

Cypress

A sustainable resource –
durable, distinctive, decorative



Selection, Installation and Finishing of Cypress Tongue and Groove Natural Timber Flooring





The Owner's Choice

Aspects relating to what a customer desires are of paramount importance and should not be taken lightly. Each floor is unique and is often seen by the owner as a focal point of the interior design. Those selecting a timber floor will often choose on colour with board width influencing how the natural colours are blended.

It is important to accommodate customer preferences; however this should not be to the detriment of the performance of the floor or its final appearance. Where the customer's preferences can not be accommodated this needs to be brought to the customer's attention. Where the customer's preferences can be accommodated but may affect the appearance of the floor, then this too needs to be brought to the customer's attention and followed up in writing. Colour variation between showroom samples and the product provided, provision of expansion joints, high levels of sun exposure on an area of the floor etc., are all areas which affect appearance and may necessitate specific discussion with the owner.

Colour, Grade and Hardness

The sapwood of Cypress is a pale straw colour and the heartwood is a dark yellowish brown colour and some boards may contain both light and dark colours. Within any species and within individual trees colour variations can occur and the product supplied may differ in colour from showroom samples and this should also be discussed with owner prior to installation.



AS 1810 – Timber – Seasoned Cypress – Milled products provides two grades for flooring – Grade No. 1 and Grade No. 2

Hardness indicates a species' resistance to indentation and abrasion. Damage to timber floors may occur due to continual movement of furniture, heavy foot traffic and in particular "siletto-heel" type loading. Cypress is rated as moderately hard. Floor finishes will not significantly improve the hardness of any timber flooring.

Cover Widths, Profiles, Spans and End-Matching

Typical T & G profiles are shown in the figure below. Some profiles are produced with grooves or rebates on the underside. Where the underside of a floor forms a ceiling, the board edges may be arched to form a 'v' joint profile. Both the secret nail profile and the standard (or top nail) profile can be used for top nail fixing but the secret nail profile must be used for secret fixing. The cover width should be limited to a maximum of 85 mm for secret nailing. Some wider board flooring has the secret nail profile which allows temporary secret fixing prior to top nailing.



Where there is a significant variation in colour, the appearance of the floor will differ depending on the cover width used. Narrower boards tend to blend the colour variations together. Gapping between individual boards during drier times is also less with narrower boards than it is with wide boards. A maximum board width of 100 mm is recommended to limit potential gap size and other movement effects such as cupping (edges of the board higher or lower than the centre).

End-matching is a process where a tongue and groove joint is provided at the ends of boards. This allows joints to be placed between joists, resulting in less wastage than plain end flooring, which must have its ends fixed over joists.

Board Lengths

Flooring is generally supplied in random length packs up to 6 m in length. The average length is often between 2.1 m and 3 m. The minimum length for timber being fixed to joists is 900 mm, based on a 450 mm joist spacing. In some instances, if it is known that the floor will be laid over a structural sub-floor, then lengths shorter than 900 mm may be provided.

Considerations Prior to the Installation of Cypress Strip Flooring

This publication outlines the recommended practices for laying Cypress strip floors over timber and engineered timber joists (it does not include steel joists), plywood, particleboard and concrete. When laying a timber strip floors over joists, either directly on the joists or over sheet flooring fixed to joists, adequate subfloor ventilation is essential for the satisfactory performance of the floor. Top nailing (often referred to as Face nailing) is a more robust fixing method than secretly fixing with adhesives. Top nailed floors can therefore accommodate greater movement. Increasing the amount of adhesive used will provide a more robust fixing. Where greater floor expansion is expected after installation, the method of fixing chosen and associated spacing of fixings or amount of adhesive used requires consideration.

Subfloor Ventilation

When the lower surface of timber floors or of supporting sheet flooring (over which a timber floor is laid) is exposed to the ground and the subfloor space is enclosed (by brickwork etc.), the subfloor vents must be adequately ventilated with permanent vents installed during construction. The humidity in an enclosed subfloor space can have a profound effect on the performance of a floor. If conditions are very moist, the lower surface of the boards may take up moisture, causing substantial swelling. Differential movement between the upper and lower surfaces of floor boards may cause boards to cup. Similarly, caution needs to be exercised with timber floors laid in areas where the microclimate is often moist. In such locations the floor may reach higher moisture contents than in other nearby areas and additional allowance for expansion of the floor may be required. Timber floors should not be laid over moist subfloor spaces. Supporting sheet flooring (e.g. particleboard) will not prevent moisture uptake in the T & G flooring if humidity levels in the subfloor space remain high for extended periods.

Ventilation Requirements

Strip floors should be provided with subfloor ventilation that exceeds minimum BCA requirements. The requirements of the BCA (currently 6000 mm² per metre length of wall for higher humidity areas) are primarily to limit the moisture content (and thereby prevent decay) of framing timbers within the subfloor space. The recommended minimum ventilation for T&G timber floors is 7500 mm² per metre length of wall, with vents evenly spaced to ensure that cross ventilation is provided to all subfloor areas.



Where it is necessary to reduce ventilation levels to meet constraints associated with energy efficiency, the BCA provides for a moisture barrier over the soil beneath the building. If ventilation is less than that recommended for timber floors, particular attention should be paid to ensuring that the subfloor space remains dry throughout all seasons. The type of vent may also need to be considered with buildings in bushfire areas having limits on the mesh size used in vents. It should be noted that the maximum vent spacing irrespective of net ventilation area is 2000 mm and that any screens that may be necessary in bushfire areas or for vermin proofing may restrict airflow.

Ventilation Efficiency & Site Drainage

The subfloor space must be free from all building debris and vegetation. Obstacles that prevent airflow to and from vents will reduce the efficiency of the subfloor ventilation system. Landscaping should not limit air-flow around the external perimeter of the subfloor space, and structural elements should not limit air-flow. Vents should be installed below the level of floor bearers, and should not be obscured by engaged piers or piers/stumps/columns which support the floor structure, or by any services



present. Where external structures (fences etc.) or landscaping may reduce airflow, consideration should be given to the use of more than the minimum number of vents.

Where verandas or decks are constructed outside the dwelling perimeter, care should be taken to ensure that the amount of ventilation provided around the veranda or deck perimeter is equivalent to or greater than the amount required for the adjacent external

wall. Where ventilation is obstructed by patios etc., additional ventilation should be provided to ensure that the overall level of ventilation is maintained and cross flow is achieved.

If adequate natural ventilation cannot be provided to subfloor spaces, a mechanical ventilation system should be installed which replaces all of the air in this space on a regular basis, and prevents the formation of 'dead-air' pockets.

If there are doubts over the subfloor humidity (areas of high water table, reduced airflow due to minimum clearances between the floor framing and ground, external structures etc.) a polyethylene membrane laid over the soil should be considered (taped at joints and fixed to stumps and walls). Increased levels of ventilation should also be considered in such instances. With dwellings on sloping blocks that have enclosed subfloor spaces, the possibility of seepage should be taken into consideration and appropriate control measures taken prior to the installation of the floor.

The drainage system provided to the dwelling site should ensure that run-off water will drain away from the building perimeter (not towards it) and that run-off water is prevented from entering the subfloor space. The ground beneath a suspended floor should also be graded so that no ponding is possible and provision made so that any water that does enter the subfloor space can escape.

Where springs or aquifers are present (e.g. exposed by earthworks on sloping sites) and cause water to enter the subfloor space, a closed drainage system should be installed under the dwelling to remove this water. The ventilation system will not cope with this level of moisture in the subfloor space.

Pre-installation Flooring Check

Ideally, flooring should not be delivered to site until it can be immediately stored under permanent cover. If this is not achievable, other precautions that are equally effective to prevent moisture uptake and excessive exposure to the sun, will be needed.

The moisture content, size and profile of the flooring should be checked prior to laying. If the moisture content is not correct or the boards do not fit together properly, or are otherwise considered to not meet the specified grade, the installer should contact the supplier to resolve these issues before commencing laying. Similarly, any board found during laying that is considered outside the grade specification should not be laid.



Installation

Installation of flooring should not be done until other construction activities (particularly wet trades) are complete and until after the building is roofed and enclosed, with the temperature and humidity as close as possible to the expected in-service conditions. This prevents initial degrade due to water and sunlight exposure and reduces damage from trades during construction. Where the timber floor is to be sanded and polished (i.e. a feature floor), fitted floor construction needs to be used; the alternative, platform floor construction, is not recommended.

Fitted floors require expansion gaps of 10 mm minimum at all walls and other fixed obstructions, which are parallel to the run of floor boards. Where board ends abut doorways, the fit needs to be neat but with a small gap (approximately 1 mm) to prevent rubbing. Floors up to 6 m (measured at right angles to the run of boards) should not require intermediate expansion joints provided that normal atmospheric conditions exist. For floor widths over 6 m or where extra allowance for expansion is required (e.g. moist locations) cramping pressure needs to be considered along with providing an intermediate expansion joint, or a series of smaller expansion gaps every 800 mm to 1000 mm to provide equivalent spacing. An alternative to the use of these smaller expansion gaps could be to loose clamp the floor, allowing all boards, individually, a small amount of expansion. If cork expansion joints are used, the cork should be 2 mm or so proud of the floor surface when installed. This will be removed during the sanding process. However, cork to the perimeter should be installed level with the timber surface.

Installation – Strip Flooring Over Joists

The size of timber members used to support the flooring boards can be determined from AS 1684 - Residential timber-framed construction. For end-matched flooring profiles, joists with a minimum thickness of 35 mm may be used. Where plain end flooring is butt joined at floor joists, 45 mm or 50 mm thick joists are recommended to reduce splitting problems at the ends of the floor boards.

Secret nailed floors need to be fixed to seasoned joists, as secret nailing cannot be re-punched. If the joists shrink away from the floor, any subsequent movement of boards on the fixings is likely to cause excessive squeaking.

Top nailed floors may be fixed to either seasoned or unseasoned joists. If fixed into unseasoned joists, the joists need to be of a species not exhibiting high rates of shrinkage and be in single or similar species. Species exhibiting high tangential shrinkage rates or prone to collapse or distortion should not be used unless seasoned. The potential effects of floor frame shrinkage require assessment prior to specifying or ordering unseasoned floor framing, and due allowance made in the building design and detailing. Similarly, after installation, the effects of both shrinkage and possible nail popping need consideration.

The acceptable joist spacing for both grades of cypress is 450 centres and the maximum board spans (the distance between the joists that support the board) for both grades of cypress are 410 mm for end matched boards and 510 mm for plain end boards. Where flooring is at an angle to the joists, the board spans are greater than where the flooring is at right angles to the joists.

In most instances boards are to be supported on at least three joists, however, there will be instances where some boards may not be (i.e. floor edges or the occasional shorter board within the floor), but these instances should be kept to a minimum. Flooring should be laid in straight and parallel lines. Butt joined boards must be cut to join over floor joists and joints in adjacent boards should be staggered. End-matched joints in adjacent boards should not occur within the same span between joists. It is essential that boards are in contact with the joists at the time of nailing, particularly when machine nailing is used, as machine nailing cannot be relied on to pull the board down to the joist.





It is generally recommended that not more than 800 mm of flooring is cramped at any one time, however, this may be varied by the installer depending on the flooring used and conditions in which the floor is laid. The pressure used to cramp the boards together will differ from one floor to another, depending on the moisture content of the flooring at installation, the air humidity and the average moisture content conditions for the location. As a general rule, cramping should be sufficient to just bring the edges of adjoining boards together while maintaining a straight line.

- Boards with a top nail profile and a cover width of 65 mm or less should be top nailed with one or two nails at each joist.
- Boards with a top nail profile and a cover width over 65 mm should be top nailed with two nails at each joist.
- Boards with a secret nail profile and a cover width of 85 mm or less may be secretly fixed with one nail, staple or cleat at each joist or may be top nailed as above.

Recommended minimum edge distance for nailing at butt joints or board ends is 42 mm. All nails, including machine nails, should be punched a minimum of 3 mm below the top surface.

During fixing, the joint between floor boards and the top surface of floor joists should be checked to ensure that gaps are not present. If gaps are present, nails should be punched to draw boards tightly onto the joists.

Table 1 outlines the recommended minimum fixing requirements for structural flooring to joists.

Table 1: Minimum Fixing Requirements – Structural Flooring to Joists.

Method of Fixing	Driving Method (for flooring 18 to 24mm in thickness)	Batten Type and Fixing Size		
		Softwood, LVL or I-beam Floor Joists	Hardwood or Cypress Floor Joists	Dense Hardwood Floor Joists (min. published density 750 kg/m ³)
Top (face) fixing without adhesive	Hand driven Machine driven	50 x 2.8 mm bullet head 45 x 2.5 mm t-head	45 x 2.5 mm bullet head 45 x 2.2 mm t-head	38 x 2.5 mm bullet head 38 x 2.2 mm t-head
Top (face) fixing with adhesive #	Hand driven Machine driven	45 x 2.5 mm bullet head 45 x 2.2 mm t-head	45 x 2.5 mm bullet head 45 x 2.2 mm t-head	32 x 2.5 mm bullet head 32 x 2.2 mm t-head
Secret fixing without adhesive	Machine driven	n/a	38 x 15 gauge staple	32 x 15 gauge staple
Secret fixing with adhesive #	Machine driven	45 x 15 gauge staple	32 x 15 gauge staple	32 x 15 gauge staple

A continuous bead (6 mm approx.) of adhesive to be applied to the joist.

Installation – Strip Flooring Over an Existing (Timber or Sheet) Floor on Joists

Assessing the Existing Floor

Cypress strip flooring may be laid over an existing strip floor or over an existing sheet floor (plywood or particleboard). Where the existing floor is structurally sound, the new floor may be fixed into the joists or into the existing floor only.

In instances where there is doubt over the structural adequacy of the existing floor, either—

- remove the existing floor and install strip flooring fixed to the joists as in Installation – Strip Flooring over joists ; or
- replace the defective boards or sheets to make the existing floor structurally sound and install strip flooring over the existing floor; or
- if the existing floor is not made structurally sound, install strip flooring at 90° to the joists and fixed through the existing floor and into the joists.

Top nails in the existing flooring should be re-punched where necessary. The existing floor may need rough sanding to provide an appropriate surface over which the new floor is to be fixed.

Adhesives require a clean, structurally sound floor that is free from surface moisture, loose particles and contaminants. In some instances supporting sheet flooring may have sagged between joists and if not levelled the sagging will show through to the new floor.

Check that the moisture content of the existing floor is appropriate to accept the new floor. The cause of any excess moisture (wetting during construction,

leaks, inadequate subfloor ventilation, etc.) needs to be addressed prior to installation of the new floor. Moisture meters are unpredictable in sheet flooring and this may necessitate oven dry testing of samples of the existing sheet flooring. Prior to laying, the new floor should be of similar moisture content (within a few per cent) to the existing floor.

Squeaking present in an existing strip floor may be reduced by re-punching the nails and/or providing a bead of adhesive to fill any gaps between the underside of flooring and tops of joists (caused by cupping, shrinkage etc). Further reductions may be achieved by fixing a seasoned batten (approximate dimensions 35 x 45 mm or 19 x 60 mm), to the underside of flooring (mid-span between joists and parallel to the joists) fixed with a full length bead of adhesive and screwed at approximately 450 to 600 mm centres to hold the batten in place until the glue is set.

Secret Fixing or Top Nailing Into Existing Flooring Only

When laying over an existing strip floor, the new flooring may be laid either parallel with the existing boards or at 90° to or at any other angle to the existing boards providing the existing floor is level. The first and last few boards that do not allow secret fixing in a secret nailed floor, should be top nailed.

A continuous bead (6 mm approx.) of adhesive at a maximum of 225 mm centres should be applied at 90° to the length of the new floorboards.

Where the spacing (along the board) between the fixings (nail, staple or cleat) exceeds 225 mm, the beads of adhesive should be applied so that there is a bead of adhesive at each fixing (nail, staple or cleat) and a bead of adhesive at the mid point between each fixing. Where adhesive is used to provide much of the fixing, the nails, staples or cleats may be spaced up to 450 mm apart.

When fixing at close centres (up to 225 mm), provide a cushion of adhesive between the two floors to minimise possible squeaks. This is achieved by using a continuous bead of adhesive at 90° to board length, midway between fixing points.

- Staples should be min. 32 x 15 gauge.
- Nails should be min. 32 x 2.2 mm.
- Cleats should be min. 32 mm.



Top Nailing Into Joists Through Existing Flooring

The floor should be top nailed with 65 x 2.5 mm machine nails or 65 x 2.8 mm hand driven nails through the existing floor and into the joists. In all cases, continuous beads (6 mm approx.) of adhesive should be provided at the joists and midway between them to provide a cushioning effect between the two floors. Board ends adjacent to walls should be fixed with adhesive and nailed to the existing flooring.



Installation – Strip Flooring Over Concrete

Assessing the Concrete Slab

Cypress strip floors may be laid on battens or plywood over a concrete slab, or by direct fix. Direct fix to the slab is a specialist field and appropriate professionals in this field should be consulted if considering this method. The following covers installation of strip flooring on plywood over concrete or on battens over concrete. Prior to installation it is necessary to ensure that the concrete is

sufficiently level to accept the system. Where the slab is greater than 3 mm out of level over any 1500 mm length, a concrete topping (levelling compound), grinding or packing should be used. Slabs on ground should be constructed with a continuous under slab vapour barrier (e.g. 0.2 mm thick polyethylene). Timber floors should not be installed until the concrete slab has a moisture content of less than



5% (generally achieved after slabs have cured for approximately 4-6 months). In old slabs, moisture contents should be below this level and if not, care should be exercised. Methods available to test the moisture content of concrete include resistance meters, capacitance meters and hygrometers.

As an added protection against moisture from the slab (from slab edge effects, beam thickening etc.) or minor building leaks, either a 0.2 mm thick polyethylene membrane or a poured chemical polyethylene should be lapped by 200 mm, taped at the joints and brought up the walls (or fixed columns etc.) above the intended top of the flooring. The polyethylene is then covered by the skirting.

When the fixings of plywood or battens pass through the polyethylene they do not significantly reduce the overall effectiveness of the membrane.

The plywood or battens need to be at a moisture content that is within a few per cent of the flooring at the time of installation.

Fixing of Battens to Concrete Slab and Strip Flooring to Battens

Battens are to be seasoned and may be either hardwood or softwood. Battens may be fixed to the slab using 75 x 6.5 mm gun nails at 600 mm maximum spacing. 'Powers Spike Fasteners' with a minimum embedment of 32 mm or equivalent fastener at 900 mm maximum spacing or M6 masonry anchors at 900 mm maximum spacing. If battens are a minimum of 35 mm in thickness, the spacing between fastenings may be increased up to a maximum of 1200 mm.

Batten spacing is the as for joists spacing when supporting flooring as in Installation – Strip Flooring over Joists.

Table 2 outlines the minimum batten size and fixing requirements for structural flooring to battens fixed to a concrete slab.

Method of Fixing	Driving Method (for flooring 18 to 21mm in thickness)	Batten Type and Fixing Size		
		Hardwood or Cypress	Dense Hardwood Batten (min. published density 750 kg/m ³)	Softwood Batten
Top (face) fixing without adhesive	Hand driven Machine driven	35 x 70 mm min. 38 x 2.5 mm bullet head 32 x 2.2 mm T-head	39 x 60 mm min. 32 x 2.5 mm bullet head 32 x 2.2 mm T-head	35 x 70 mm min. 45 x 2.5 mm bullet head 45 x 2.2 mm T-head
Secret fixing without adhesive	Machine driven	45 x 15 gauge staple	32 x 15 gauge staple	n/a
Secret fixing with adhesive #	Machine driven	45 x 15 gauge staple	32 x 15 gauge staple	45 x 15 gauge staple

A continuous bead (6 mm approx.) of adhesive to be applied to the batten.

Fixing Plywood to Concrete Slab and Strip Flooring to Plywood

Plywood should be structural grade, a minimum 12 mm thick and with a type A bond. Sheets may be installed in a 'brick' pattern or at 45° to the intended direction of the strip flooring with a minimum 6 mm gap between sheets and a minimum 10 mm gap to internal and external walls. In most cases the plywood is fixed to the concrete. In those cases where for technical or acoustic reasons the plywood can not be fixed to the concrete, the plywood sheets are laid at 45 degrees to the direction of the floorboards and the end joints of the plywood sheets are staggered. Various methods of fixing the plywood sheets to the concrete are used including adhesives and mechanical fixing. The option detailed below is for hand-driven spikes which provide solid fixing to the slab: —

- Install 0.2 mm polyethylene vapour barrier or a poured chemical membrane over the slab as in Assessing the concrete slab.
- Fix plywood sheets to the slab with hand driven 50 mm long by 6.5 mm spikes ('Powers SPIKE' or equivalent). A minimum of 20 spikes to be used per 2400 mm x 1200 mm sheet, equally spaced and with the outer spikes 75 mm to 100 mm from the sheet edge.
- If a brick pattern is used, it is preferable that sheets be staggered by 900 mm so that fixings do not line up from sheet to sheet.

The first and last few boards that do not allow secret fixing in a secret nailed floor, should be top nailed.

A continuous bead (6 mm approx.) of adhesive at a maximum of 225 mm centres should be applied at 90° to the length of the new floorboards.

Where the spacing (along the board) between the fixings (nail, staple or cleat) exceeds 225 mm, the beads of adhesive should be applied so that there is a bead of adhesive at each fixing (nail, staple or cleat) and a bead of adhesive at the mid point between each fixing. Where adhesive is used to provide much of the fixing, the nails, staples or cleats may be spaced up to 450 mm apart.

When fixing at close centres (up to 225 mm), provide a cushion of adhesive between the two floors to minimise possible squeaks. This is achieved by using a continuous bead of adhesive at 90° to board length, midway between fixing points.

- Staples should be min. 32 x 15 gauge.
- Nails should be min. 32 x 2.2 mm.
- Cleats should be min. 32 mm.





Floor Finish Types & Characteristics

Timber Floor Finishes

Timber floor finishes can be grouped into the four broad categories. These are the oil-based finishes, composite finishes (mixes of oil-based and solvent based polyurethane finishes), solvent based polyurethane finishes and water based finishes. With time, all finishes will change in colour and film will build as the floor wears. Therefore the ability to touch up becomes more difficult with time, however all coatings can be restored by recoating. In the long term a re-sand and refinish may be necessary depending on the wear and age of the floor.

Oil-Based Finishes

Oil-based finishes (alkyd/oleoresins) are the more traditional types of finish manufactured by reacting a natural oil (e.g. linseed and tung) with another chemical. Varnishes and the traditional tung oils fall within this category and are associated with the polished and waxed timber floors of the past. These types of finishes are still available and require greater regular maintenance than the other finishes. However, with the use of acrylic floor polishes, they have become easier to maintain. These finishes will darken with time. They are unlikely to edge bond boards.

Solvent Borne Polyurethane Finishes

Solvent based polyurethanes (one pack and two pack) provide a harder finish, generally with limited flexibility but much greater abrasion resistance. Consequently, this greatly reduces the level of routine maintenance. They currently provide some of the hardest finishes available today with gloss levels from matt through to a very high gloss. These finishes, as with the oil-based finishes, will generally darken with time. The odour during application is very strong with these products but dissipates as the finish dries. Due to their high strength and generally limited flexibility, edge bonding of boards can occur.

Composite Oil-Based/Solvent Borne Finishes

Finishes containing oil-based alkyds with the addition of urethanes provide a finish with reasonably good abrasion resistance. Oil modified urethanes, which are one of the predominant floor finishes used in the USA and many of the 'tung oil' based finishes are of this type. The odour during application is very strong but dissipates as the finish dries. These finishes provide a subdued, satin to semi-gloss appearance and are unlikely to edge bond boards. They darken with time and require more frequent maintenance particularly in high traffic areas. Acrylic floor polishes may be used to protect the finish.

Water Borne Finishes

Some water based polyurethane/acrylic mixes of moderate durability are available but straight one and two pack water based polyurethanes with very good wear resistance are gaining in popularity. These finishes are generally applied over a sealer (either solvent or water based), that not only enhances the colour of the timber but can significantly reduce the risk of edge bonding. Rapid shrinkage in the floor and the associated stretching of the finish at board joints has on occasions caused the appearance of light coloured lines at board joints. Matt through to gloss finishes are available and these finishes generally darken little with time. During application there is low odour associated with water based finishes. A curing additive (catalyst) may or may not be recommended by the manufacturer.

Table 3 outlines the types of finish available and lists various characteristics of each.

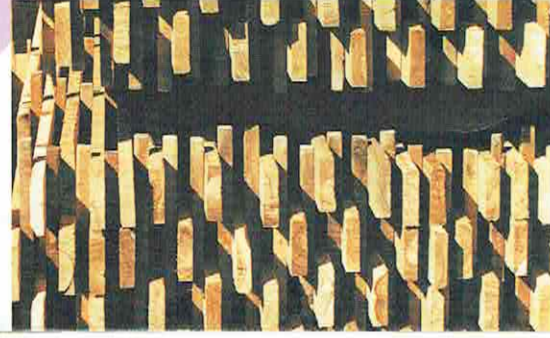
Oil Based Alkyds		Composite		Solvent Based		Water Based	
Tung oil	Linseed oil based varnishes	Oil modified urethanes (OMU)	Urethane oil/alkyd 'tung oil'	2 pack Polyurethane	Single pack Polyurethane (moisture cured)	Polyurethane/Acrylic	Polyurethane (Single and two pack)
Less wear resistant finish requiring more frequent maintenance. The use of acrylic floor polishes may assist in protecting the finish and reducing maintenance. Unlikely to edge bond boards. *		Less wear resistant finish requiring more frequent maintenance. The use of acrylic floor polishes may assist in protecting the finish and reducing maintenance. Unlikely to edge bond boards. *		High wear resistant finish. May edge bond boards. # There is a reduced risk of edge bonding when applied over an appropriate sealer.		Moderate to high wear resistant finishes. Unlikely to edge bond boards when applied over an appropriate sealer. #	
6-24 hour drying by solvent evaporation. Some tolerance to waxes. Moderate to strong odour on application. Avoid inhalation and contact.		6-24 hour drying by solvent evaporation. Some tolerance to waxes. Moderate to strong odour on application. Avoid inhalation and contact.		1-4 hour drying by chemical reaction. Not tolerant to waxes. Strong odour on application. Avoid inhalation and contact.		2-4 hour drying by evaporation and reaction. Not tolerant to waxes. Minimal odour on application. Avoid inhaling cross-linkers and hardeners.	
Matt to gloss levels. Darkens with age. Generally ready for use 2-5 days from completion. *		Matt to gloss levels. Darkens with age. Generally ready for use 2-5 days from completion. *		Matt to very high gloss levels. Darkens with age. Generally ready for use 2-3 days from completion. *		Matt to gloss levels. Less darkening with age. Generally ready for use 2 days from completion. *	

* Varies with weather conditions and product. Full curing may take a longer time.
Edge bonding relates to the finish acting as an adhesive and bonding board edges together. When board shrinkage occurs, this can result in wide irregularly spaced gaps at board edges or splitting of boards.



Cypress

A sustainable resource –
durable, distinctive, decorative



Quality Certified
Australian Cypress

Australian Timber Industry Certification Pty Ltd

NSW CYPRESS – QUALITY AND RELIABILITY

The sawmills that supply NSW Cypress operate comprehensive quality control systems, under the guidance of Australian Timber Industry Certification (ATIC). ATIC's Quality Certified Australian Cypress system was developed at the request of the NSW Cypress Industry Strategic Plan. It has been adopted by all of the Cypress millers who obtain their sawlogs from Forests NSW under long term Wood Supply Agreements.

The ATIC system includes a set of requirements for continuous internal quality control, backed by regular external sawmill inspections conducted by ATIC auditors. The ATIC system certifies that NSW Cypress tongue and groove flooring products comply with the grade rules of the Industry Standard for Australian Cypress Flooring, and that structural framing complies with Australian Standard AS 2858.

So, for quality Cypress products that will perform reliably and look good, make sure that the Cypress timber you order is ATIC certified. To find out more visit www.atic.net.au.

If more details are required on the certification or processing applications please contact the following:

AFS Certification / Forests NSW Certification
Officer Tel: 02 9872 0519 or email: ems@sf.nsw.gov.au

Quality Assurance / Australian Timber Industry
Certification Tel: 03 9611 9088 or www.timbercert.com.au

www.cypressnsw.com

For any additional assistance contact
Timber Development Association (NSW) Ltd
www.timber.net.au



Naturally termite resistant timber
Ecologically managed for a sustainable future