Nothofagus cunninghamii

Other common names: Beech, Myrtle Beech, Tasmanian Myrtle and Australian Cherry

The Timber

Myrtle is a striking wood with rich red, brown and almost orange tones. It makes an excellent veneer and finishing timber. It is believed the richness of colour comes from the quality of the soil it grows in. The deepest red myrtle comes from highly fertile soils on basalt. The colour is vibrant, combining subtle variations in tone with the texture and sheen of wavy and fiddleback features to produce a surface alive with character and individuality. While a pale and pink myrtle is available, commercial production concentrates on the deeper red variety. It is a close grained species with well defined annual rings but with little latewood.

Myrtle's fine aesthetic qualities are matched by its working properties. It is particularly easy to work and makes an excellent veneer.

Taking on a deep lustre when polished, Myrtle is prized by architects and furniture makers alike. It is used as a solid or veneer in high quality furniture, joinery, cabinet-making and feature panelling in homes and offices, or as a striking finishing timber for cornices, architraves and skirting. It has further applications for craft workers. Myrtle turns well and traditionally has been used for spindle turning and bowls. Craft workers particularly favour burls and knotty wood.

The Resource

Myrtle is found in any of the wet forests across Tasmania, more frequently in the north-west and west of the State. Provided that conditions are moist and sheltered, the tree flourishes from sea level to the tree line.

Myrtle regenerates continuously in the absence of fire, growing in openings in the stand if conditions are moist and sheltered. In exposed areas myrtle can be susceptible to insect and fungal attack which damages the timber and kills the tree, making it unsuitable for growth in plantations.

Increases in Tasmania's forest reserves have restricted the supply of Myrtle which in the future will come from selective harvesting of forests grown on longer rotations.



Tasmanian Myrtle properties:			
Colour	Myrtle heartwood is pale pink to deep red, occasionally with pale yellow-grey streaks. Sapwood is white to light pink.		
Grain	Grain is mainly straight and occasionally wavy with clearly visible growth rings.		
Texture	Fine, uniform and smooth.		
Durability	In-ground contact: Class 4. Outside above ground: Class 3. Termite resistance of heartwood: Not resistant. Refer to AS 5604–2005 Timber–Natural durability ratings.		
Lyctid susceptibility	Sapwood is susceptible.		
Sizes	Dressed seasoned timber 40 to 300 mm wide by 12 to 40 mm thick. Undressed seasoned timber 25 to 300 mm wide by 25 to 50 mm thick.		
Density	Approximately 700 kg/m³ at 12% moisture content. Unseasoned density approximately 1100 kg/m³.		
Shrinkage (green to 12% MC)	Approximately 3% radial, 6.5% tangential before reconditioning; 2.3% radial and 4.7% tangential after reconditioning.		
Movement	Between 25% and 5% MC, radial movement is approximately 0.18% per 1% MC change; tangential movement about 0.32% per 1% MC change.		
Strength groups	Seasoned SD5, unseasoned S4.		
Joint group	Seasoned JD3, unseasoned J3.		
Structural grades	Most commonly available structural grade is number 3; F11 seasoned, F8 unseasoned.		
Toughness (Izod)	15-24 Nm unseasoned, up to 15 Nm seasoned.		
Hardness (Janka)	4.4 kN unseasoned, 5.9 kN seasoned.		

Fire hazard properties: flooring (AS ISO 9239.1)				
Critical radiant heat flux	> 4.5 kW/m ²			
Smoke development rate	< 750%.min			
Fire hazard properties: wall and ceiling lining (AS/NZ 3837)				
Material group no.	• 3			
Average extinction area	< 250 m²/kg			
Workability				
General	Myrtle cuts relatively cleanly and may be easily dressed to a smooth, lustrous surface.			
Blunting	Moderate.			
Sawing	Cuts very cleanly and accurately with standard blades.			
Planing	Moderate feeding forces required. Surfaces can be planed very smooth and lustrous.			
Moulding	Surfaces are true and clean; even end grain.			
Boring	Easy to drill. Holes are clean and to size.			
Rebating + mortising	Very good results may be obtained with relative ease.			
Turning	Turns very well.			
Nailing	Nails very well, material does not tend to split. Pre-drilling is often necessary in seasoned material. Nails hold well.			
Gluing	Glues satisfactorily with most common adhesives.			
Bending	An excellent bending timber. 25 mm material bends well to a radius of 75 mm.			
Finishing	Readily worked to a smooth, lustrous surface. Most finishes adhere very well. Staining can be difficult.			

For further information contact:

Locked Bag 1324, Launceston,Tasmania, 7250 Phone: 1300 041 766 – (international callers: +613 6324 4081) Email: contact@tasmaniantimber.com.au



Tasmanian timber is sustainably grown, harvested and processed to meet the highest standards in quality and environmental practice.

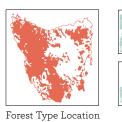
tasmaniantimber.com.au



Nothofagus cunninghamii

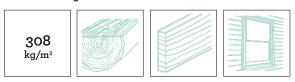
Forest Type

Distribution of forest type that contain these species:





Carbon Storage²

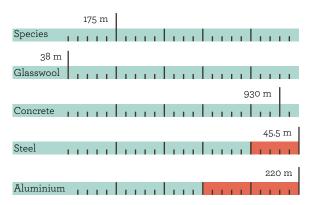


Availability

Rare	Limited	Readily	Freely

Thermal Resistance³

Thickness required to achieve a value of R1





Certification



82%

chain of custody	1
---------------------	---

82% of total Myrtle

forest types are reserved

TY TASMA	
The Contraction of the second	

Appearance

Myrtle is a tall evergreen tree, reaching to 30–40 m in height and can achieve a diameter of 1.5–2.5 m. Their fine textured leaves and dark green crown can give Myrtle trees a ragged appearance.

<u>Flowers:</u> Myrtle flowers in spring, with very small light flowers growing on the new shoots at the ends of branches. Female flowers grow in groups of three, just above the male flowers, which are either solitary or found occasionally in threes. Seeds are shed in late summer to early autumn. A parasitic fungus, *Cyttaria Gunii*, often grows on myrtle trees, causing round, dimpled orange fruit like protrusions.

<u>Leaves</u>: new spring growth is red to bronze coloured, developing into a glossy green leaf. As they age, the leaves become thick, stiff and develop a dark green shade. Myrtle's leaves are triangular in shape. They grow to 1-1.5 cm and have a coarse blunt-tooth edge.

<u>Bark:</u> Myrtle bark is brown, scaly and slightly fibrous, and does not shed from the trunk.

Forest

Myrtle is a predominant species in Tasmania's cool temperate rainforests. In wet eucalypt forests, myrtle grows as an understorey tree and as a small shrub at higher altitudes when the site is exposed to wind. Achieving its best growth in highly organic soils, Myrtle in moist and sheltered conditions will flourish from sea level to 700 m, though it can achieve significant growth rates through to 1570 m.

<u>Growing constraints</u>: depending on available rainfall and humidity, Myrtle can be fairly fast growing. In optimum growing conditions, it is capable of regenerating continuously and forests can contain Myrtle trees ranging from 1 to 500 years old.

<u>Distribution</u>: Myrtle is found in the north-west and west of the state, though small communities thrive on the Tasman Peninsula and South Bruny Island. 82% of total forest types containing Myrtle are in reserves.

Environmental

The aim of environmentally sustainable and responsible building practice is to consume minimal resources during construction, operation and eventual demolition.

<u>Sustainable management</u>¹: the National Forest Policy Statement identifies three principles for sustainable forest management: preserve biological diversity, maintain ecological processes within forests, and community benefit. Species sourced and processed in Tasmania from certified native forest and plantations are considered to be sustainably managed.

<u>Certification:</u> certified forests are managed in line with internationally recognised performance-based standards and are subject to third party audit. Most forests in Tasmania are certified to the Australian Forest Certification Scheme (AFCS). This requires compliance with AS 4708 (for forestry growers) and AS 4707 for Chain of Custody (forest to consumers). AFCS is internationally recognised by the Program of the Endorsement of Forest Certification schemes (PEFC) and certifiers are independently accredited by JAS-ANZ.

<u>Chain of Custody</u>: ensures that timber supplied is from a certified forest source. It requires controlled labelling and an auditable trail from the forest along the supply chain involving forest managers, processors, manufacturers, and stockists.

<u>Carbon storage</u>²: the growth of trees absorbs carbon, other emissions and particles from the atmosphere; converting them into wood and other biomass. Some carbon is released by harvest and processing, but the carbon stored within the recovered wood is contained for the life of the material.

<u>R Values</u>³: a material's resistance to the flow of heat is calculated as its R Value. The R Value of the building envelope is the sum of individual building components. The insulation (R Value) properties of building materials are important considerations in the design of energy efficient structures.

<u>Availability:</u> Myrtle's availability is rare, and the resource is limited by quotas or predominant reservation.

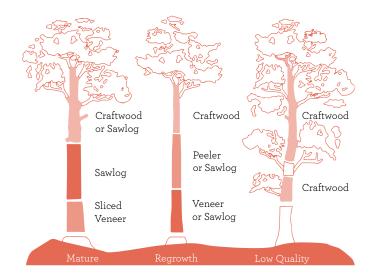


ORIGINAL

Environmental Summary		
Resource Available from sustainably managed sources ¹	1	
Reserves A percentage of this species is reserved	<i>√</i>	
Certification This species is available with forest certification	1	
Chain of Custody Product with Chain of Custody is available	1	
Appearance Product for appearance use is available	1	
Structural Product for structural use is available	×	

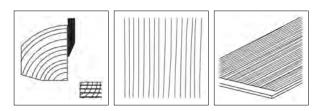
Tree Product

Mature Eucalypt Profile Shown

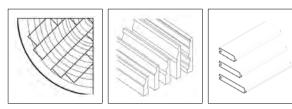


Products Appearance

Quarter Sawn Veneer



Sawn Solid



Craft Wood





tasmaniantimber.com.au

ORIGINAL

Characteristics



Colour:

Heartwood is pink to reddish brown with almost orange tones, while sapwood is almost white and narrow.



Grain:

Close-grained, but sometimes wavy. Texture is fine and even. growth rings are visible, but not prominent.

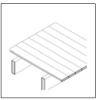


Features:

1. Burl: an outgrowth on the side of the tree caused by wounds or abnormal growth. These create a localised distortion of the grain that displays as a cluster or grouping of clusters.

2. Wavy: short and regular markings in the grain, in the form of waves or undulations.

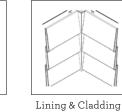
Applications

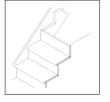


Flooring











Windows Doors Stairs

Joinery



Credits:

Maps: Tasmanian Government Department of Primary Industries and Water; Tree Product Illustration: Forestry Tasmania; Forest Type Illustration: Fred Duncan, Forestry Tasmania; Forest Image: Tasmanian Timber Promotion Board; Species Illustration: Vicky Dewsbury; Species Application Image: Australian School of Fine Furniture 1. National Forest Policy Statement, daffa.gov.au

2. 2004: Ximenes, F.A. and Davies, I. "Timber CAM – A carbon accounting model for wood and wood products in Australia". dpi.nsw.gov.au/forests/info/timbercam 3. R Value Comparision Calculations -AS2878:2000, and ASHRAE, 2005 Physical Properties of Materials.

The Australian Government Department of Agriculture, Fisheries and Forestry does not endorse the information, statistics, view, opinions or recommendations within this publication. The Department accepts no responsibility for any consequences arising from the use of this information.



tasmaniantimber.com.au

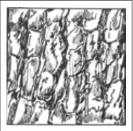
ORIGINAL

ΤΑΣΜΑΝΙΑΝ TIMBER[™]

Tree Grows 30 – 40 m Can have a diameter of 1.5 – 2.5 m









Non-shedding Brown, scaly Slighty fibrous

Bark

Leaves Triangular shape Coarse, blunt tooth edge Red – bronze juvenile growth Dark green, rigid adult growth



Flowers Small and light Female groupings of 3 buds Solitary male flowers below



Funding assistance was provided through the Tasmanian Community Forest Agreement Industry Development Program, a joint initiative of the Australian and Tasmanian governments and administered by the Australian government Department of Agriculture, Fisheries and Forestry.

ORIGINAL

T A S M A N I A N T I M B E R ™