

Timber Zoo

Advice on Dressed Timber

Both recycled and KD timber products on the shelves at Timberzoo are suitable for fine-furniture practices such as laminating and jointing - for instance, mitres and dovetails. These timbers are reliably 10-12% MC and stable in typical indoor environments in terms of shrinkage or excessive movement.

However, our range of re-dressed F27 and Wharfdeck sizes, which have also been kiln-dried, are not suitable for these practices because they are dried to 15-16% MC which is consistent - and at equilibrium - with the range of humidity experienced in outdoor areas such as decks and courtyards.

Re-dressed F27 and Wharfdeck products retain an arrised edge that will provide an elegant expressed-join for outdoor benchtops and tabletops. The aris also acts as a deterrent, preventing ready edge-lamination of F27 boards.

It is broadly recognised in the industry that edge-laminated benchtops are not suitable for outdoor areas - exposed to weather or even in dry undercover - due to wide variations in atmospheric humidity throughout the year. Suitable designs for benchtops outdoors should recognise timber behaviour in a range of humidity and weathering environments. This applies to all species in the range of durability classes.

Durable Species

Both F27 and furniture boards in durable species can be used outdoors providing necessary design criteria are observed. DC1 (Durability Class 1) and DC2 hardwoods can be used outdoors exposed to sun and rain. Whereas DC3 and DC4 timbers can be used in any covered areas outdoors.

Properties of Australian hardwoods can be referenced on the Resources page of our website:
www.timberzoo.com.au/resources

Natural Durability Classes

Natural durability is defined as "the inherent resistance of a specific timber to decay and to insect attack". Natural Durability Classes provide the basis for rating the timber's performance and longevity in contact with the ground when exposed to average environmental conditions. The classification system is based on the average life expectancy (in years) for any timber species, as shown here.

TABLE 1

NATURAL DURABILITY—PROBABLE LIFE EXPECTANCY*

Class	Probable in-ground life expectancy (years)	Probable above-ground life expectancy (years)
1	Greater than 25	Greater than 40
2	15 to 25	15 to 40
3	5 to 15	7 to 15
4	0 to 5	0 to 7

* The ratings in this Table are based on expert opinions and the performance of the following test specimens:

(a) In-ground: 50 × 50 mm test specimens at four sites around Australia.

(b) Above-ground: 35 × 35 mm test specimens at eleven sites around Australia.

NOTES:

1 As further reliable evidence becomes available, these ratings may require amending.

2 The heartwood of an individual piece of timber may vary from the species' nominated classification.

3 Above-ground conditions equate to outside above-ground subject to periodic moderate wetting when ventilation and drainage are adequate.

Standards Australia 2003. Revised 2005. AS 5604 - Timber-Natural durability ratings.

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The following species table represents the most species sold at Timberzoo:

DURABILITY CLASS			
1 - Highly Durable	**2 - Durable**	**3 - Moderately Durable**	**4 - Low Durability**
Ironbark	Spotted Gum	Messmate	Mountain Ash
Tallowwood	Blackbutt	Qld Silver Ash	Douglas Fir
White Mahogany	Silver Top Ash	Blackwood	Northern Silky Oak
Forest Red Gum Blackbean	Jarrah	Tasmaniak Oak	White Oak
Grey Box Turpentine		Brushbox	

Suitability

Many DAR timber projects have a higher standard of finish than rudimentary sawn timber projects such as garden beds or retaining walls. Therefore, consider all the aspects of suitability in your choice of timber:

- Dimension:

In an exposed aspect, use well-balanced dimensions on all handrails, benches and tables. Keep to 4:1 ratio of width vs thickness. 140 x 40mm might survive years without surface deviation. 290 x 32mm in the same species might cup 4-5mm at its centre in only a few months.

- Grade:

Some natural features are a water-trap on an upper face in an exposed aspect.

Consultation

Discuss your project with Timberzoo staff. Inform us of your intended use so we can recommend best timbers for the project and address all fit-for-purpose issues on timber selection.



Fine furniture practices such as laminating, used in an internal application.



Expressed joins used in external applications, reducing the impact of timber movement.

Recycled Timber - defect or desired features?

Recycled Messmate boards at Timberzoo are re-milled from recycled construction timbers. They were originally installed as green timber - structural joists, beams, rafters - and were seasoned over the life of the building, then removed during demolition.

Appearance of Recycled Timber: What to expect

The construction source of recycled hardwood will determine the 'attrition' features they exhibit. Purlins will have nail, screw or bolt holes; floor joists will show metal marks on one edge. Truss chords will exhibit bolt holes, notches and mortise features; ridge boards and ceiling hangers will show clusters of nail holes across the face of the board.
Timber may show discoloration close to original surface intensified by oxidation and surface checking (fine shallow furrows or fracture on the surface of boards). Black halos often surround bolt or nail holes and chisel marks remain on an edge where metal fragments have been dug out.

Messmate or mixed Stringybarks?

Recycled construction timbers don't arrive at Timberzoo as a single species batch. What we call recycled "messmate" in the industry has other stringybarks in the packs. Silvertop Ash, Mountain Ash, Yellow Stringybark, Blue-leaf Stringybark, Blackbutt, and Tasmanian Blue Gum often occur in the mix. All a similar colour and all difficult to separate. Unfortunately for complete accuracy, the labelling of Stringybarks as "Messmate" became an industry convention in the recycling game.

Other Native Hardwood Species

The same general outline of appearance and attrition features in Victorian stringybarks is true for recycled Douglas Fir and for east coast eucalypt species such as Ironbark, Blackbutt, Spotted Gum, Tallowwood and Red Mahogany. The following is a list of expected attrition and natural features that are to be found in our range of timbers dressed and presented for sale - as well as rough-sawn structural and landscape grade stocks.

Surface checking	edge-notches	bolt holes	knot and adjacent feature
Gumlines	gum voids	hobnail	insect spirals and pinhole scatter
Black Speck	coffee stain	cross-grain	chatoyance and fiddleback
Nail Holes	black or carbon staining – usually around penetrations		
Teredo Worm Holes	internal drying check (limited)		surface oxidation, staining
Injury Overgrowth	clean pocketing	metal dig-outs	rebates and mortise holes
Raised grain on dressed cross-grain or fiddleback boards			pencil-streak

Our grading process embraces most legacy marks as desirable in a modern context and is not intended to remove or dock these features described above unless they are excessive or affect board integrity. These attrition features will cause no detriment to the finished floor or wall. Displays of finished flooring, lining boards and DAR loose boards and production packs are always available for inspection, and purchasers should inform themselves first-hand prior to purchase of the essential nature of the product described here, as no claims will be heard in respect of grade, flaws as listed, colour, tonal variation or tabled visible defect after purchase. No returns, refunds or exchanges are possible if claim is based upon expected or predictable recycled characteristics or change of mind.