



Recommended Practice / August 2005



Technical Data Sheet

Species, Properties and Uses

Species Tables

16b

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To be read in conjunction with TDS 16a

If you need more information on the subject of this data sheet, please contact Timber Queensland. We need your feedback to ensure that future revisions continue to meet the needs of timber users.



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1 Standard Trade Name	2 Botanical Name	3 Strength Group		4 Joint Group		5 Density (kg/m ³)		6 Hardness (seasoned) (kN)	7 Toughness		8 Tangential Shrinkage %	9 % Unit Tangential Movement	10 #Durability Class (*Termite Resistant)	11 Lyctid Susceptibility	12 Early Fire Hazard			13 Bushfire Rated	14 Colour	15 Common Uses									16 Availability varies region by region		
		Unseasoned	Seasoned	Unseasoned	Seasoned	Unseasoned	Seasoned		Unseasoned	Seasoned					Ignitibility	Spread of Flame	Smoke Development			In Ground	Framing Above Ground-Exposed	Framing Above Ground-Protected	Decking	Cladding	Internal Flooring	Panelling	External Joinery	Internal Joinery			
ash, alpine	<i>Eucalyptus delegatensis</i>	S4	SD4	J3	JD3	1050	650	5.0	M	M	8.5	0.35	4/3	S	14	8	3	-	W	-	-	S	-	-	0	0	-	0	-	0	R
ash, crows	<i>Flindersia australis</i>	S2	SD3	J1	JD1	1050	950	11.0	M	M	4.2	-	1/1	S	-	-	-	-	W	-	-	-	0	-	0	-	-	-	-	-	L
ash, mountain	<i>Eucalyptus regnans</i>	S4	SD3	J3	JD3	1050	650	4.9	M	M	13.3	0.36	4/3	NS	14	8	3	-	W	-	-	-	-	-	0	0	-	0	-	0	R
ash, silvertop	<i>Eucalyptus sieberi</i>	S3	SD3	J2	JD2	1100	850	9.8	M	M	10.6	0.36	3/2	NS	-	-	-	✓	W-P	-	-	0	-	-	-	-	-	-	-	L	
balau, yellow (selangan batu)	<i>Shorea spp.</i>	S2	SD3	J2	JD2	1150	900	-	-	-	7.0	-	2/1	S	-	-	-	✓*	R	-	0	0	0	0	0	0	0	-	-	-	R
bangkirai	<i>Shorea laevis</i>	S3	SD3	-	-	1050	850	-	-	-	5.0	-	2/2	S	-	-	-	-	W	P	0	-	0	-	0	0	0	-	-	-	L
belian (ulin)	<i>Eusideroxylum zwageri</i>	S1	SD1	-	-	1300	1000	13.0	-	-	4.5	-	1/1	NS	-	-	-	-	B	-	-	-	0	-	-	-	-	-	-	-	L
beech, myrtle	<i>Nothofagus cunninghamii</i>	S4	SD5	J3	JD3	1100	700	5.9	-	-	4.7	0.32	4/3	NS	-	-	-	-	P	-	-	0	-	0	0	0	0	-	0	L	
bloodwood, red	<i>Corymbia intermedia</i>	S3	SD3	-	-	1150	900	8.8	-	-	4.0	-	1*/1	S	-	-	-	-	R	0	-	-	-	-	-	-	-	-	-	L	
blackbutt	<i>Eucalyptus pilularis</i>	S2	SD2	J2	JD2	1150	900	8.9	M	M	7.3	0.37	2*/1	NS	13	7	3	✓	W	-	0	0	0	0	0	0	0	-	-	-	R
blackbutt, New England	<i>Eucalyptus andrewsii</i>	S3	SD3	J2	JD2	1150	850	9.2	M	M	11.4	0.36	2*/1	S	-	-	-	-	W	-	0	0	-	-	0	0	-	-	-	R	
blackbutt, W.A.	<i>Eucalyptus patens</i>	S4	SD5	J2	JD2	1100	850	6.9	L	L	10.0	-	2/1	S	-	-	-	-	B	-	-	S	0	0	0	0	0	-	-	-	L
blackwood	<i>Acacia melanoxylon</i>	S4	SD4	J3	JD3	1050	650	4.9	-	-	3.9	0.27	3/-	S	13	9	3	-	B	-	-	0	-	0	0	0	0	-	0	R	
box, brush	<i>Lophostemon confertus</i>	S3	SD3	J2	JD2	1100	900	9.1	M	M	9.7	0.38	3*/3	NS	14	7	3	-	B	-	-	-	-	0	0	0	-	-	-	L	
box, grey coast	<i>Eucalyptus bosistoana</i>	S1	SD1	J1	JD1	1200	1100	13.1	H	H	8.2	0.42	1*/1	S	-	-	-	-	W	0	-	-	0	-	0	-	-	-	-	R	
brownbarrell	<i>Eucalyptus fastigata</i>	S4	SD4	J3	JD3	1100	750	5.5	M	M	11.8	0.34	4/3	S	-	-	-	-	W	-	-	0	-	-	-	-	-	-	-	L	
calantas (kalantas)	<i>Toona calantas</i>	S6	SD7	-	JD4	-	500	-	L	L	7.0	-	2/-	S	-	-	-	-	R	-	-	-	-	-	-	0	0	0	R		
candlebark	<i>Eucalyptus rubida</i>	S5	SD5	J3	JD3	1100	750	5.9	M	L	12.2	0.34	3/3	S	-	-	-	-	P	-	-	0	-	-	-	-	-	-	-	L	
cedar, western red	<i>Thuja plicata</i>	S7	SD8	-	JD6	-	350	-	L	L	3.0	-	3*/2	NS	15	10	4	-	W-B	-	-	-	-	0	-	0	0	0	R		
cypress	<i>Callitris glaucophylla</i>	S5	SD6	J3	JD3	850	700	6.1	L	L	2.5	0.26	1*/1	NS	13	8	3	-	WB	-	0	0	0	0	0	0	0	-	-	R	
fir, Douglas (oregon)	<i>Pseudotsuga menziesii</i>	S5	SD5	J4	JD4	710	550	3.0	L	L	4.0	-	4/4	NS	14	9	3	-	W	-	-	0	-	-	-	0	-	0	R		
gum, blue southern	<i>Eucalyptus globulus</i>	S3	SD3	J2	JD2	1150	1000	11.5	M	H	7.7	0.40	3/2	S	-	-	-	-	W	-	-	0	-	-	0	0	-	-	R		
gum, blue Sydney	<i>Eucalyptus saligna</i>	S3	SD3	J2	JD2	1100	850	8.1	M	M	9.5	0.35	3/2	S	-	-	-	-	P	-	-	0	-	-	0	0	-	-	R		
gum, grey	<i>Eucalyptus propinqua</i>	S1	SD2	J1	JD1	1250	1050	14.0	M	M	7.0	-	1/1	NS	-	-	-	-	R	0	0	-	-	-	-	-	-	-	R		
gum, grey mountain	<i>Eucalyptus cypellocarpa</i>	S3	SD2	J2	JD2	1100	900	10.3	M	M	11.9	0.39	3/2	S	-	-	-	-	P	-	-	-	-	-	0	0	-	0	R		
gum, manna	<i>Eucalyptus viminalis</i>	S4	SD4	J3	JD2	1100	800	5.8	M	M	12.0	0.34	4/3	S	-	-	-	-	P	-	-	-	-	-	0	0	-	0	R		
gum, mountain	<i>Eucalyptus dalrympleana</i>	S4	SD5	J3	JD3	1100	700	5.7	M	M	11.5	0.35	4/3	S	-	-	-	-	P	-	-	0	-	-	0	-	-	0	L		
gum, red, forest	<i>Eucalyptus tereticornis</i>	S3	SD4	J1	JD1	1150	1000	11.3	M	M	8.6	0.34	1*/1	NS	-	-	-	✓*	R	0	0	0	0	0	0	0	-	-	-	R	

Durability Class - Inground/above ground

1 Standard Trade Name	2 Botanical Name	3 Strength Group		4 Joint Group		5 Density (kg/m ³)		6 Hardness (seasoned) (kN)	7 Toughness		8 Tangential Shrinkage %	9 % Unit Tangential Movement	10 #Durability Class (*Termite Resistant)	11 Lyctid Susceptibility	12 Early Fire Hazard			13 Bushfire Rated	14 Colour	15 Common Uses								16 Availability varies region by region						
		Unseasoned	Seasoned	Unseasoned	Seasoned	Unseasoned	Seasoned		Unseasoned	Seasoned					Ignitibility	Spread of Flame	Smoke Development			In Ground	Framing Above Ground-Exposed	Framing Above Ground-Protected	Decking	Cladding	Internal Flooring	Panelling	External Joinery		Internal Joinery					
																														Unseasoned	Seasoned	Unseasoned	Seasoned	Unseasoned
gum, river, red	<i>Eucalyptus camaldulensis</i>	S5	SD5	J2	JD2	1150	900	9.7	M	L	8.9	0.31	2*/1	S	-	-	-	✓	R	0	0	0	0	0	0	0	0	0	0	0	0	0	-	L
gum, rose	<i>Eucalyptus grandis</i>	S3	SD4	J2	JD2	1100	750	7.3	M	M	7.5	0.30	3/2	NS	-	-	-	-	P	-	-	0	-	-	0	-	0	0	0	-	-	R		
gum, shining	<i>Eucalyptus nitens</i>	S4	SD4	J3	JD3	1100	530	5.8	M	M	12.8	0.33	4/3	S	-	-	-	-	W	-	-	0	-	-	0	-	-	-	-	-	-	L		
gum, spotted	<i>Corymbia maculata/ Corymbia citridora</i>	S2	SD2	J1	JD1	1200	1100	10.1	H	H	6.1	0.38	2*/1	S	13	3	3	✓	B	-	0	0	0	0	0	0	0	-	0	-	-	R		
hardwood, Johnstone River	<i>Backhousia bancroftii</i>	S2	SD3	J1	JD1	1150	950	-	-	-	6.4	0.39	3/2	NS	-	-	-	-	B	-	-	-	-	0	-	-	-	-	-	-	L			
hemlock western	<i>Tsuga heterophylla</i>	S6	SD6	J4	JD4	800	500	2.7	L	L	5.0	-	4/4	NS	14	9	3	-	W	-	-	0	-	-	-	0	-	0	-	0	L			
ironbark, grey	<i>Eucalyptus paniculata</i>	S1	SD1	J1	JD1	1250	1100	16.3	H	H	7.5	0.39	1*/1	NS	-	-	-	-	WRB	0	0	0	0	-	0	-	-	-	-	-	R			
ironbark, red	<i>Eucalyptus sideroxylon</i>	S2	SD3	J1	JD1	1200	1100	11.9	H	M	6.3	0.37	1*/1	S	-	-	-	✓	R	0	0	-	0	-	0	-	-	-	-	-	R			
ironwood Cooktown	<i>Erythrophleum chlorostgchys</i>	S1	SD1	-	-	-	1220	13.0	-	-	3.0	-	1/1	S	-	-	-	-	RB	0	-	-	-	-	0	-	-	-	-	-	L			
jarrah	<i>Eucalyptus marginata</i>	S4	SD4	J2	JD2	1100	800	8.5	L	L	7.4	0.30	2*/2	S	13	6	3	✓*	R	-	0	0	0	0	0	0	0	0	0	0	R			
kapur	<i>Dryobalanops</i> spp.	S3	SD4	J2	JD2	1100	750	5.4	L	M	6.0	-	3/2	NS	13	7	3	-	WPR	-	-	0	-	-	-	-	-	-	-	-	L			
karri	<i>Eucalyptus diversicolor</i>	S3	SD2	J2	JD2	1150	900	9.0	M	M	9.9	0.40	3/2	NS	13	5	3	-	P	-	0	0	-	-	0	0	-	0	-	0	R			
keruing	<i>Dipterocarpus</i> spp.	S3	SD3	J2	JD2	950	750	4.6	H	H	9.5	-	3/3	S	-	-	-	-	R	P	P	0	-	-	0	-	-	-	-	-	L			
kwila (merbau)	<i>Intsia bijuga</i>	S2	SD3	J2	JD2	1150	850	8.8	M	M	2.5	-	3*/2	S	-	-	-	✓	R	-	0	0	0	-	0	0	0	0	-	0	R			
mahogany, Philippine, red, dark	<i>Shorea</i> spp.	S5	SD6	-	JD3	-	650	3.2	-	-	4.0	-	3/3	S	-	-	-	-	R	-	-	-	-	-	-	-	-	-	0	R				
mahogany, Philippine, red, light	<i>Shorea, Pentacme, Parashorea</i> spp.	S6	SD7	-	JD4	-	550	2.6	-	-	6.5	-	4/4	S	-	-	-	-	W	-	-	-	-	-	-	0	-	0	-	R				
mahogany, red	<i>Eucalyptus resinifera</i>	S2	SD3	J1	JD1	1200	950	12.0	M	M	6.3	0.34	2*/1	S	-	-	-	-	R	-	0	0	-	-	0	-	-	-	-	L				
mahogany, southern	<i>Eucalyptus botryoides</i>	S2	SD3	J2	JD2	1100	900	9.2	M	M	9.8	0.37	3*/2	NS	-	-	-	-	R	-	-	0	-	-	0	-	-	-	-	L				
mahogany, white	<i>Eucalyptus acmenoioides</i>	S2	SD3	J1	JD2	1150	1000	10.1	M	M	5.4	0.34	1*/1	NS	-	-	-	-	W	-	0	0	0	-	0	-	-	-	-	R				
marri	<i>Eucalyptus calophylla</i>	S3	SD3	J2	JD2	1150	850	7.1	M	M	6.6	0.34	3/3	S	-	-	-	-	W	-	-	0	-	-	0	0	-	-	-	L				
meranti, red, dark	<i>Shorea</i> spp.	S5	SD6	J4	JD3	1100	650	3.5	-	-	5.0	-	4/2	S	14	9	4	-	R	-	-	-	-	-	-	0	-	0	-	R				
meranti, red, light	<i>Shorea</i> spp.	S6	SD7	-	JD5	-	400	2.4	-	-	4.4	-	4/3	S	14	9	4	-	P	-	-	-	-	-	-	0	-	0	-	R				
messmate	<i>Eucalyptus obliqua</i>	S3	SD3	J3	JD3	1100	750	7.4	M	M	11.3	0.36	3/3	S	13	5	3	-	W	-	-	0	-	-	0	0	-	0	-	R				
messmate, Gympie	<i>Eucalyptus cloeziana</i>	S2	SD3	J1	JD1	-	955	-	-	-	6.0	-	1*/1	NS	-	-	-	-	W	0	0	0	0	-	0	-	0	-	L					
oak, American	<i>Quercus</i> spp.	S6	SD6	-	-	-	750	-	-	-	5.0	-	4/-	S	-	-	-	-	W	-	-	-	-	-	0	0	-	0	L					
pelawan (Northern Box)	<i>Tristania</i> spp.	S2	SD2	J1	JD1	1145	920	-	M	M	7.0	-	2/-	NS	-	-	-	-	PR	-	-	-	0	-	0	-	-	-	-	R				

Durability Class - Inground/above ground

1 Standard Trade Name	2 Botanical Name	3 Strength Group		4 Joint Group		5 Density (kg/m ³)		6 Hardness (seasoned) (kN)	7 Toughness		8 Tangential Shrinkage %	9 % Unit Tangential Movement	10 #Durability Class (*Termite Resistant)	11 Lyctid Susceptibility	12 Early Fire Hazard			13 Bushfire Rated	14 Colour	15 Common Uses								16 Availability varies region by region						
		Unseasoned	Seasoned	Unseasoned	Seasoned	Unseasoned	Seasoned		Unseasoned	Seasoned					Unseasoned	Seasoned	Ignitibility			Spread of Flame	Smoke Development	In Ground	Framing Above Ground-Exposed	Framing Above Ground-Protected	Decking	Cladding	Internal Flooring		Panelling	External Joinery	Internal Joinery			
peppermint, narrow-leaved	Eucalyptus australiana	S4	SD4	J3	JD2	1100	800	7.5	L	L	13.2	0.36	4/3	S	-	-	-	-	P	-	-	0	-	-	-	-	-	-	-	-	-	-	-	L
pine, caribbean	Pinus caribaea	S6	SD6	J4	JD4	-	550	-	-	-	5.0	0.34	4/4	NS	-	-	-	-	W	P	P	S	P	P	0	0	P	-	-	-	-	-	R	
pine, hoop (Araucaria)	Araucaria cunninghamii	S6	SD5	J4	JD4	800	550	3.4	L	L	3.8	0.23	4/4	NS	14	7	2	-	W	P	P	S	P	P	0	0	P	0	-	-	-	-	R	
pine, radiata	Pinus radiata	S6	SD6	J4	JD4	800	550	3.3	M	L	5.1	0.27	4/4	NS	14	8	3	-	W	P	P	S	P	P	0	0	P	0	-	-	-	-	R	
pine, slash	Pinus elliotii	S5	SD5	J4	JD4	850	650	3.4	L	L	4.2	0.30	4/4	NS	-	-	-	-	W	P	P	S	P	P	0	0	P	0	-	-	-	-	R	
ramin	Gonystylus spp.	S4	SD4	-	JD3	-	650	5.8	-	-	5.5	-	4/-	S	14	7	3	-	W	-	-	-	-	-	0	0	-	0	-	-	-	-	L	
sacau (Northern Box)	Palaquium hornei	S3	SD2	J2	JD2	1010	890	-	M	M	6.4	-	2/-	S	-	-	-	-	PR	-	-	-	0	0	0	0	-	-	-	-	-	-	R	
stringybark, Blackdown	Eucalyptus sphaerocarpa	S3	SD3	J1	JD1	-	1000	-	-	-	7.0	-	2*/1	S	-	-	-	-	B	-	0	0	-	0	-	-	-	-	-	-	-	-	L	
stringbark, brown	Eucalyptus baxteri	S3	SD3	J2	JD2	1100	850	7.5	M	M	10.4	0.33	3/2	NS	-	-	-	-	B	-	-	0	-	-	0	-	-	-	-	-	-	-	L	
stringbark, white	Eucalyptus eugenioides	S3	SD3	J2	JD2	1100	1000	9.0	M	M	10.6	0.36	2*/2	NS	-	-	-	-	P	-	0	0	0	-	0	-	-	-	-	-	-	-	L	
stringbark, yellow	Eucalyptus muellerana	S3	SD3	J2	JD2	1150	900	8.6	M	M	7.5	0.37	3*/2	NS	-	-	-	✓*	W	-	0	0	0	-	0	-	-	-	-	-	-	-	R	
tallowwood	Eucalyptus microcorys	S2	SD2	J1	JD2	1200	1000	8.6	M	M	6.1	0.37	1*/1	S	12	5	4	✓*	W	0	0	0	0	0	0	-	-	-	-	-	-	-	L	
taun	Pometia pinnata	S4	SD4	-	JD3	-	700	-	-	-	5.5	-	3/2	S	-	-	-	-	R	-	-	0	-	-	0	0	-	-	-	-	-	-	R	
turpentine	Syncarpia glomulifera	S3	SD3	J2	JD2	1050	950	11.6	M	M	13.0	0.35	1*/1	NS	-	-	-	✓	PB	0	-	-	0	-	0	-	-	-	-	-	-	-	L	

Commercial Species Groups

ash, Victorian oak, Australian oak, Tasmanian	Eucalyptus spp.	S4	SD4	J3	JD3	1050	650	4.9	M	M	13.3	0.36	4/4	S	-	-	-	-	W	-	-	0	-	-	0	0	-	0	-	0	-	R	
hardwood, mixed (Qld/Nth. NSW)	Eucalyptus spp. Corymbia spp.	S3	SD3	J2	JD2	1150	750	-	M	M	-	-	3/2	S	-	-	-	-	WPRB	-	0	0	0	0	0	0	0	-	-	-	-	-	R
softwoods, mixed Australian grown	pinus spp.	-	SD7	-	JD4	850	550	-	L	L	-	-	4/4	NS	-	-	-	-	W	-	-	0	-	-	0	0	-	-	-	-	-	R	
softwoods, imported (unidentified)	mixed spp.	S7	SD8	J6	JD6	850	400	-	L	L	-	-	4/4	NS	-	-	-	-	W	-	-	0	-	-	-	0	-	-	-	-	-	R	
hemfir	mixed spp.	-	SD7	-	JD5	-	-	-	L	L	-	-	4/4	NS	-	-	-	-	W	-	-	0	-	-	-	-	-	-	-	-	-	R	
Spruce pine fir (SPF)	mixed spp.	-	SD7	-	JD6	-	-	-	L	L	-	-	4/4	NS	-	-	-	-	W	-	-	0	-	-	-	-	-	-	-	-	-	R	

Durability Class - Inground/above ground