

Radiata Pine: *Pinus radiata*

Other common names: Monterey Pine

The Timber Radiata Pine is a versatile timber; it is widely used for the full range of structural and decorative applications including framing, lining, glue laminated beams, veneer and plywood. When appropriately treated, it can be used for many exposed structural and non-structural applications.

The timber is low in density and fairly soft, often with very wide annual growth rings. The heartwood is light brown to yellow; the sapwood white to pale yellow, but often indistinct. The grain is usually straight, but knots are common.

Radiata Pine is very easy to work with standard tools, although its knotty character and resin canals can cause premature blunting of cutters. Its open grain structure readily accepts preservative treatment, which can provide protection to hazard level 6 (the highest level).

The Resource Radiata Pine is a plantation softwood timber grown widely throughout Australia. In Tasmania the first commercial Radiata Pine plantations were established in the 1930s. Since then the Tasmanian Radiata Pine estate has expanded to more than 55,000ha, largely concentrated in the north-east of the State. The tree has also been widely planted in windbreaks and as stock shelter, particularly on slopes of otherwise poor productivity.

Radiata Pine plays a significant role in meeting the ever-increasing demand for sawn timber. As a well-managed plantation tree, it can provide a renewable resource providing dependable supply for generations to come.





Radiata Pine properties

Colour	Cream to light straw.
Grain	Grain is usually straight. Knots are common and growth rings are prominent.
Texture	Fine but uneven.
Durability	In-ground contact: Class 4. Outside above ground: Class 4. Termite resistance of heartwood: Not resistant. Refer to AS 5604-2005 Timber - Natural durability ratings. In-ground performance of untreated Radiata Pine is poor. It can be preservative treated to any durability class.
Lyctid susceptibility	Not susceptible.
Sizes	Dressed seasoned timber 40 to 190mm wide by 12 to 90mm thick. Undressed seasoned timber 50 to 200mm wide by 19 to 100mm thick. Lengths up to 5400mm long are available, with the bulk of production between 2400 and 4800mm long.
Density	Approximately 550kg/m ³ at 12% moisture content. Unseasoned density approximately 800kg/m ³ .
Shrinkage (green to 12% MC)	Approximately 2.9% radial, 4.8% tangential.
Movement	Between 25% and 5% MC, radial movement is approximately 0.19% per 1% MC change; tangential movement about 0.27% per 1% MC change.
Strength groups	Seasoned SD6, unseasoned S6.
Joint group	Seasoned JD4, unseasoned J4.
Structural grades	F4 to F14; MGPI0, 12 and 15.
Toughness (Izod)	12J unseasoned, 6.9J seasoned.
Hardness (Janka)	2.1kN unseasoned, 3.3kN seasoned.

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

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

Fire hazard properties: other (AS 1530.3)

Spread of flame index	9
Smoke development index	3

Workability

General	Usually easy to work away from knots.
Blunting	Moderate. Can be severe in knotty material.
Sawing	Easy, normally fairly clean.
Planing	Smooth surfaces easy to attain. Knots can be hard on cutters.
Moulding	Satisfactory.
Boring	Easy to drill. Holes tend to be oversize.
Rebating + mortising	Generally produces good results.
Turning	Satisfactory. Density variations across growth rings can cause problems.
Nailing	Very easy to nail. Twisted shank nails may be necessary to achieve satisfactory hold.
Gluing	Glues well with most common adhesives.
Bending	A good bending timber. 25mm material bends well to a radius of 100mm.
Finishing	Readily worked to a smooth, flat surface. Stains readily, and finishes adhere very well.

for further information contact:

Locked Bag 1324, Launceston, Tasmania, 7250
 freecall in Tasmania: 1800 244 870
 other states: 03 (int+613) 6324 4470
 web: www.tastimber.tas.gov.au
 email: info@tastimber.tas.gov.au