



ULTI RACK™

THE ULTIMATE VAN ROOF RACK

Sled Test Summary

TRL Project Reference: PTG304



Test Overview

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Test Centre	TRL (Product Testing) Impact Sled Facility
Test Standard	Customer specified a 20g deceleration pulse similar to Regulation 17
Test Type	Deceleration test to check integrity of vehicle roof rack and associated components
TRL Project Reference #	PTG304
Test Reference #	G304I01 and G304I02
Test Date	2 nd October 2015
Report Date	7 th October 2015

This is an abridged version of a full test report, prepared under the guidance of TRL, to be used for product marketing purposes by Van Guard. If you have any questions relating to this document please contact Van Guard - sales@van-guard.co.uk.

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1. Test Specification and Results

The tests were based on a 20g deceleration pulse, similar to Regulation 17, as requested by the client.

1.1 Test Samples

Two test configurations were planned, with further tests to be conducted if deemed necessary as a result of the outcome of the first two tests.

Test No. 1. (TRL Test No. G304I01) Large capacity roof rack (new product) with 2 off pipe carriers and 1 off ladder. Approximate test piece mas of 60-70kg.

Test No. 2. (TRL Test No. G304I02) Large capacity roof rack (new product) with ballast load (steel sheet). Approximate test piece mass of 150kg.

1.2 Test Conditions

The client requested a deceleration test to exceed 20g peak, similar to the standard Regulation 17 test pulse. For the two tests, the test piece was bolted to the sled using interface brackets supplied by the client.

1.3 Test Results

Test No. 1. (G304I01) No discernible movement of the test piece and no damage observed.

Test No. 2. (G304I02) No discernible movement of the test piece and only minor cracks to a couple of the rack cross-member clips were observed - these were so small, they appeared to have no significant effect on the integrity of the structure.

2. Photography

Video: One high speed video was recoded of each impact at a rate of 1000 frames per second

Stills: Pre and post-test photographs were taken using a digital stills camera.



Figure 1. Test setup - G304I01

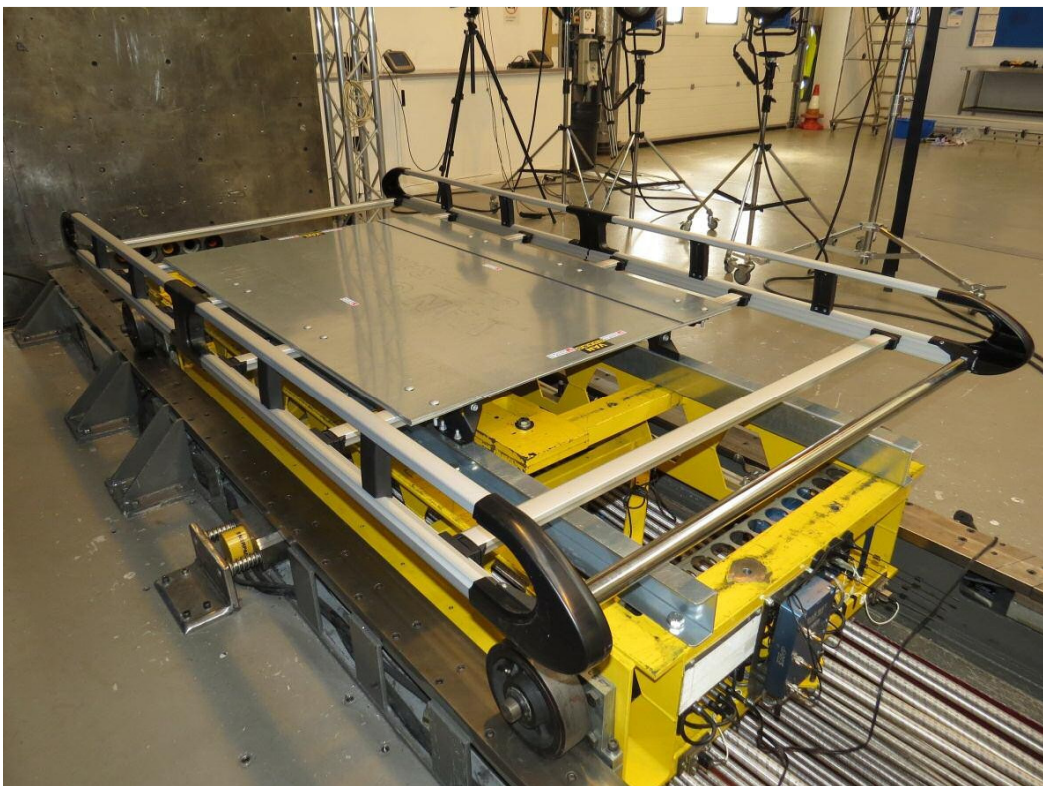


Figure 2. Test setup - G304I02

END OF REPORT