

**Common name:** Tawhairaunui, Red beech

**Botanical name:** *Nothofagus fusca*

### WHY USE RED BEECH?

Red beech is sourced from sustainably managed forests. It is extremely stable, suitable for interior joinery and flooring, and the fine even texture makes it most suitable for turning into dowels and brushware. Being very hard-wearing, it is also suitable as stair treads and flooring. As a flooring timber, it has a very attractive figurative appeal and lustre, and is significantly harder and more resistant to impact than alternative attractive softwood species such as Rimu and Matai. Red beech can also be used for upmarket furniture items. Due to the natural durability of the timber to H3.2 hazard class, it is a suitable alternative to hardwood timbers and makes an excellent alternative for use as outdoor furniture settings and decking timber.

### APPEARANCE AND DESCRIPTION:

The dry heartwood is a light to medium red-brown colour. The sapwood is light brown to white exhibiting toning in greys, browns, and greens once dry, red beech is considered the most stable timber in New Zealand due to its very tight cell structure.

### PERFORMANCE CHARACTERISTICS

#### Durability:

Red beech is naturally durable to Hazard class H3.2 and is not prone to household borer attack.

#### Mechanical properties:

Density at 12% moisture content	630kg/m <sup>3</sup> (ranges from 625-740 kg/m <sup>3</sup> )
Modulus of elasticity	11.6 GPa
Modulus of rupture	116 MPa
Shear strength parallel to grain	13.6 MPa
Compression strength parallel to grain	54 MPa
Bending Strength	116 MPa
Side Hardness	5.4 kN
Tangential shrinkage – green to 12% MC	7.6 %
Radial Shrinkage – green to 12% MC	2.4 %

#### Machining:

Red beech combines the qualities of excellent sawing, machining, turning, finishing and bending properties with good strength, durability, hardness and exceptional dimensional stability.

#### Gluing and coating considerations:

No particular considerations.