
TEST REPORT



POOL FENCE



CLIENT – SILVER STONE HARDWARE PTY LTD

PRODUCT – FLAT TOP ALUMINIUM PANEL

TESTED BY

AZUMA DESIGN PTY LTD

AZT0163.20

NATA ACCREDITED LABORATORY NO. 15147

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Test results in this report are relevant only to the sample tested

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

1 Customer Requirements

To test the pool fence sample according to AS1926.1 Set 2012- Swimming Pool Safety Standards Set- Section 3- Loading Requirements. Only the applicable tests for this type of sample shall be carried out.

2 Test Sample Information

2.1 General Information

Product Name/Number	Flat Top Aluminium Panel 2400 mm
Customer	Silver Stone Hardware Pty Ltd
Address	56-62 Bryant St, Padstow NSW 2211
Azuma Test Number	AZT0163.20
Date of Test	18/05/2020
Test Sample	Supplied by customer in good condition
Overall Size	2400 mm (Width) x 1200 mm (Height)
Test Sample Description	Two aluminium box sections with through holes in the bottom rail and holes on a single side in the top rail. Aluminium round tubes pickets are welded into the rails. Sample is powdercoated black.

2.2 Barrier

Material	Aluminium	
Overall Dimensions	Horizontal	25 mm x 38 mm x 2400 mm
	Vertical	Ø16 mm x 1.2 mm x 1195 mm
Gap between Vertical Elements (< 100 mm)	70 mm	
Spacing between Vertical Elements	86 mm	
Gap between Horizontal Elements (> 900 mm)	1147 mm	
Total Product Height Greater than 1100 mm	1200 mm	
Gap between bottom of barrier and finished ground level (< 100 mm)	N/A, Test Sample not installed	

2.3 Gate

Not part of supplied test sample

2.4 Posts

Not part of supplied test sample

2.5 Hardware

Not part of supplied test sample

3 Strength and Rigidity of Barrier Openings

3.1 Procedure

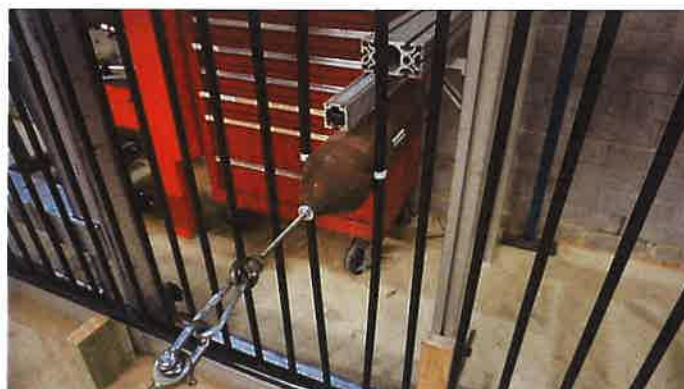
From AS 1926.1 - 2012 - Appendix A - Test for Strength and Rigidity of Barrier Openings.

1. Secure the panel into the supporting structure (jig) in the vertical position.
2. Hang the test object from the supporting structure. The test object shall be suspended horizontally at two points by using a suspension method that minimizes the effects of friction and allows free movement, as shown in Figure A1 of AS 1926.1.
3. Attach the force measuring device to the conical end of the test object, as shown in Figure A1 of AS 1926.1. Connect the other end of the force measuring device to the force activating device.
4. Each panel shall be tested in three locations, across the width of the panel at the middle of each third of the panel.
5. Place the conical end of the test object into the opening being tested and steadily apply a force up to 150 N, in an attempt to force the object through the opening. Should the test object oscillate during the test it shall be stabilized.
6. Record the force at which the test object pulled through the panel or that it failed to pull through the panel.

3.2 Results

Force Location	Peak Force (minimum 150 N)	Result
Left Third Centre	251.1 N	Pass
Middle Third Centre	288.7 N	Pass
Right Third Centre	206.4 N	Pass

3.3 Pictures



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4 Strength of Posts and Footings

Not part of supplied test sample

5 Strength of Fencing Components

5.1 Procedure

From AS 1926.1 - 2012 - Appendix C - Test for Strength of Fencing Components.

1. Connect the force measuring device to test object.
2. Place the flat end of the test object against the test component at its most flexible point.
3. Using the force measuring device, apply a pre-load force of 50 N for a minimum of 30 seconds. Remove the force and measure the zero load displacement.
4. Using the force measuring device apply a force of 330 N, without shock, for a minimum of 30 seconds.
5. Remove the test force and measure and record the amount of permanent deformation of the component relative to the zero load displacement.
6. Inspect the component for –
 - a. breakage or sign of fracture of any component; and
 - b. Loosening of any component that will impair the effectiveness of the panel.

5.2 Results

Horizontal	
Preload Force	50 N
Time Held	30 seconds
Datum Measurement	31.5 mm
Force Applied	330 N
Time Held	30 seconds
Permanent Deformation	30.1 mm
Breakage or sign of fracture of any component	Nil
Loosening of any component that will impair the effectiveness of the panel	Nil
Permanent Deformation exceeds the limit of: $\frac{l}{200} = \frac{2400}{200} = 12 \text{ mm}$	1.04 mm < 12 mm
Result	Pass

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Vertical	
Preload Force	50 N
Time Held	30 seconds
Datum Measurement	37.6 mm
Force Applied	330 N
Time Held	30 seconds
Permanent Deformation	33.8 mm
Breakage or sign of fracture of any component	Nil
Loosening of any component that will impair the effectiveness of the panel	Nil
Permanent Deformation exceeds the limit of: $\frac{l}{200} = \frac{1149}{200} = 5.74 \text{ mm}$	3.80 mm < 5.74 mm
Result	Pass

5.3 Pictures



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6 Flexible Materials & Components

Not part of supplied test sample

7 Strength Test for Rigid Components of Gate Units

Not part of supplied test sample

8 Durability of Gate Units

Not part of supplied test sample

9 Additional Testing for Gate Units

Not part of supplied test sample

10 Conclusion and Signatories

10.1 Conclusion

From the results achieved, it is evident that the sample satisfied the tested requirements as per AS1926.1-2012 Swimming Pool Safety Standards Set.

10.2 Signatories

Tested By:

Ash Horne

Signature:

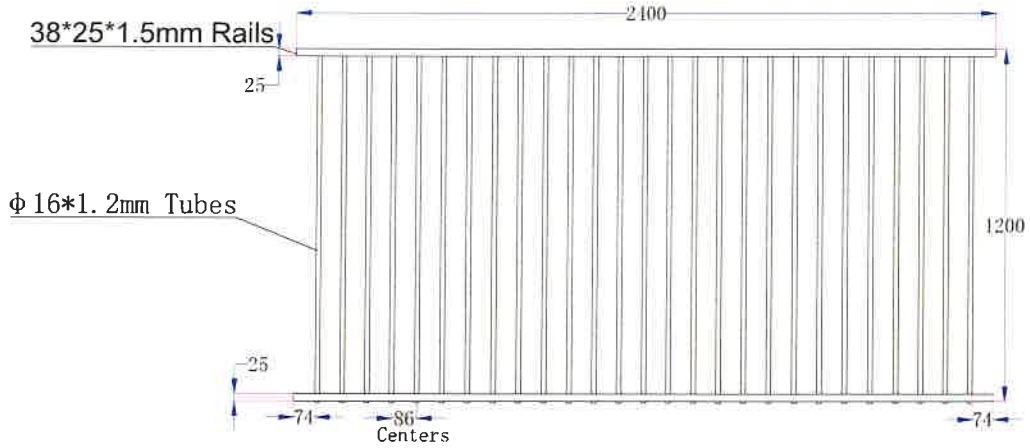
AHorne

Date:

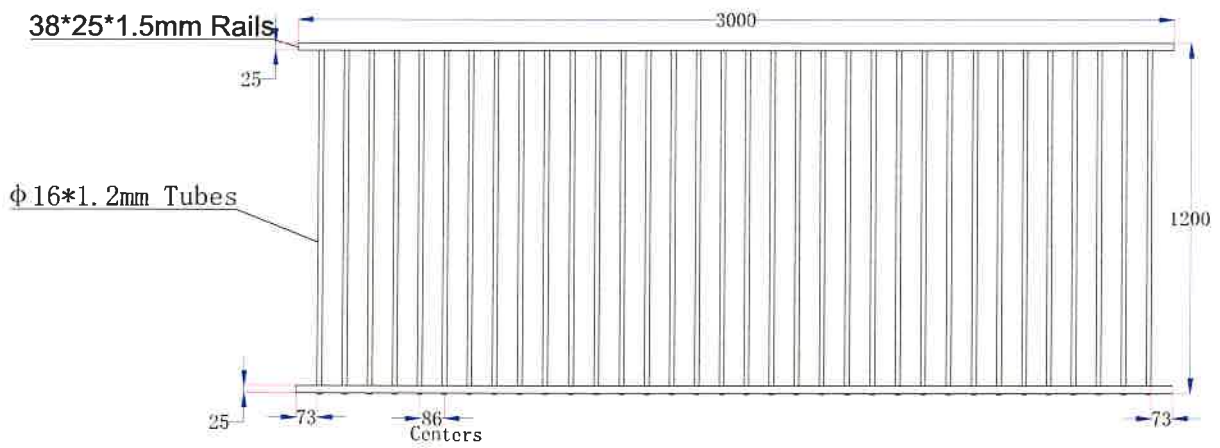
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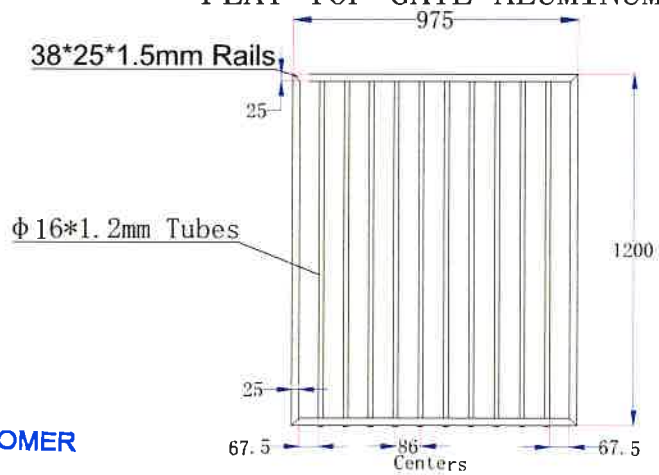
FLAT TOP PANEL ALUMINUM



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FLAT TOP GATE ALUMINUM



INFORMATION SUPPLIED BY CUSTOMER