

INFORMATION SHEET

SILVER BEECH



Common names: Tawhai, Silver Beech

Botanical name: *Nothofagus menziesii*

WHY USE SILVER BEECH?

Silver beech is sourced from sustainably managed forests, and is becoming the favoured wood to replace rimu as the prime native species. It is excellent as a turnery species, particularly good in brushes and dowels, and excellent for cabinetry. It also is renowned for its steam bending properties, and was once widely used for motor-body building. Today, it is useful for brushware and dowels, small turned goods and implements, handles and railings, and furniture.

APPEARANCE AND DESCRIPTION:

The colour of silver beech varies with location, age and between the sap and heartwood, but always has a pinkish to red overtone. The dry sapwood is a light pinkish grey, and the heartwood pinkish brown.

PERFORMANCE CHARACTERISTICS

Durability:

Silver beech is non-durable, both for heartwood and sapwood. It is unsuitable for outdoor applications but can be used for interior and indoor furniture applications without the need for further treatment.

Mechanical Properties:

Density at 12% moisture content (MC)	592kg/m ³ (ranges from 585-705 kg/m ³)
Modulus of elasticity	12.0 GPa
Modulus of rupture	100 MPa
Shear strength parallel to grain	12.5 MPa
Compression strength parallel to grain	47 MPa
Side Hardness	4.5 kN
Tangential shrinkage – green to 12% MC	5.7 %
Radial Shrinkage – green to 12% MC	2.6%

Machining:

The wood of silver beech is very easily turned and shaped, and having no silica content, it does not blunt cutting knives. It is also an excellent carving timber.

Gluing and coating considerations:

No particular considerations.

INFORMATION SHEET – SILVER BEECH (CONTD)

Sustainability:

- All supplies of available silver beech in New Zealand are required to be managed to exacting standards under detailed long term Sustainable Management Plans. Silver beech is harvested under such sustainable forest management permits from the Ministry of Agriculture and Forestry. This guarantees a sustainable supply for future generations.
- The use of sustainably managed silver beech is a positive alternative to using less sustainably managed timbers such as imported hardwoods, and illegally logged rainforest.
- The majority of Southland silver beech is from sustainably managed second growth (previously harvested and regenerated) forest, of an average age of 75-80 years, with FSC certified supplies available.
- Generally-speaking, plantation-grown and second-growth regenerated native forest timbers can produce breast height diameters of 60cm, and small quantities of heartwood within 75 years.

**To locate suppliers of silver beech, visit the vendor's database on the NZ Wood website:
www.nzwood.co.nz**