

Species Fact Sheet



Tawa – Beilschmiedia tawa

Other Names: New Zealand Chestnut, New Zealand Oak

Region of Origin: New Zealand

SPECIES OVERVIEW:

Tawa has a white to pale brown coloured heartwood with a straight grain and fine texture. Logs sometimes contain portions of black heartwood but at Rosenfeld Kidson, only 'Clean White Tawa' is stocked. The timber is often treated with preservative to prevent staining and insect attack.

MAIN USES:

Typically used in flooring, panelling, furniture and cabinetmaking, interior joinery, turnery and dowel manufacture.

WORKING PROPERTIES:

Tawa machines and finishes extremely well and has excellent turning properties.

MECHANICAL PROPERTIES:

Tawa is a hard wood of medium density. It is hard and moderately strong.

AVAILABILITY:

Specifications stocked at Rosenfeld Kidson are: Sawn 25mm, 40mm, 50mm thicknesses. T&G strip flooring and overlay profiles.

GRADING:

Clean White.

DENSITY (kg/m₃)*: 730

DURABILITY: Non-durable

STRENGTH GROUP: SD4
MOR (MPa): 94
MOE(GPa): 12.3

JANKA(kN): 5.2

SHRINKAGE GREEN TO 12% M.C. Tangential Radial 7.0 4.0

*Air Dry Density (kg/m3) is average indication only and actual value may vary. Refer to timber properties tables over page for strength, shrinkage and durability classifications.



Timber Properties

STRENGTH GROUPINGS:

Minimum values for strength groups (<u>unseasoned</u> timber)						
(units are Mpa = 145 lb/sq.inch)						
Strength group	Modulus of rupture	Modulus of elasticity	Maximum crushing strength			
S1	103	16300	52			
S2	76	14200	43			
S3	73	12400	36			
S4	62	10700	31			
S5	52	9100	26			
S6	43	7900	22			
S7	36	6900	18			

Minimum values for strength groups (seasoned timber)						
(ι	(units are Mpa = 145 lb/sq.inch)					
Strength group	Modulus of rupture	Modulus of elasticity	Maximum crushing strength			
SD1	150	21500	80			
SD2	130	18500	70			
SD3	110	16000	61			
SD4	94	14000	54			
SD5	78	12500	47			
SD6	65	10500	41			
SD7	55	9100	36			
SD8	45	7900	30			

SHRINKAGE CLASSIFICATIONS:

Description of shrinkage	Shrinkage from Green to Oven-dry (12% MC)		
	(%) before reconditioning		
	Tangential	Radial	
Very low	0 - 3.5	0 - 2	
Low	3.5 - 5.0	2 - 3	
Medium	5.0 - 6.5	3 - 4	
High	6.5 - 8.0	4 - 5	
Very high	> 8.0	> 5	

DURABILITY CLASSIFICATIONS:

Grade of durability	Approximate service life (years)		
	Fully protected	Above ground, exposed	In-ground, exposed
Very durable	>50	>40	>25
Durable	>50	15-40	15-25
Moderately durable	>50	7-15	5-15
Non-durable	>50	0-7	0-5