



## CHOOSING TIMBER

Decking Timber needs to rate highly on exterior durability, bridging strength and hardness. Decking can be purchased in several different profiles and sizes.

## DURABILITY:

Class 1 timbers are very durable: expected life heartwood above ground 50 years.

Class 2 timbers are durable: expected life of heartwood above ground 30 years.

Class 3 and 4 timbers have less durability and are not recommended for decking.

Treated pine is very durable. Decking is classified as a grade 3 hazard, and correctly treated pine for this application will be treated to H3 according to the Australian Standard AS1604; expected life above ground 15-25 years.

Life expectancy is dependent on the level of moisture content of less than 20% will last longer than indicated, whilst 'wet' decks with a typical moisture content of greater than 20% will have shortened service lives. The main enemy of timber decks is fungi (decay). Fungi will only attack and consume timber with a moisture content that is consistently high.

## BRIDGING STRENGTH

Timbers vary in strength and stiffness and are classified into eight Strength Groups. The stronger the timber the wider the permitted centre –to centre joist spacing.

## HARDNESS

This is a measure of resistance to indentation and, for decks, resistance to wear. The Janka scale measures hardness. For decks, harder is better.

## PROFILES AND SIZES

Reeded or smooth. Install reeded side down so as to provide ventilation over joist and extended deck life. Sizes 70 x 19, 70 x 22, 70 x 35, 90 x 19, 90 x 22 and 90 x 35mm.

Species	Durability/ Life above ground	Hardness	Spacing's
H3 Treated Pine	Similar to Class 2	3.3, soft	400 mm
Cypress Pine	Class 1/50yr	6.5, mod hard	400 mm
Jarrah	Class 2/30yr	8.5, mod hard	500 mm
Yellow Stringybark	Class 2/30yr	8.5, mod hard	500 mm
Merbau	Class 2/30yr	8.6, mod hard	500 mm
Tallow Wood	Class 1/50yr	8.6, mod hard	500 mm
Belau	Class 2/30yr	9.0, mod hard	500 mm
Black Butt	Class 2/30yr	9.1, mod hard	500 mm
Silver Top Ash	Class 2/30yr	9.5, mod hard	500 mm
Red Gum	Class 2/30yr	10, very hard	500 mm
Spotted Gum	Class 2/30yr	11, very hard	500 mm
Turpentine	Class 1/50yr	12, very hard	500 mm
Red Ironbark	Class 1/50yr	13, very hard	500 mm
Grey Ironbark	Class 1/50yr	14, very hard	500 mm



**ADDITIONAL INFO:**

Merbau comes from Asia/Pacific Islands; Balau comes from Malaysia/Indonesia.  
 All other timber listed are from Australia  
 Cypress Pine is a Class 2 in-ground but Class 1 above ground (see AS5604).  
 Cypress Pine decking can contain high percentages of sapwood: durability will suffer if it does.  
 Joist spacing's are centre-to-centre and for 19mm thick material.

**CONSTRUCTION**

Decking boards should be laid in straight lines and over at least two spans. A stringline is useful to ensure runs of boards are in straight lines and are parallel with previously laid runs of boards. A gap of 4 to 6 mm between boards is recommended to allow for water drainage and ventilation.

Decking boards should be fixed with two nails, sizes for 10mm thick decking boards are indicated below, at each joist using a nail length of approximately 2.5 times the board thickness. Deformed shank galvanised nails would be used where decking is to be attached to softwood joists. Pre-drilling of all nail holes for high density hardwood decking may be required. Pre-drilling of board ends may also be required for lower density hardwood and softwood decking. A trial nailing is recommended to determine the need for pre-drilling as a means of minimising splitting.

Decking Species	Joist Species	Nailing			
		Machine Driven		Hand Driven	
Hardwood Cypress	Hardwood, Cypress	50 x 2.5 Flathead		50 x 2.8 Bullet Head	
	Seasoned Treated Pine, Oregon	50 x 2.5 DS Flat Head	65 x 2.5 Flat Head	50 x 2.8 DS Bullet Head	65 x 2.8 Bullet Head
Seasoned Treated Pine	Hardwood Cypress	50 x 2.5 Flat Head		50 x 2.8 Flat Head	
	Seasoned Treated Pine, Oregon	50 x 2.5 DS Flat Head	65 x 2.5 Flat Head	50 x 2.8 DS Flat Head	65 x 2.8 Flat Head

Notes:

DS—Deformed shank

1. Nails to be hot dipped galvanised or stainless steel mechanical galvanised plated not recommended
2. In areas subjected to extreme wetting and drying conditions (e.g. around swimming pools), consideration should be given to increasing the nail diameter and/or length
3. Dome head nails may be used in lieu of flat head nails.

**TIMBER CARE**

Decks are usually made from Class 1 or Class 2 naturally durable timbers, or from H3 treated pine. Although durable, all three categories of timber benefit from coating after installation.

All timbers need a coating of some type to impart a high level of water repellence. Left bare, timber (particularly softwoods) will absorb moisture readily and expand, then shrink as it dries out. Frequent repetitions of this cycle lead to surface cracking and checking.

Coatings help prevent cracking.

Continuously high (> 20%) moisture content is likely to lead to fungal attack (decay). Coatings help keep timber dry.

Ultra violet light reacts with lignin in the timber's cells and turns timber grey. This greying is not structurally damaging. Coatings help prevent greying.

Badly greyed decks can be cleaned using diluted Oxalic Acid, or one of the manufactured timber cleaners.

Hours of Business

Monday to Friday 9.00am—5.00pm

Saturday 9.00am—5.00pm

Sunday Closed



## DECK FINISHES

### **TRANSPARENT OILS**

- \* A blend of oils and oil resins derived from Tung oil and Linseed oil, dispersed in a hydrocarbon solvent base. The solvent base helps the timber to absorb the oils. Oil should be absorbed by the timber fibres as much as possible and not simply coat the surface.
  - \* Transparent oils do not last as long as conventionally pigmented versions, being more easily degraded by ultra violet light.
  - \* Usually contain special UV inhibitors which impart some colour to the coating but do not change the essential colour of the timber (unlike stains which do).
  - \* Help retard greying but don't entirely prevent it.
  - \* Water repellent; help keep timber dry.
  - \* Recoating is easy – no need to sand, just ensure deck is clean and dry and re-apply one coat. Recoat every twelve months.
  - \* Most include a mouldicide to prevent moulds blackening the surface of the deck boards.
- Turps clean up.

Examples: **Haymes** Decking Oil

**Pigmented Oils** can either enhance or change the colour of the timber and can help old weathered decks look new. It can wear through on high-traffic steps, but is easily recoated.

### **OPAQUE ACRYLICS**

- \* Unlike the oils, acrylics form a film on top of the timber surface.
- \* Totally opaque; good for changing the colour of timber to “house” colours including blues, browns, greys, greens and reds.
- \* Two coats will form a tough, flexible film that will not crack readily.
- \* Durable, as the high pigment content acts as an effective absorber and reflector of UV light.
- \* Water repellent; help keep timber dry.
- \* No primer required; apply two coats straight onto timber.
- \* Will tend to wear through in high-traffic steps, but easily recoated.
- \* **Semi Transparent** have less pigment content, and are good for enhancing or rejuvenating natural timber.

- Water clean up.

Examples: **Haymes** Dexpress Deck & Timber Stain

### **CLEAR FILM-BUILD COATINGS**

- \* Clear, film-build coatings are like polyurethanes on flooring in that a film is built up on top of the timber surface.
  - \* Good for preserving the new look of natural timber.
  - \* Low sheen gloss level.
  - \* Water proof; help keep timber dry.
  - \* Easily washed and hosed off; good for entertaining areas.
  - \* Prevent greying of the timber.
  - \* Durable; UV inhibitors prolong film life. Recoat every three years.
  - \* More durable than clear oils, but more work to prepare and recoat.
  - \* **Translucent film** is identical to the clear but with a tint added.
- Water and solvent versions available.

Examples: **SIKKENS**: apply three coats of Cetol HLS Natural (turps clean up) OR apply three coats of Cetol Deck (also turps clean up).