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## **Facsimile**

To: Dean Satchell From: Bruce Davy

Organisation: NZFFA Subject: Janka Harness & Density Results

Location: Date: 26 May 2014

Fax No.: No. of 2
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Dean,

Please note below the Janka test results for the three species of timber supplied for testing The three species were E. Nitens, American White Oak, and Tasmanian Oak were supplied for Stability testing, Janka hardness and density at test (weight/volume at test).

Table 1: Janka Hardness test summary

Janka Hardness, kN	E. Nitens	American White Oak	Tasmanian Oak
Average	3565.29	8141.67	4325.00
Minimum	1575.00	5900.00	3400.00
Maximum	6050.00	10000.00	5150.00
Range	4475.00	4100.00	1750.00
Standard Deviation	942.82	1512.50	775.08
CoV%	26.44%	18.58%	17.92%
Count	34	6	6

**Table 2:** Density at test summary

Density at test, kg/m3	E. Nitens	American White Oak	Tasmanian Oak	
Average	570.89	832.76	685.26	
Minimum	464.64	751.34	601.09	
Maximum	698.02	913.23	765.84	
Range	233.38	161.89	164.75	
Standard Deviation	56.76	62.34	71.35	
CoV%	9.94%	7.49%	10.41%	
Count	34	6	6	

**Table 3:** Moisture content at test summary

Moisture content at test, %	E. Nitens	American White Oak	Tasmanian Oak
Average	11.77	9.80	11.31
Minimum	11.43	9.24	10.72
Maximum	12.27	10.34	11.97
Range	0.84	1.10	1.25
Standard Deviation	0.23	0.41	0.48
CoV%	1.91%	4.16%	4.28%
Count	34	6	6

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The hardness tests were performed on the wider face of the timber samples provided, as it is assumed that the intended use is flooring. For the E. Nitens and Tasmanian oak samples this was the Radial face. For the American white oak samples this was the tangential face.

The Janka hardness test specimens were stored four weeks in the Engineering conditioning room – set to 20°C and 65%Rh to condition before testing.

The results of the dimensional stability tests will be provided as soon as they become available.

I trust this information meets your requirements. Please feel free to contact me to discuss this information.

Bruce Davy

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