

# TIMBER HARDNESS AND DURABILITY for floors and decks

TIMBER NAME	TYPICAL COLOUR	BOTANICAL NAME	MAIN ORIGIN	SAPWOOD	JANKA	DENSITY	DENSITY	OUTDOOR DURABILITY		FIRE
				LYCTID BORER	HARDNESS 12 % Moisture	KG / M3 green	KG / M3 12 % Moisture	DURABIL- ITY CLASS	LIFE ABOVE GROUND	RATING AS 3959
Balsa	Oatmeal	Ochroma pyramidale	Ecuador	Susceptible	0.4	NA	170	4	Short	

## FLOORING TIMBERS

Baltic Pine	White / yellow	Picea abies	Europe	Immune	2.1	NA	420	4	5 to 8 years	
Kauri Pine (Qld.)	Pale cream / brown	Agathis microstachya	North Qld.	Immune	2.7	720	420	4	5 to 8 years	
East Indian Kauri	Straw	Agathis Dammara	Sth East Asia	Immune	2.7	800	550	4	5 to 8 years	
Radiata Pine	White	Pinus radiata	Sthn Australia	Immune	3.3	800	500	4	5 to 8 years	
New Guinea Rosewood	Gold / red / brown	Pterocarpus indicus	Sth East Asia	Susceptible	4.7	NA	615	2	30 years	
Makore	Pink / blood red / brown	Tieghemella Hecklii	West Africa	Susceptible	4.9	NA	610	2	30 years	
Mountain Ash	Pale pink to straw	E. regnans	Tas / Vic	Resistant	4.9	1030	680	4	5 to 8 years	
Alpine Ash	Pale pink to brown	E. delegatensis	Tas / Vic	Resistant	4.9	1050	620	4	5 to 8 years	
Victorian Ash	Pale pink / straw / brown	E.regnans / delegatensis	Tas / Vic	Resistant	4.9	1040	650	4	5 to 8 years	
Kamerere	Red brown	Eucalyptus deglupta	PNG	Sometimes	5.3	NA	400 to 700	3	15 years	
Kapur	Yellow / pink / reddish brown	Dryobalanops aromatica	Malay/ Indon.	Susceptible	5.4	NA	750	3	15 years	
Tasmanian Oak	Pale pink / straw / brown	E.regnans / delegatensis / obliqua	Tas / Vic	Susceptible	5.5	1053	693	4	5 to 8 years	
European Oak	Pale yellow / brown	Quercus robur	Europe	Susceptible	5.5	NA	550	2	30 years	
Ramin	Straw with pale pink tinge	Gonystylus bancanus	SthEast Asia	Susceptible	5.8	NA	650	4	5 to 8 years	
Myrtle Beech	Pink / brown	Northofagus cunninghamii	Tas / Vic	Susceptible	5.9	NA	700	4	5 to 8 years	
Blackwood	Gold / red / brown	Acacia melanoxylon	Tasmania	Susceptible	5.9	870	640	3	15 years	
Manna Gum	Pale pink / brown	E. viminalis	Sthn Australia	Susceptible	6.0	1100	750	4	5 to 8 years	
American White Oak	Pale yellow / brown	Quercus spp.	North America	Susceptible	6.0	NA	750	3	15 years	
Brownbarrel	Pale brown	E. fastigata	Vic / NSW	Susceptible	6.4	1140	750	4	5 to 8 years	
European Beech	Pale brown	Fagus sylvatica	Europe	Immune	6.4	NA	700	4	5 to 8 years	
Cypress Pine	Yellow / brown	Calitris glauca	Vic / NSW	Immune	6.5	800	680	1	50 years	
Taun (Malugay)	Red brown	Pometia pinnata	Sth East Asia	Susceptible	6.5	NA	680 - 850	3	15 years	
Sapele	Reddish brown	Entandrophragma cylindricum	Africa	Susceptible	6.7	NA	650	3	15 years	
Messmate	Pale brown	E. obliqua	Tas / Vic	Susceptible	7.1	1080	780	3	15 years	
Rose Gum ( Flooded)	Pink / brown	E. grandis	NSW / Qld	Resistant	7.5	620	950	3	15 years	
Wormy Chestnut	Pale brown with many marks	E. sieberi and E. obliqua	Sth East Aust.	Susceptible	8.3	1140	800	3	15 years	
Jarra	Dark red	E. marginata	West Australia	Susceptible	8.5	1170	820	2	30 years	
Yellow Stringybark	Yellow / brown	E. muellerana	NSW / Vic	Resistant	8.5	1100	870	2	30 years	
Merbau	Red / brown	Intsia bijuga	Asia / Pacific	Susceptible	8.6	NA	830	2	30 years	Acceptable
Tallow Wood	Yellow / brown	E. microcorys	NSW / Qld	Susceptible	8.6	1230	990	1	50 years	
White Stringybark	Pale brown / pink	E. eugenoides	Est coast Aust.	Resistant	8.8	1030	830	2	30 years	
Kempas	Gold / brown	Koompassia malaccensis	Malay / Indon.	Susceptible	9.0	1000	850	3	15 years	
Sydney Blue Gum	Deep pink	E. saligna	NSW / Qld	Susceptible	9.0	1070	850	3	15 years	
Karri	Pink / red / brown	E. diversicolour	SW corner of WA	Resistant	9.0	1200	900	3	15 years	
Black Butt	Pale brown	E. pilularis	NSW / Qld coast	Resistant	9.1	1100	900	2	30 years	Acceptable
Brushbox	Pink / grey / brown	Tristania conferta	NSW / Qld coast	Occasionally	9.5	1160	900	3	15 years	
Silver Top Ash	Pale brown	E. sieberi	SE coast Aust.	Rarely	9.5	1200	820	3	15 years	Acceptable
Malas	Orange / red brown	Homalium foetidum	Asia / Pacific	Resistant	9.5	NA	800	3	15 years	
River Red Gum	Red / brown	E. camaldulensis	Australia	Susceptible	10.0	1130	900	2	30 years	Acceptable
Grey Mountain Gum	Pinkish brown	E. cypellocarpa	Vic / NSW	Susceptible	10.0	1100	880	3	15 years	
Spotted Gum	Cream / grey / brown	E. maculata	East coast Aust.	Susceptible	11.0	1150	950	2	30 years	Acceptable

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								DURABILITY CLASS	LIFE ABOVE GROUND	
Turpentine	Reddish brown	Syncarpia glomulifera	Sydney to Cairns	Resistant	12.0	1130	930	1	50 years	Acceptable
Sthn Blue Gum	Pale brown	E. globulus	Vic / Tas	Susceptible	12.0	1100	900	3	15 years	
Red Ironbark	Dark red	E. sideloxyron	Central Vic / NSW	Resistant	13.0	1220	1130	1	50 years	Acceptable
Grey Ironbark	Brown / dark red	E. paniculata	NSW / Qld coast	Resistant	14.0	1210	1120	1	50 years	
Grey Gum	Red	E. propinqua	NSW / Qld	Resistant	14.0	1240	1080	1	50 years	
Northern Brushbox	Pink / red / brown	Tristania merguensis / wittiana / oboyata	Asia / Pacific	Resistant	16.0	NA	1010	2	30 years	
Belah	Dark chocolate brown	Casuarina christata	Inland NSW	Resistant	20.0	1250	1150	2	30 years	
<b>DECKING TIMBERS</b>										
Makore	Pink / blood red / brown	Tieghemella Hecklii	West Africa	Susceptible	4.9	NA	610	2	30 years	
European Oak	Pale yellow / brown	Quercus robur	Europe	Susceptible	5.5	NA	550	2	30 years	
Cypress Pine	Yellow / brown	Calitris glauca	Vic / NSW	Immune	6.5	800	680	1	50 years	
Jarrah	Dark red	E. marginata	West Australia	Susceptible	8.5	1170	820	2	30 years	
Yellow Stringybark	Yellow / brown	E. muellerana	NSW / Vic	Resistant	8.5	1100	870	2	30 years	
Merbau	Red / brown	Intsia bijuga	Asia / Pacific	Susceptible	8.6	NA	830	2	30 years	Acceptable
Tallow Wood	Yellow / brown	E. microcorys	NSW / Qld coast	Susceptible	8.6	1230	990	1	50 years	
White Stringybark	Pale brown / pink	E. eugenoides	Esat cst Aust.	Resistant	8.8	1030	830	2	30 years	
Balau (Batu)	Yellow - reddish brown	Shorea spp. (heavy varieties)	Sth East Asia	Susceptible	9.0	1000	900	2	30 years	
Black Butt	Pale brown	E. pilularis	NSW / Qld coast	Resistant	9.1	1100	900	2	30 years	Acceptable
River Red Gum	Red / brown	E. camaldulensis	Australia	Susceptible	10.0	1130	900	2	30 years	Acceptable
Spotted Gum	Cream / grey / brown	E. maculata	East coast Aust.	Susceptible	11.0	1150	950	2	30 years	Acceptable
Turpentine	Reddish brown	Syncarpia glomulifera	Sydney to Cairns	Resistant	12.0	1130	930	1	50 years	Acceptable
Red Ironbark	Dark red	E. sideloxyron	Central Vic / NSW	Resistant	13.0	1220	1130	1	50 years	Acceptable
Belian	Dark chocolate brown (dry)	Eusideroxylon zwageri	South East Asia	Resistant	13.0	1300	1040	1	50 years	
Grey Ironbark	Brown / dark red	E. paniculata	NSW / Qld coast	Resistant	14.0	1210	1120	1	50 years	
Grey Gum	Red	E. propinqua	NSW / Qld coast	Resistant	14.0	1240	1080	1	50 years	
Northern Brushbox	Pink / red / brown	Tristania merguensis / wittiana / oboyata	Asia / Pacific	Resistant	16.0	NA	1010	2	30 years	
Belah	Dark chocolate brown	Casuarina christata	Inland NSW	Resistant	20.0	1250	1150	2	30 years	
Massara	Dark red	Manilkara bidentata	South America					1	50 years	
<b>OTHER TIMBERS</b>										
American Mahogany		Swietenia macrophylla	Central America	Susceptible	3.6	NA	550	3	15 years	
Note: also called Caribbean Pine (Tropic)	Cuban, Honduras and Brazilian Mahogany									
Meranti - light red	Golden brown	Pinus caribaea	Central America	Immune	3.9	990	540	4	5 to 8 years	
Meranti - dark red	Pale pink to red brown	Shorea spp.	Malaysia	Susceptible	2.6	NA	500	4	5 to 8 years	
	Red to deep red brown	Shorea spp.	Malaysia	Susceptible	3.5	NA	680	4	5 to 8 years	
Teak (plantation)		Note: both Merantis are often called Pacific Maple								
	Dark golden brown	Tectona grandis	Asia / India	Susceptible	4.5	NA	550	2	15 years	
Nyatoh	Purple pink to red brown	Palaquium / Payena spp.	South East Asia	Susceptible	3.8	NA	660	4	5 to 8 years	
Kapur	Yellow / pink / reddish brown	Dryobalanops aromatica	Malaysia / Indon.	Susceptible	5.4	NA	750	3	15 years	
Keruing (Apitong)	Red brown	Dipterocarpus spp.	South East Asia	Susceptible	5.5	950	750	3	15 years	
Oregon	Yellow - reddish brown	Pseudotsuga menziesii	North America	Immune	3.2	NA	540	4	5 to 8 years	