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TEST CERTIFICATE

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

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

TEST DATE: MAY 23RD 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:	*1527P*
Description:	*Grab Rail 32x1200 Conc Poly Pol SS*
Tube Diameter:	*32mm (nom.)*
Tube Material:	*Stainless Steel*
Grabrail Length:	*1200mm (Centre to Centre)*
Elbow/Flange connection:	*5 fastener holes*

TEST PROCEDURE:

The grabrail was assembled and fixed to a length of timber beam (*90mm x 45mm Grade MGP10 Pine*) which was in turn secured to the base plate of a testing machine. In order to simulate the grabbing action of a human hand, a fabric lifting sling was wrapped around the grabrail tubing. The end of the sling was then coupled to the testing machine's loading device. Load testing was conducted at the mid-span position and at one end of the grabrail test item. At both loading points, load was applied in the horizontal outward direction (tension action of screw fasteners) and in the vertical downward direction (shearing action of screw fasteners). 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:

End flange vertical load test The grabrail supported the proof load test without failure or excessive deformation. Upon reloading the grabrail, a peak load of **1742N** was achieved.

Mid-span vertical load test The grabrail supported the proof load test without failure or excessive deformation. Upon reloading the grabrail, a peak load of **1805N** was achieved.

End flange horizontal outward load test The grabrail supported the proof load test without failure or excessive deformation. Upon reloading the grabrail, a peak load of **4645N** was achieved.

Mid-span Horizontal outward load test The grabrail supported the proof load test without failure or excessive deformation. Upon reloading the grabrail a peak load of **3093N** was achieved.

TEST COMMENTS:

In accordance with AS 1428.1 Clause 17 (c), the test item as reported as passed the specified proof load testing requirements of **1100 Newtons**. The factor of safety based on the lowest recorded test load of 1742N is computed to be 1.58.