

General Properties of ModWood

Moisture absorption (full submersion)

	hollow boards	solid boards
24 hours	1%	>1%
7 days	3%	>1%
3 months	25%	5 - 7%

Thermal expansion 0.000015 mm/mm/deg C

A 5400mm board will expand and contract approximately 3mm in a 40 degree temperature variation. Therefore ModWood should not be fixed at or near its maximum expansion for the geographical area that it is installed.

Termite resistance ModWood has been tested by CSIRO and found to have a high degree of termite resistance to attack by two of Australia's most important species of subterranean termites, *Mastotermes darwiniensis* and *Coptotermes acinaciformis*. Against untreated hardwoods and softwoods ModWood is dramatically more resistant against termite attack.

Specific Gravity 1.15

Shore D hardness 95

Slip resistance

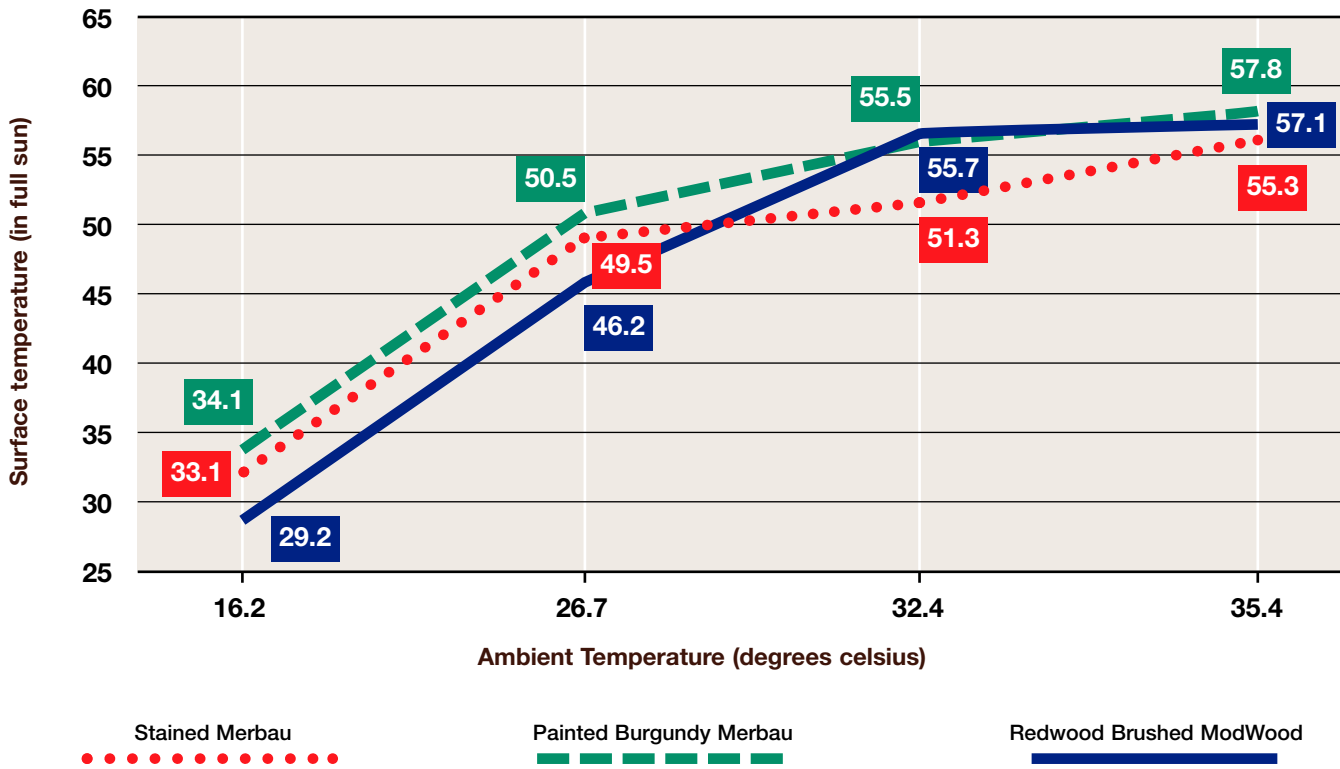
Slip resistance testing by CSIRO Tested to AS/NZS 4586:2000

No.	Sample	Wet Pendulum Result	Wet Pendulum Class	Oil-Wet Ramp Result (degrees)	Oil-Wet Ramp Class
1	ModWood brushed	27	Y	13.5	R10
2	ModWood smooth	27	Y	10.7	R10
3	Oiled Timber	26	Y	11.2	R10
4	Painted Timber	25	Y	15.4	R10

Sample 3 was coated with Cabot natural decking oil, merbau tint with a brush.

Sample 4 was coated with Cabot decking paint and applied with a mini roller.

Surface Temperature Comparison - ModWood versus stained and painted Merbau



Burning Characteristics - tested by CSIRO

Ignitability Index	14
Spread of flame Index	8
Smoke developed Index	4
Heat evolved Index	7



Specific Strength Properties of Boards

Marina board - 137 x 32mm

Span (mm)	MOR (MPa)	MOE (MPa)	Load at Peak		Load at break (N)	Extension at break (mm)	Extension at 100kg load (mm)	Extension at 200kg load (mm)
			(N)	(kg)				
600	24.65	4381	4,006	409	3996	21.05	2.7	5.75
500	25.5	4220	4,969	507	4954	15.14	1.64	3.33
400	23.89	3468	5,784	590	5760	10.61	1.06	2.06
300	24.11	2982	8,101	827	8090	5.73	0.41	0.92

Wide deck - 137 x 23mm

Span (mm)	MOR (MPa)	MOE (MPa)	Load at Peak		Load at break (N)	Extension at break (mm)	Extension at 100kg load (mm)	Extension at 200kg load (mm)
			(N)	(kg)				
450	25.34	4954	2669	272	2651	14.87	3.09	7.39
400	26.12	4734	3127	319	3100	12.63	2.21	4.88
300	26.73	4149	4275	436	4235	7.13	1.09	2.13

Solid deck - 88 x 23mm

Span (mm)	MOR (MPa)	MOE (MPa)	Load at Peak		Load at break (N)	Extension at break (mm)	Extension at 100kg load (mm)	Extension at 200kg load (mm)
			(N)	(kg)				
450	26.09	4878	1808	184	1781	14.47	5.01	-
400	26.89	4661	2097	213	2082	12.29	3.58	8.05
300	27.51	4085	2893	293	2873	6.93	1.76	3.51

Hollow deck - 88 x 23mm

Span (mm)	MOR (MPa)	MOE (MPa)	Load at Peak		Load at break (N)	Extension at break (mm)	Extension at 100kg load (mm)	Extension at 200kg load (mm)
			(N)	(kg)				
400	24.47	4778	1881	192	1859	10.52	3.64	-
300	25.33	4471	2592	265	2570	6.07	1.62	3.56