

Blackwood: *Acacia melanoxylon*

Other common names: Black Wattle

The Timber This is the perfect timber for fine furniture, joinery or a feature floor.

Boasting a variety of colours ranging from light golden-brown to deep brown (sometimes with a reddish tint) and occasionally showing black streaks, the timber radiates a subtle beauty that makes it irresistible to Tasmanian designers. Additional character is added by the grain of the wood, which can be straight or wavy with a natural lustre.

Blackwood is easily worked, very stable and long lasting, and Blackwood artefacts are always statements of style and quality.

In addition to the supply of solid sections, the availability of high quality veneers has increased the timber's versatility for use in joinery, cabinet-making and feature panelling. Small cross-sections of solid timber are also laminated, particularly for bench tops.

The Resource Blackwood is a member of the wattle family and a hardwood. It occurs throughout Tasmania's native forests from sea level to 1000m in elevation but it thrives in swamp and riverine areas. It is also a common understorey component of wet eucalypt forest.

The swamps of north-west Tasmania, where there are almost pure stands, have been a primary source of high quality Blackwood for more than a century. This resource has been the cornerstone of Tasmania's fine furniture industry over that time.

About 8000ha of swamp forest is dedicated to Blackwood silviculture on a sustained yield basis. Rotations are generally of the order of 70 years for native forest.

Blackwood is an easy tree to grow. Its durable seed remains viable in the soil for decades. After harvest, regeneration treatment involves burning to encourage germination and fencing to protect seedlings from browsing wildlife. Young seedlings are very palatable to pademelons, wallabies and other native animals.

In the past, demand has sometimes exceeded supply, but thanks to the work of progressive manufacturers who have highlighted the character of Blackwood in their work, even knotty and naturally featured sections of logs are now used. As a result of sensible, sustainable management, Australia's talented designers and manufacturers will always have access to a small but reliable supply.





Blackwood properties

Colour	Heartwood is light brown to dark brown with occasional red tinting. Sapwood is straw coloured.
Grain	Mainly straight, occasionally wavy (fiddleback figure).
Texture	Even and medium.
Durability	In-ground contact: Class 3. Outside above ground: Class 3. Refer to AS 5604-2005 Timber - Natural durability ratings. Durable for internal use but should only be used externally if protected from the weather.
Lyctid susceptibility	Sapwood is susceptible.
Sizes	Dressed seasoned timber; 19 to 285mm wide by 19 to 45mm thick is available in lengths up to 5400mm. Most production lengths are less than 3000mm.
Density	Approximately 640kg/m ³ at 12% moisture content. Unseasoned density approximately 870kg/m ³ .
Shrinkage (green to 12% MC)	Approximately 1.5% radial, 4% tangential. Negligible collapse shrinkage.
Movement	Between 25% and 5% MC, radial movement is approx. 0.16% per 1% MC change; tangential movement is about 0.27% per 1% MC change.
Strength groups	Seasoned SD4, unseasoned S4.
Joint group	Seasoned JD3, unseasoned J3.
Structural grades	Most commonly available structural grade is number 3; F14 seasoned, F8 unseasoned.
Toughness (Izod)	15J unseasoned, 13J seasoned.
Hardness (Janka)	4.6kN unseasoned, 5.9kN seasoned.

Fire hazard properties: flooring (AS ISO 9239.1)

Critical radiant heat flux	> 2.2 and < 4.5kW/m ²
Smoke development rate	< 750%.min

Fire hazard properties: wall and ceiling lining (AS/NZ 3837)

Material group no.	3
Average extinction area	< 250m ² /kg

Workability

General	Blackwood possesses a deep, lustrous grain and is highly resilient, yet easy to work. Particular care should be taken to avoid inhalation of Blackwood dust.
Blunting	Moderately high.
Sawing	Cuts fairly easily, cleanly and accurately. Moderate feeding forces required.
Planing	Surfaces very smooth and lustrous. Care must be taken to work "with" the grain.
Moulding	Surfaces and edges are true, even end grain.
Boring	Holes are usually clean and to size.
Rebating + mortising	Cuts very cleanly, giving excellent results.
Turning	Turns very well with sharp arrises & well-finished curves.
Nailing	Nails well although some seasoned material can tend to split. Nails hold reasonably well.
Gluing	Glues satisfactorily with most common adhesives.
Bending	A very good bending timber: 25mm material bends well to a radius of 50mm.
Finishing	Readily worked to a smooth, resilient finish and takes a high polish.

notes:

†from green to 12% moisture content (MC)

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Due to the printing process, the colours shown are indicative only.