

Species Fact Sheet



Vitex – Vitex cofassus

Other Names: Vasa, New Guinea Teak

Country of Origin: Solomon Islands, Papua New Guinea

SPECIES OVERVIEW:

Vitex is a durable hardwood with a pale yellowish to creamy-grey appearance. Texture is fine and slightly lustrous with an even grain. When freshly cut the timber has a leathery odour and the timber is greasy to the touch. Vitex is sourced from low-impact, village-based operations in the Solomon Islands.

MAIN USES:

Used primarily in outdoor applications for decking, boardwalks and exterior joinery. Sometimes used in boatbuilding as a teak substitute. As a kiln dried product can also be used for T&G strip flooring.

WORKING PROPERTIES:

The timber is converted without difficulty. It planes and machines well and is easy to cut across the grain.

A good finish can be obtained and it has good bending qualities and holds nails well without pre-drilling.

MECHANICAL PROPERTIES:

Vitex is a dense hard wood with above average crushing and bending strength and medium stiffness and resistance to shock loads.

AVAILABILITY:

Specifications stocked at Rosenfeld Kidson are: Sawn 25mm, 40mm, 50mm, 75mm and 100mm thicknesses in varying fixed widths. Various machined decking profiles.

GRADING:

Select.

DENSITY (kg/m₃)*: 800 DURABILITY: Durable

STRENGTH GROUP: S3, SD4

MOR (MPa): Unseasoned Seasoned

74 108

MOE(GPa): Unseasoned Seasoned

11.1 13.1

JANKA(kN): 5.0

SHRINKAGE GREEN TO 12% M.C. Tangential Radial 6.0 3.5

*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)						
(L	(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