



**Iroko** – *Chlorophora excelsa*

**Other Names:** Odum, Kambala

**Region of Origin:** West Africa

**SPECIES OVERVIEW:**

Iroko is golden orange to brown, lighter vessel lines are conspicuous on flat sawn surfaces. Colour darkens with age. The grain is interlocked and sometimes irregular and the texture rather coarse but even. Iroko can be sourced with independent FSC certification.

**MAIN USES:**

Boatbuilding, interior and exterior joinery, outdoor furniture and as a substitute for teak.

**WORKING PROPERTIES:**

The timber works satisfactorily with hand and machine tools but with a moderate to severe blunting effect. The wood nails and screws well, glues satisfactorily and when the grain is filled an excellent finish can be obtained.

Although severe reactions are quite uncommon, Iroko has been reported as a sensitizer. Usually most common reactions simply include eye, skin, and respiratory irritation.

**MECHANICAL PROPERTIES:**

This medium density wood has a moderate steam bending classification, with medium crushing strength, very low stiffness and resistance to shock loads.

**AVAILABILITY:**

Specifications stocked at Rosenfeld Kidson are: Kiln-dried sawn 25mm, 40mm, 50mm and 75mm thicknesses in mixed widths.

**GRADING:**

Select.

DENSITY (kg/m <sup>3</sup> )*:	640	
DURABILITY:	Very Durable	
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STRENGTH GROUP:	SD6	
MOR (MPa):	Unseasoned 67	Seasoned 94
MOE(GPa):	Unseasoned 8.4	Seasoned 10.8
JANKA(kN):	7.1	
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SHRINKAGE GREEN TO 12% M.C.	Tangential 5.0	Radial 3.0

\*Air Dry Density (kg/m<sup>3</sup>) is average indication only and actual value may vary. Refer to timber properties tables over page for strength, shrinkage and durability classifications.



The mark of responsible forestry



**STRENGTH GROUPINGS:**

Minimum values for strength groups (unseasoned timber)			
<i>(units are Mpa = 145 lb/sq.inch)</i>			
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)			
<i>(units are Mpa = 145 lb/sq.inch)</i>			
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