

**General Properties of ModWood**
**Moisture absorption (full submersion)**

	solid boards
24 hours	<1%
7 days	<1%
3 months	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

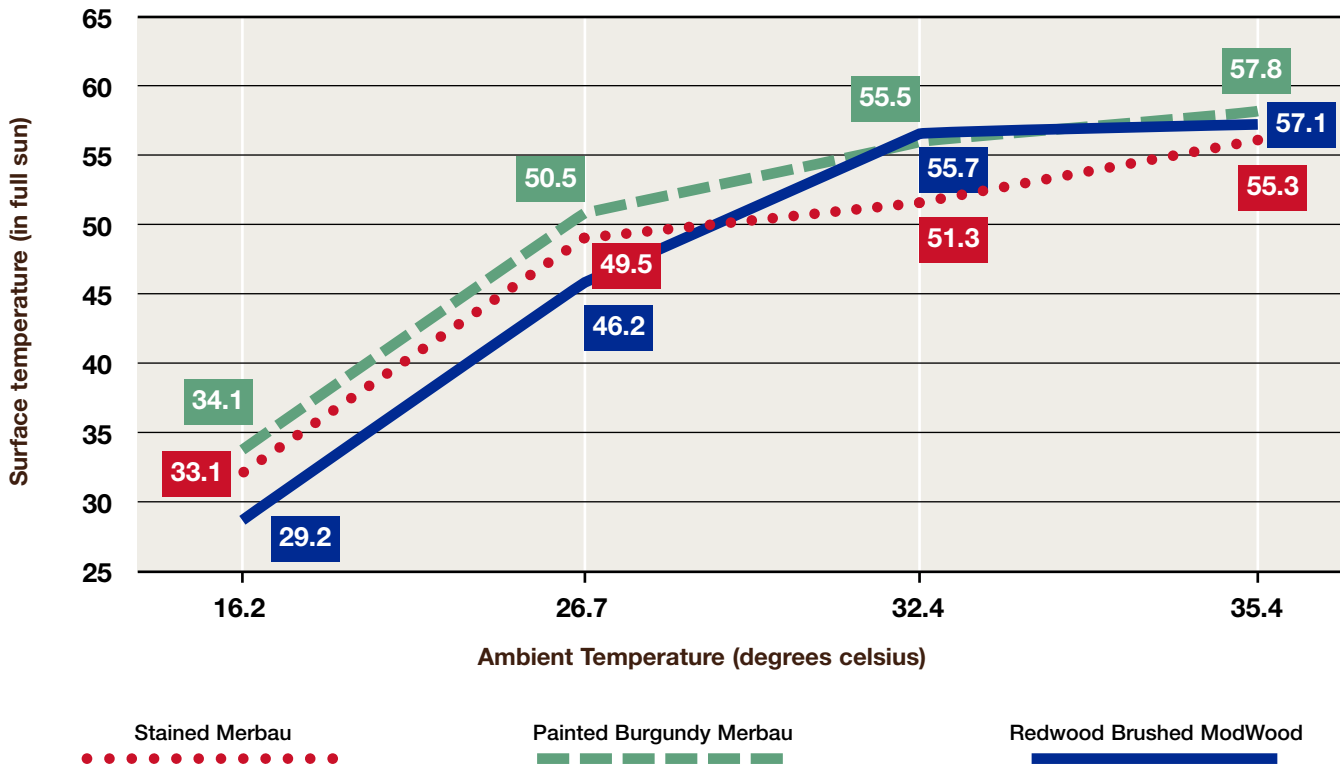
**Slip resistance**
**Slip resistance testing by CSIRO Tested to AS/NZS 4586:2004**

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 AWTA AS/NZS 1530.3 - 1999

Ignitability Index	13
Spread of flame Index	7
Smoke developed Index	4
Heat evolved Index	5

tested by AWTA ASISO 9239.1 - 2003 Part 1

	mean
Critical Heat Flux	3.0 KW/m <sup>2</sup>
Smoke Value	176% min

**Typical Specific Strength Properties of Boards**

These results were based on ASTM D790 test methods, with standard size ModWood boards and typical spans as used in the building industry.

**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	36.06	4677	5502	561	5501	27.61	2.73	5.65
500	36.68	4727	6780	692	6779	18.56	1.55	3.12
400	36.67	4394	8383	855	8383	11.63	0.91	1.75
300†	NA	3843	NA	NA	NA	NA	0.4	0.82

**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	36.97	4937	3958	404	3950	19.39	2.88	6.17
400	38.9	5040	4613	471	4609	17.27	2.01	4.32
300	40.72	4653	6403	653	6402	10.07	0.94	1.87

**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	41.55	5575	2803	286	2800	21.39	4.2	10.21
400	40.92	5195	3129	319	3126	17.03	3.05	7.03
300	43.47	5070	4412	450	4407	9.71	1.32	2.74

† The Marina tested at a span of 300mm exceeded the range of the 10kN loadcell before yield or rupture were reached.