



## STATIC LOAD TESTING REPORT

**Report No:** NM16-2090.3

**Date:** 31 May 2016

**Client:** SCIENTIA COFFINS & CASKETS  
A2 / 22 Powers Road  
SEVEN HILLS NSW 2147

**Contact:** Mr. Isaac Leung

**Order No:** REFER Issac

**Test Date:** 26 May 2016

**Scope:** The static load testing of a constructed coffin and associated hardware.  
The client requested testing to establish a Working Load Limit of 200 kg's with a Safety Factor of 2.

**Test Sample Identity:** GRECIAN URN, Cedar timber constructed coffin body, with metal/timber handles.

Paul Titterton  
NSW State Manager

Anthony Millard  
Mechanical Testing Officer  
Approved Signatory



**NATA Accredited Laboratory No: 15535**  
Accredited for compliance to ISO/IEC 17025

Samples will be disposed of within 30days of reporting unless prior arrangements are made. Test report shall not be reproduced except in full with out written approval of the laboratory. Test results described above, relate only to the samples submitted for testing.

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**Test Description:** The nominated coffin and associated hardware was subjected to a static load test. A calibrated, class A, 'S' type load cell (S/N: 80143) was used to measure the static load which was applied using ballast. Various static loads were applied and held for varying times as shown in test results.

**Test Methodology:** The nominated coffin and associated hardware was loaded with varying amounts of ballast and raised by 4 of the 6 attached handles, these being the two forward and two rearward. As close as practicable, ballast was distributed to reproduce loading imparted by a human body, i.e. higher concentration towards the torso.

Where test were performed with the lid in situ the lid fixings were not used.

Rigging incorporated load distribution beams to ensure equal loading of each of the four handles, Refer figure 1.

Engagement of the rigging with the handles was by means of choked synthetic fibre round-slings to eliminate point loading.

Varying loads were applied and held for durations shown in test results.

After each test loading the structure of the coffin, handles and attachment of handles were assessed for any permanent deflection and/or damage.

**Test Results:**

**1 Static Load Testing**

<b>Applied Test Load (Kg's)</b>	<b>Test Duration at Full Load</b>	<b>Tested With Lid</b>	<b>Results and Observations</b>
247 (Note 1)	30 Seconds	Yes	Supported test load with no evidence of permanent damage or deformation to handles and/or coffin.
400 (Note 1)	5 Minutes	Yes	Supported test load with no evidence of permanent damage or deformation to handles and/or coffin. Refer figure 2.

Note 1: Applied test loads are total of casket and ballast.

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**Test Conclusion:** The coffin witheld a load of 400kgf for a period of 5 minutes without evidence of failure, permanent deformation, damage or loss of functionality. This establishes a Working Load Limit of 200kg's with a Safety Factor of 2.



Figure 1: General test configuration.

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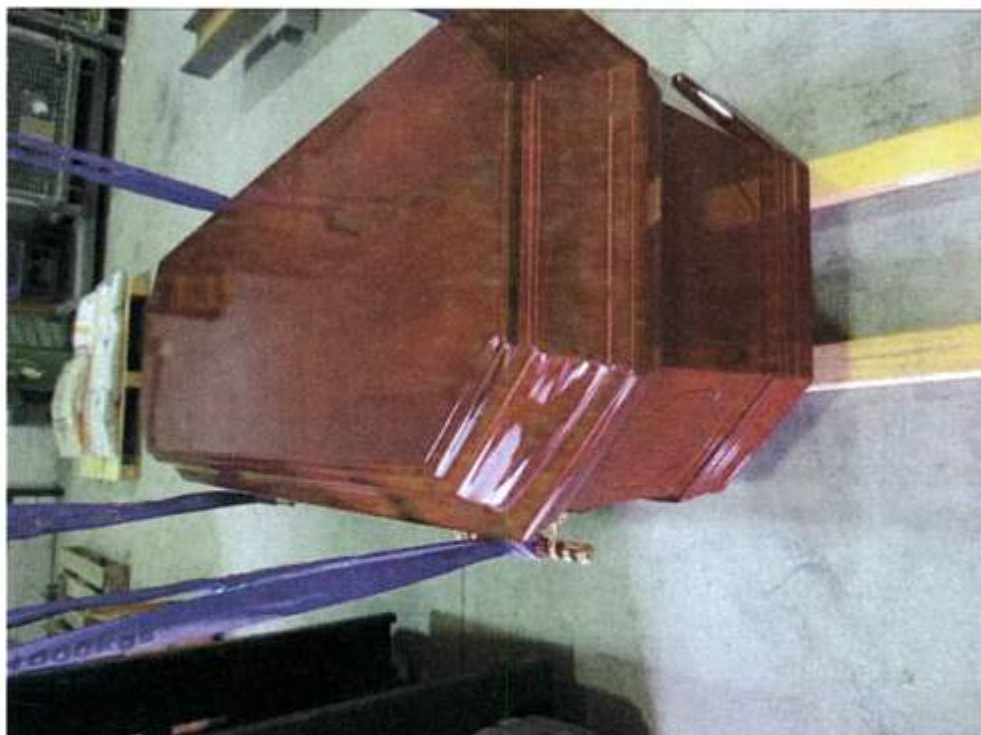


Figure 2: Coffin supporting 400kg's.