

TEST CERTIFICATE

For full test details refer to MTS Test Report MT-12/248-C

CLIENT: LENCARE
ATT:
B1 2-6 GREENHILLS AVE
MOOREBANK NSW 2170

TEST DATE: JUNE 8TH 2012

STANDARD REFERENCE: AS1428.1-2009
Design for Access and Mobility
Part 1: General Requirements for Access-New Building Work
Clause 17 (c), load was to be applied at a constant rate until the
nominated proof load of **1100 Newtons** was achieved.

PRODUCT IDENTIFICATION:
Product Code: *LK030*
Description: *Drop Down GR RL TRH*
35x775x195mm BSS
Tube Diameter: *35mm (nom.)*
Tube Material: *Stainless Steel*
Grabrail Length: *775mm (Overall)*
Hinge/Plate connection: *8 fastener holes*

TEST PROCEDURE:

The grabrail was assembled and fixed to a vertical timber stud member (*90mm x 45mm Grade MGPI0 Pine*), which was in turn secured to the base plate of a testing machine (see Fig.2). Load was applied 0.5m out from the grabrail's hinge mechanism. The loading direction was vertically downward and was applied as a concentrated force, acting directly against the SS tube. Due to the drop down grabrail's primary purpose of supporting downward force, no attempt was made to test the grabrail for lateral loading whereby the device was deemed to have insufficient strength to support lateral loads equivalent to the downward action effect. Once the nominated proof load was applied the load was maintained for 60 seconds and the grabrail was examined for signs of distress including excessive bending and fastener withdrawal. Once the 60s proof test period had elapsed, load testing was continued until the peak force was achieved and failure of the grabrail or connection occurred.

LOAD TEST OBSERVATIONS:

The grabrail supported the proof test load of 1100N without failure and there was no sign of excessive bending, plastic deformation or withdrawal of the screw fasteners. Upon ultimate load testing a peak force of **3385N** was recorded before the upper most screw fastener withdrew from the timber. Post test examination of the fold down grabrail revealed localised indentation of the tube had occurred at the point of application of load. There was no other damage to the grabrail or hinge plate connection itself.

TEST COMMENTS:

In accordance with AS 1428.1 Clause 17 (c), the test item as reported herein has passed the specified proof load testing requirements of 1100 Newtons.

The factor of safety based on the ultimate test load of 3385N is computed to be 3.08.