



## **Cyclone Testing Station**

School of Engineering and Physical Sciences James Cook University Townsville Qld 4811 Australia

Telephone (07) 4781 4722 Facsimile (07) 4781 6788 Email: jcu.cts@jcu.edu.au www.jcu.edu.au/cts

## **TEST SUMMARY SHEET – TS915**

Reappraisal Date of Test Summary Sheet: 31 December 2017 (See Note 2 below)

Simulated wind driven debris impact testing was conducted on Roll-A-Shutter Door Assemblies. The testing was performed with the use of new materials provided by B & D Australia Pty Ltd.

**Description of Roller Shutter and Set-Up Tested** 

Product Name: Roll-A-Shutter Door Assemblies

Roller Shutter Assembly:

Door curtain formed by interlocking slats supported in guide tracks with wind locks

Roller Shutter slat

Dimensions:

1.2 mm BMT, G300 steel with an overall height of 110 mm and a cover height of 100 mm

Roller Shutter Wind Locks:

Cast steel 50 mm wide and 40 mm long with upturned lip 15 mm high and 7 mm

thick with a recessed segment on the inside of the lip creating a 'beak' profile.

Roller Shutter Guide Track:

 $85 \times 50 \times 3.0$  mm steel 'C' channel with  $40 \times 12$  mm flat steel bar plug welded at

250 mm spacing to the inner face of the channel.

Roller Shutter Guide Lugs:

5 mm thick  $48 \times 20$  mm "angle" cross section lugs welded at 250 mm centres

Manufacturer's Details Name of Manufacturer:

B & D Australia Pty Ltd

Address of Manufacturer:

34-36 Marigold Street, Revesby, NSW 2212

**Report and Test Details** 

Report Details:

Cyclone Testing Station Report No. TS915, dated 11 October 2013

Report Title: Test Regime: Simulated Windborne Debris Impact Testing of Roll-A-Shutter Door Assemblies Impact Testing to AS/NZS 1170.2:2011 in accordance with AS/NZS 4505:2012

## **Test Results**

Impact Location	Measured Impact Velocity (m/s)	Results and Observations
In corner of door on interface between two slats	>36	Pass: slats permanently deformed at impacted site. One clip disengaged from guide but remained in the guide leaving small opening at end of adjacent slats.
Midspan of door curtain, on one slat	>36	<b>Pass:</b> permanent deformation of several slats. No penetration or separation of slats.
Nominal centre of curtain height, within 300 mm from edge on one slat	>36	Pass: slats permanently deformed at impacted site. One clip disengaged from guide but remained in the guide leaving small opening at end of adjacent slats.
Grouped near midheight of door	40.3, 40.3, 35.9, 40.9, 42.0	Pass: small indentations no penetrations

## **Conditions of Use**

Refer to Report No. TS915, (contact B & D Australia) for full details of the Roller Shutter installation, test methods and results:

These test results are based on legislation and standards that are current at the time of issue and may be subject to change. Therefore this Test Summary Sheet should be reappraised by the date noted.

Signed

Date

Mr/S. J. Ingham

Engineer

Mr. C. J. Leitch

Senior Consulting Engineer

110/2013