic or similar material.

Maintenance of external timbers is critical

Where the product is manufactured for external use, be sure you adhere to a strict periodical maintenance program in regard to your selected finish coatings. Also external fixings such as bolts, screws and nails should be hot dipped galvanised coated to ensure a longer life.

Avoiding end splitting

Pre-drill nail holes where fixing close to the edge to avoid splitting. Use a drill that is about three quarters of the diameter of the nails you will be using.

Are moisture barriers required?

Building regulations may require moisture barriers to be used in some situations when fixing timber cladding and panelling. Check with your local building authority.

Flooring installation tips

Where flooring is laid after the erection of the walls, Australian Standard 1684-1992 requires that a 10mm clearance be allowed between the flooring and the bottom plates which are parallel to the direction of laying. 10mm clearances are appropriate for rooms of 3 to 4 metres in width. When there is a span of greater than 6 metres there should be an intermediate expansion joint installed.

Proportional increases are required where larger widths of flooring are planned, including sections which are continuous through doorways or other openings.

The clearances ensure that normal movement of appropriately fixed flooring due to average seasonal weather and moisture variations will not disturb the walls. To ensure that top nailed boards are bedded firmly on floor joists, do not cramp more than 0.9 metres of flooring width at one time.

Secret nailed boards must be fixed individually. Do not over cramp the floor boards over 80mm actual width. We do not recommend flooring boards greater than 100mm wide be secret nailed.

For best results when installing hardwood flooring, the minimum length nails should be 2.5 times the thickness of the floor boards.

Fixing to Concrete

Note:

This information applies only to products approved by Parkside Timber for fixing to concrete sub-floors.

When fixing timber floors to concrete it is important that the slab conform to the standard moisture requirements of no more than 5.5 %.

The concrete sub-floor must also have a planeness equal or better than 3mm in a 3 metre radius. The sub-floor should be topped with an approved cementitious topping to bring it within this tolerance. The provision of a secondary moisture barrier by means of plastic sheeting is advised before fixing with battens or plywood prior to laying timber floor. When joined, the plastic sheeting must overlap by 200mm and be taped.

Flooring suitable for gluing to the sub floor must be fixed by an approved adhesive. Correct expansion gaps must be left at the perimeter to allow for seasonal movement of the floors. Before fixing refer to the appropriate Australian Standard.