



Load Test Report

Report Number: 29765 Reissue A March 30, 2016
Client: KLEVAKLIP SYSTEMS PTY LTD Page 1 of 3
Address: Unit 3 / 176 South Creek Rd, Cromer NSW 2099
Client Contact: Greg Doupe
Order Number: Refer Greg Doupe
Test Requirements: Load test of floor joist as per client's instructions.
Site Address: Unit 3 / 176 South Creek Rd, Cromer NSW 2099
Sample Identification: Nylon joist hangers
Test Dates: 12/2/16

Note: This report replaces report number 29765 (dated 22/2/16), typographic error in compliance statement has been amended.

Test: AS 1170.1-2002 Part 3.4

Test Equipment: Hydraulic Pump and Ram, test blocks, 3000kg Hollow Load Cell, laser measure, stopwatch

Test Setup: Joist hangers were installed by client with joist span on 1.5m and 0.45m centres. Loads were distributed over the majority of the span via a steel plate testing four joist hangers simultaneously.

Test Requirement:

- The joist hangers were tested as follows to loads from AS 1170.1-2002 part 3.4:
 - A preload of 50% of the test load was applied for one minute in the same way the test load was to be applied (refer to results table for various applications) and base measurement recorded.
 - A serviceability load of 12kN was applied to the joists via the plate for 15 minutes. Displacement was measured.
 - Load was removed and the permanent set was measured.
 - The joist brackets were retested to an ultimate load of 20kN ultimate load in the same way as the previous load.
 - Testing was repeated on two more sets of four hangers.

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http://www.alsglobal.com/~media/Files/Divisions/Industrial/Asset_Care/Asset_Care_Resources/Terms_and_Conditions/ALS-Terms-and-Conditions-Industrial-Australia.pdf

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Test Results:

Sample	Load (kN)	Pressure over area (kPa)	Observations	Deflection under load (mm)	Permanent set (mm)	Compliance
1	12	17.8	No damage or loosening	4.0	0.5	Complies
	20	29.6	No damage or loosening	6.5	0.5	Complies
2	12	17.8	No damage or loosening	3.5	1.0	Complies
	20	29.6	No damage or loosening	5.0	1.0	Complies
3	12	17.8	No damage or loosening	3.0	0.5	Complies
	20	29.6	No damage or loosening	5.0	1.0	Complies

Compliance: The joist hangers tested comply with AS1170 for serviceability loading (permanent set < 30% of deflection) and ultimate loading (no collapse under load) when loaded to the loads outlined in AS1170.1 part 3.4.

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http://www.alsglobal.com/~media/Files/Divisions/Industrial/Asset_Care/Asset_Care_Resources/Terms_and_Conditions/ALS-Terms-and-Conditions-Industrial-Australia.pdf

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Figure 1: Joist hangers test setup



Figure 2: Example of joist hanger tested