



**Karri** – *Eucalyptus diversicolor*

**Other Names:** Karri

**Country of Origin:** South Western Australia

**SPECIES OVERVIEW:**

Karri heartwood is reddish-brown, paler in colour than jarrah when fresh but maturing to a more uniform brown. The grain is interlocked with some wavy grain, the texture is even, moderately coarse and prone to checking. Ideal timber for general construction as it is available in clear long lengths and large sections. Although the shrinkage classification is high, Karri suffers minimal bowing, warping or twisting during the seasoning process. All stock carries PEFC certification.

**MAIN USES:**

Structural and heavy construction work for bridges, wharves and boardwalks, cross arms, mine guides and decking. Kiln dried product is also used for flooring, furniture and interior joinery.

**WORKING PROPERTIES:**

Difficult to work with hand tools and has a moderate to severe blunting effect. Pre-boring is required for nailing. It can be glued, stained and polished satisfactorily.

**MECHANICAL PROPERTIES:**

High bending and crushing strengths and stiffness with medium resistance to shock loads. The steam bending classification is good and it is also fire resistant.

**AVAILABILITY:**

Specifications stocked at Rosenfeld Kidson are: Sawn 50mm, 75mm 100mm, 150mm and 200mm thicknesses in varying fixed widths.

**GRADING:**

Select.

DENSITY (kg/m <sup>3</sup> )*:	880	
DURABILITY:	Moderately Durable	
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STRENGTH GROUP:	SD2	
MOR (MPa):	Unseasoned 79	Seasoned 132
MOE(GPa):	Unseasoned 15.0	Seasoned 18.5
JANKA(kN):	8.9	
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SHRINKAGE GREEN TO 12% M.C.	Tangential 10.0	Radial 4.5

\*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.





**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