

ASSA ABLOY AUSTRALIA
235 Huntingdale Rd
Oakleigh, VIC 3166

TEST REPORT 6178

Security Window Grille

FOR

**(Prowler Proof- Gershwin
122 Buchanan Rd
Banyo
QLD)**



NATA Accredited Laboratory
Accreditation No.: 14812

This document is issued in accordance with
NATA's accreditation requirements

Accredited for compliance with ISO/IEC
17025-Testing

Date of Issue: 20/02/2019

**Test Report
Security Window Grille**

Test Report Number:	6178	PAM Number:	
Manufactured By:	Prowler Proof Gershwin	Date of Submission:	
Tested By:	D Gough	Date:	6/02/2019
Certified By:	C Korvin	Date:	6/02/2019
Witnessed By:	Adam How	Date:	6/02/2019

Details of Test Window

Type and Class:	Movable Class B
Make or Model:	Hinge Window Security Screen with Forcefield security mesh
Sample Number:	P01-000255
Frame Size:	1640 x 1045mm
Framing Material:	Pine
Constructional Description of Test Security Window Grille:	
An Aluminium hinged window security screen containing woven stainless steel mesh infill	

Details of Test Window Infill

Type and Fabrication Method:	316 Stainless steel wire mechanically bonded to aluminium frame
Manufacturer's Name / Part Number:	Forcefield 141412
<u>Type 1 Mesh Infill (if applicable)</u>	
1) Number of Intersected Strands in a 150mm Circle:	
2) Breaking Force in Shear of One Strand (min 3kN):	
Multiplication of Above Points 1 and 2 (min 30kN):	
<u>Type 3 Mesh Infill (if applicable)</u>	
Material Type and Grade:	316 Stainless Steel mesh
Mass per m² (kg):	Not given
Knife Shear Test:	Meshtec International CER-KS19-001 TISI Lab 0243



(Above details supplied by customer not by testing authority)

**Test Report
Security Window Grille**

Dynamic Impact Test – AS 5039/5041-2003

Measurement Before Impact Test at Impact Point (datum reading): 7mm			
Test	Remarks	Pass	Fail
Impact One:	18mm deformation	Yes	
Impact Two:	21mm deformation	Yes	
Impact Three:	21mm deformation	Yes	
Impact Four:	23mm deformation	Yes	
Impact Five:	23mm deformation	Yes	
150mm Diameter Probe			
Infill Type Probe test:	Yes passes <3mm requirement		

Jemmy Tests – AS 5039/5041-2003

Location	Remarks	Pass	Fail
Centre Locking Point:	No preliminary access points could be created to apply the jemmy test fixture. Passes by default	Yes	
Bottom Locking Point:	As above	Y	
Top Locking Point:	As above	Y	
Centre Hinge:	As above	Y	
Bottom Hinge	As above	Y	
Top Hinge:	As above	Y	

Infill Pull Tests – AS 5039/5041-2003

Location	A 450mm Maximum	B 150mm Maximum	C 100x100 mm Maximum	D	E	Pass	Fail
Centre Grille (1.5kN):							
Horizontal, Locking Point (2.0kN) (Class B,C+D only):							
Top Corner, Lock Side (1.5kN @ 18°):							
Bottom Corner, Lock Side (1.5kN):							
Bottom Non-Locking Corner (1.5kN @ 45° + 18°):							

A - Maximum size of any gap between grille and grill frame or grille frame and door frame under load (dynamic).

B - Maximum size of any gap between grille and grill frame or grille frame and door frame after load (static).

C - The size of any gap caused by the infill breaking away from the security grille framing.

D - Whether the grille remained in a fixed position.

E - Whether the locking device maintained the door in a locked position.

Identification Details for Security Window Grille
Submitted for Type Testing in Accordance to AS 5039/5041-2003
 (Informative)

General

Model Number / Name:	Hinged Window Security Screen with Forcefield Security Mesh	This information to be clearly marked on test window.
Sample Number:	P01-000255	
Manufactured By:	Prowler Proof	
Date of Submission:	6/2/2019	
Description:	An Aluminium hinged window security screen containing woven stainless steel mesh infill	
DRAWINGS: COMPLETE ATTACHED SHEETS (Figure 1 and 2) (To show additional specific details of door construction such as internal stiffening, hinging, etc., attach further sheets as necessary)		

Framing Section

Type:	Extruded Aluminium		
Manufacturer's- Name:	Capral	Section Number:	P01-000208& P01-000209
Attached Dimensional Drawing- Number:	P01-000208/P01-000208	Issue:	1/1
Material Type and Grade:	6060 T5		
Surface Finish:	Powder coated		
Mass per Metre Length (kg):	0.798kg/m		
Mounting Frame Material:	Pinus radiata		
(Attach drawings if necessary)			

Corner Stake

Type:	None used-corner welded		
Manufacturer's- Name:		Section Number:	
Attached Dimensional Drawing- Number:		Issue:	
Material Type and Grade:			
Surface Finish:			
(If a corner stake is not used, describe the method of joining the frames)			
Fastener Details:			
Type:	Welded		
Part Number:			
Material	Alum <input type="checkbox"/>	x <input type="checkbox"/>	St.Steel <input type="checkbox"/>
			Monel <input type="checkbox"/>
			Steel <input type="checkbox"/>
			OTHER <input type="checkbox"/>
Surface Finish:	Machine finish converted and powder coated to Qualicoat standards		
Length and Diameter:			
(Attach drawings if necessary)			

Mid Rail (If applicable)

Type: None																			
Manufacturer's-	Name: _____																		
Attached Dimensional Drawing-	Section Number: _____																		
Material Type and Grade:	Number: _____																		
Mass per Meter Length (kg):	Issue: _____																		
Surface Finish:																			
Means of Securing to-	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Frame:</td> <td>Weld</td><td></td> <td>Screw</td><td></td> <td>Rivet</td><td></td> <td>Other</td><td></td> </tr> <tr> <td>Infill:</td> <td>Weld</td><td></td> <td>Screw</td><td></td> <td>Rivet</td><td></td> <td>Other</td><td></td> </tr> </table>	Frame:	Weld		Screw		Rivet		Other		Infill:	Weld		Screw		Rivet		Other	
	Frame:	Weld		Screw		Rivet		Other											
Infill:	Weld		Screw		Rivet		Other												
(If means of securing is OTHER, submit full details on a separate sheet)																			
Weld Details:																			
Type of Weld and Pattern: _____																			
Fastener Details:																			
Type: _____																			
Part Number: _____																			
Material	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Alum</td><td></td> <td>St.Steel</td><td></td> <td>Monel</td><td></td> <td>Steel</td><td></td> <td>OTHER</td><td></td> </tr> </table>	Alum		St.Steel		Monel		Steel		OTHER									
Alum		St.Steel		Monel		Steel		OTHER											
Surface Finish: _____																			
Length and Diameter: _____																			
Number Used and Location: _____																			
(Attach drawings if necessary)																			

Locks (If applicable)

Type: (Description of mechanism including cylinder)	Internal handle only, no cylinder, with Roto NT multipoint Euro locking and strikers	
Manufacturer's-	Name: Giesse/Schlegel and Roto	Part Number: 141419
Construction Material-	Body: Die cast zinc	Striker: Roto diecast zinc
Number of Locking Points:	6	
Handle (furniture) Identification:	141419 Flush handle-no key black	
Means of Mounting:	Mechanical fastening (screw x 2)	
Mounting Location:	Centred on left or right hand vertical depending on handing	

Infill

Type and Fabrication Method:	Stainless steel wire mechanically bonded to aluminium frame							
Manufacturer's- Name:	Forcefield			Part Number:	141412			
Attached Dimensional Drawing- Number:	NA			Issue:	NA			
Material Type and Grade:	316 Stainless steel							
Surface Finish:	Black low sheen							
Diameter of Type 3 Infill:	0.8mm diameter wire							
Means of Securing:	Weld	<input type="checkbox"/>	Screw	<input type="checkbox"/>	Rivet	<input type="checkbox"/>	Other <input checked="" type="checkbox"/>	
(If means of securing is OTHER, submit full details on a separate sheet)								
Weld Details:								
Type of Weld and Pattern:								
Fastener Details:								
Type:				Part Number:				
Material	Alum	<input type="checkbox"/>	St.Steel	<input type="checkbox"/>	Monel	<input type="checkbox"/>	Steel <input type="checkbox"/>	OTHER <input type="checkbox"/>
Surface Finish:								
Length and Diameter:								
Number Used and Location:	Indicate on figure 2							
(Attach drawings if necessary)								

Hinges (If applicable)

Type:	Roto NT			Number Fitted:	NA			
Manufacturer's- Name:	Roto			Part Number:				
Attached Dimensional Drawing- Number:				Issue:				
Material Type and Grade- Leaves:	Galvanised folded steel sheet			Pin:	Solid			
Surface Finish:								
Means of Securing:	Weld	<input type="checkbox"/>	Screw	<input checked="" type="checkbox"/>	Rivet	<input type="checkbox"/>	Other <input type="checkbox"/>	
Weld Details:								
Type of Weld and Pattern:								
Fastener Details:								
Type:	Wurth raised countersunk head drilling screw with AW Drive PIAS			Part Number:	020542 25			
Material	Alum	<input type="checkbox"/>	St.Steel	<input type="checkbox"/>	Monel	<input type="checkbox"/>	Steel <input checked="" type="checkbox"/>	OTHER <input type="checkbox"/>
Surface Finish:	Galvanised zinc							
Length and Diameter:	3.5 x 25mm							
Number Used and Location:	See attached drawing							
(indicate on figure 1) (Attach drawings if necessary)								

Track or Build Outs (If applicable)

Type: <u>NA</u>										
Manufacturer's-			Name: _____				Part Number: _____			
Attached Dimensional Drawing-			Number: _____				Issue: _____			
Material Type and Grade: _____										
Surface Finish: _____										
Fastener Details:										
Type: _____					Part Number: _____					
Material	Alum	<input type="checkbox"/>	St.Steel	<input type="checkbox"/>	Monel	<input type="checkbox"/>	Steel	<input type="checkbox"/>	OTHER	<input type="checkbox"/>
Surface Finish: _____										
Length and Diameter: _____										
Number Used and Location: _____										
(indicate on figure 1)					(Attach drawings if necessary)					

Interlock (If applicable)

Type: <u>NA</u>										
Manufacturer's-			Name: _____				Part Number: _____			
Attached Dimensional Drawing-			Number: _____				Issue: _____			
Material Type and Grade: _____										
Surface Finish: _____										
Fastener Details:										
Type: _____					Part Number: _____					
Material	Alum	<input type="checkbox"/>	St.Steel	<input type="checkbox"/>	Monel	<input type="checkbox"/>	Steel	<input type="checkbox"/>	OTHER	<input type="checkbox"/>
Surface Finish: _____										
Length and Diameter: _____										
Number Used and Location: _____										
(indicate on figure 1)					(Attach drawings if necessary)					

Rollers (If applicable)

Type: <u>NA</u>									
Manufacturer's-			Name: _____				Part Number: _____		
Attached Dimensional Drawing-			Number: _____				Issue: _____		
Number Used and Location: _____									
(indicate on figure 1)					(Attach drawings if necessary)				

Manufactured By:	Prowler Proof
Sample Number:	P01-000255

Location of Fixing Points, Locking Points, Hinges and Mid-Rail.

All Dimensions in Millimetres.

All Concealed, see DRWG P01-000255

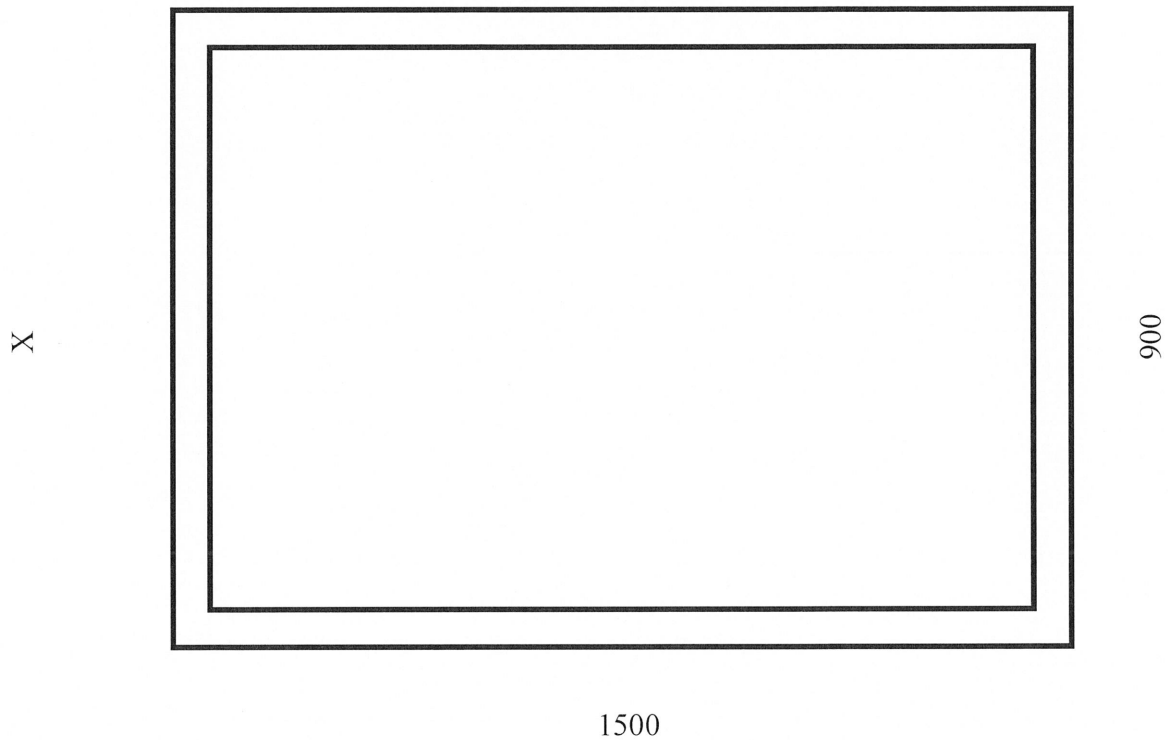
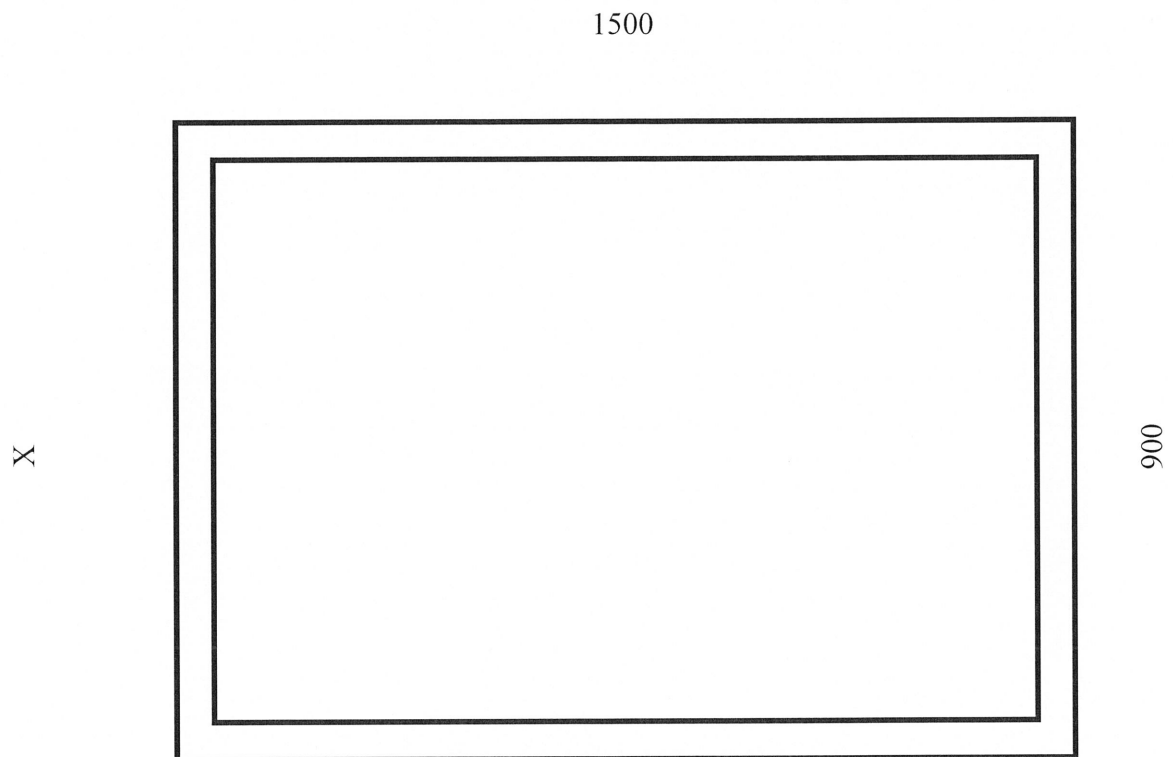


Figure 1

Manufactured By: Prowler Proof
Sample Number: P01-000255

Means of Securing Infill to Framing, Location of Welds / Fasteners

All Dimensions in Millimetres.



Mechanically bonded around full perimeter of infill

Figure 2



Meshtec International Co., Ltd.
 168 Moo 3 Chiang Mai – Lampang Road
 T. Saraphi A. Saraphi, Chiang Mai 50140



Test Certificate

Knife Shear Test

Certificate No.: CER-KS19-001

Date of Received: 21 / January / 2019

Date of Test: 21 / January / 2019

Sample Name: Premium Fixed Window

Sample Number: KS19-001 (0.8mm./316 Routine 2019)

Customer name/ address: MFG: Meshtec International

Test method: AS 5041 : 2003

Pre-Test visual check (Tick box if ok)

- to make sure regulator seals are not broken/ PM check before test
- machine force/ pressure apparatus ready for test

Calibrated by: NIMT

%Humidity = 69 % (Less than 80%)

Certificated No.: MFT-0138-18

Temp. = 23 °C At time = 09.00 A.M.

Expiry dates: 24 / May / 2020

(23± 5°C for force gauge)

RESULTS

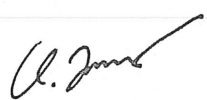
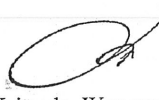
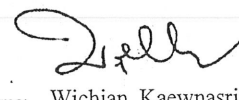
	Length of completed Penetration (mm)	New Blade used (Yes/ No)
Test No 1	<u>7.64 mm. (4 lines)</u>	<u>YES</u>
Test No 2	<u>4.01 mm. (2 lines)</u>	<u>YES</u>
Test No 3	<u>5.17 mm. (3 lines)</u>	<u>YES</u>

Observations: Test stroke 1 wire penetration 7.64 mm. (4 lines), Stroke 2 wire penetration 4.01 mm. (2 lines)
Stroke 3 wire penetration 5.17 mm. (3 lines); Total wire penetration = 16.82 mm. (9 lines).

- AS 5041 requires continuous penetration to be less than 150 mm after the third test.
- Uncertainty of test method = ± 0.110mm

PASS / ~~FAIL~~

NOTE: Cross out whichever does not apply.

<p>Tested by</p>  <p>Name: <u>Jakkrit Udom</u> Date: <u>21 / January / 2019</u></p>	<p>Reviewed by</p>  <p>Name: <u>Kritsada Wongwan</u> Date: <u>21 / January / 2019</u></p>	<p>Approved by</p>  <p>Name: <u>Wichian Kaewnasri</u> Date: <u>21 / January / 2019</u></p>
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----- End of Report -----

- TISI accredited testing laboratory No. 0243
- This Certificate is issued in accordance with the conditions of accreditations granted by the Thai Industrial Standards Institute which has assessed the measurement capability of the laboratory accredited for compliance with ISO 17025.
- This certificate may not be reproduced other than in full except with the prior written approval of the Meshtec International Laboratory.
- This report is certified only on the sample tested.

1/6/19
7/2/19

BILL OF MATERIALS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	P01-000210	HINGED WINDOW SYSTEM DESIGN	1
2	P01-000252	TEST FRAME STRUCTURAL SUPPORT TOP/BOTTOM	2
3	P01-000253	TEST FRAME STRUCTURAL SUPPORT SIDES	2
4	P01-000254	TEST FRAME STRUCTURAL SUPPORT CENTRE	1
5		Bugle Head Batten Screw 14gx50mm	25
6		Bugle Head Batten Screw 14gx100mm	10
7	ANSI B18.6.5M - M5x0.8 x 35 - F - I	Cross Recessed Pan Head Tapping Screw - Type F - Type I - Metric	24

A

B

C

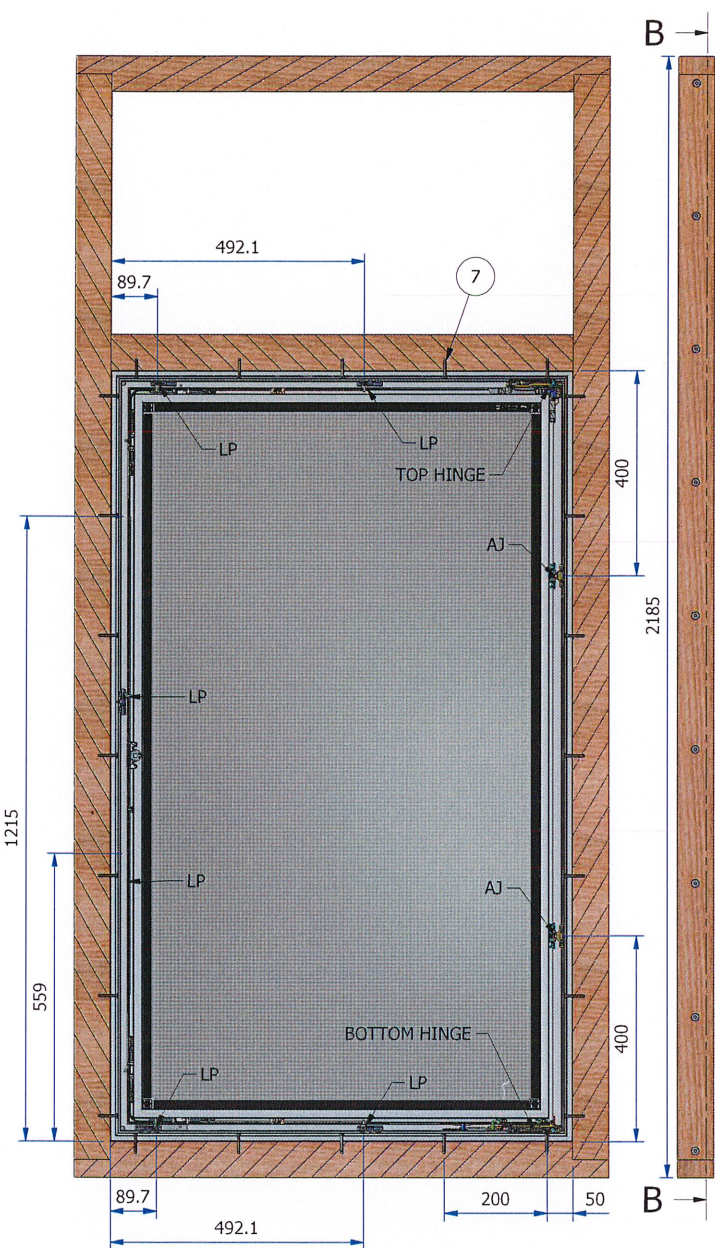
D

A

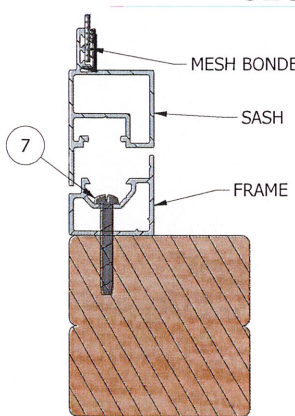
B

C

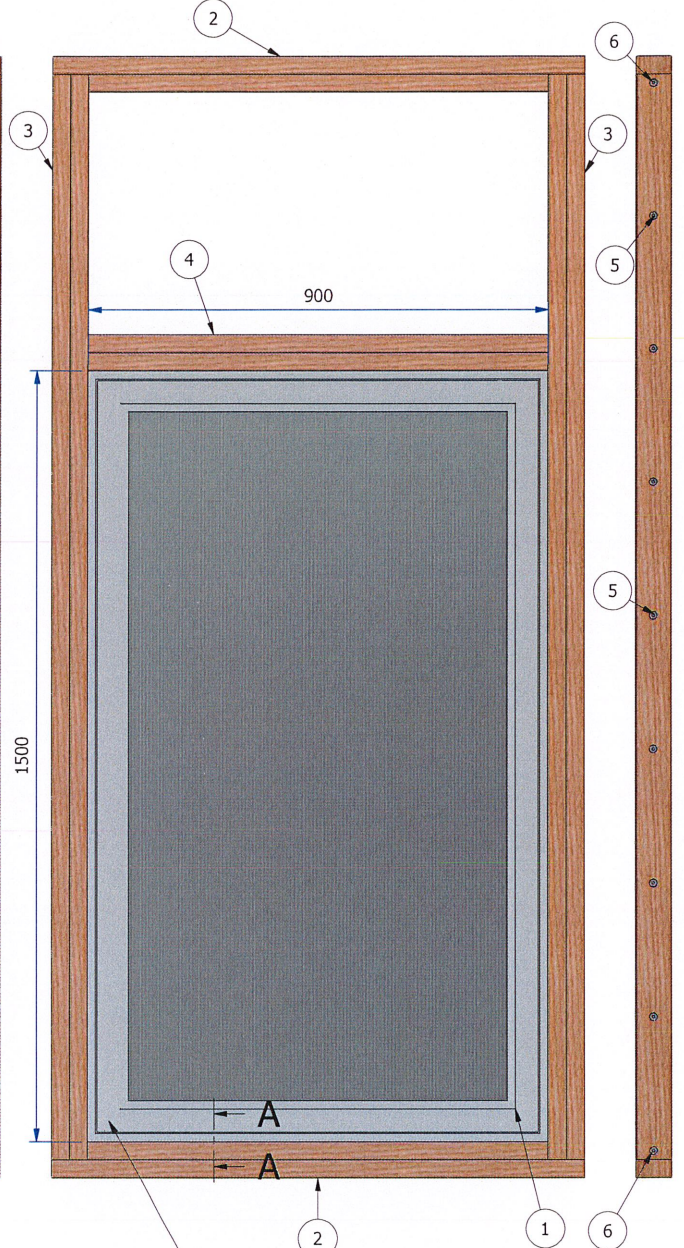
D



SECTION B-B



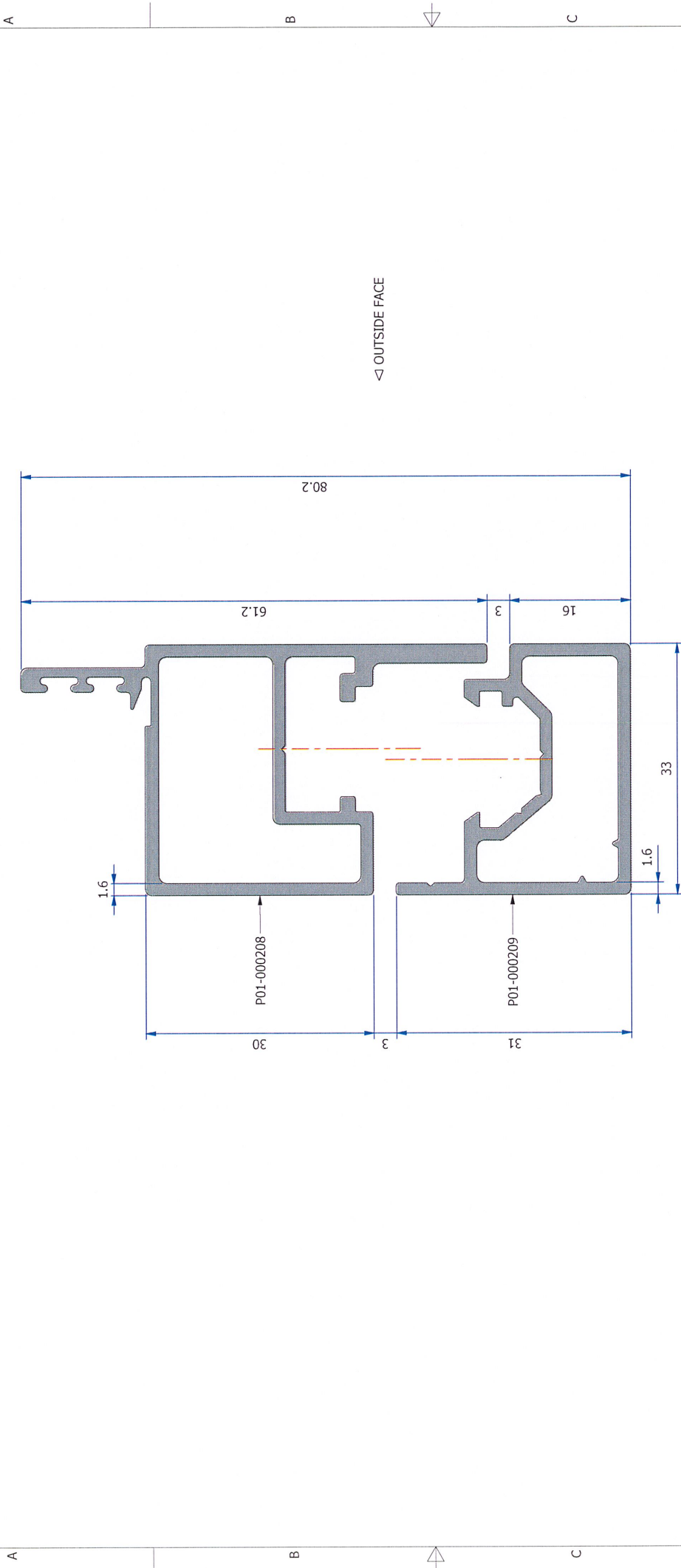
SECTION A-A



WELDED CORNERS FOR SASH AND FRAME

- NOTES:**
- AJ = ANTI-JEMMY
 - LP = LOCKING POINT

<p>Prowler Proof Gershwin Pty Ltd</p> <p>122 BUCHANAN RD BANYO, QLD. 4014 PH: +61 7 3363 0666 FAX: +61 7 3267 5411</p> <p>PROWLER PROOF</p>	<p>DRAWN A.HOW</p>	<p>DATE 18-Jan-19</p>	<p>TITLE: HINGE WINDOW SYSTEM - FORCEFIELD TEST FRAME</p>	<p>SHEET 1 OF 1</p>
	<p>CHECKED</p>	<p>DATE</p>	<p>PART NUMBER: P01-000255</p>	<p>SCALE: SEE VIEW</p>
<p>APPR.</p>	<p>DATE</p>	<p>RAW MATERIAL</p>	<p>DRAWING DOCUMENT FILE NAME: P01-000255.idw MODEL DOCUMENT FILE NAME: P01-000255.iam</p>	<p>REV: A</p>
<p>UNLESS OTHERWISE SPECIFIED</p> <p>X = ±1mm X.X = ±0.5mm X.XX = ±0.25mm</p>		<p>MACHINE FINISHES = 3.2 = ± 1°</p>	<p>ALL DIMENSIONS IN MILLIMETERS ALL THREAD TO BE METRIC COARSE ALL WELDS TO AS1554 ALL BURRS AND SHARP EDGES TO BE REMOVED</p>	<p>3RD ANGLE PROJECTION</p>
<p>DO NOT SCALE DRAWING</p>			<p>WEIGHT: N/A</p>	<p>SHEET SIZE: A3</p>



Prowler Proof Gershwin Pty Ltd 122 BUCHANAN RD BANYO, QLD, 4014 PH: +61 7 3363 0666 FAX: +61 7 3267 5411		DRAWN Draw CHECKED DATE 05-Feb-18	DATE 05-Feb-18	TITLE: HINGED WINDOW SYSTEM (CONTROL SKETCH)	SHEET 1 OF 1
APPR. DATE P01-000207 PRAWLER PROOF PROJECT CODE:		PART NUMBER: P01-000207	DRAWING DOCUMENT FILE NAME: P01-000207.dwg PLOT DOCUMENT FILE NAME: P01-000207.plt	SCALE: SEE VIEW	REV: C
RAW MATERIAL Generic		UNLESS OTHERWISE SPECIFIED X = ±1mm X.X = ±0.5mm X.XX = ±0.25mm		ALL DIMENSIONS IN MILLIMETERS ALL THREADS TO METRIC COARSE ALL WELDS TO AS1554 ALL BURRS AND SHARP EDGES TO BE REMOVED	
© THIS DRAWING AND ITS CONTENTS ARE CONFIDENTIAL AND ARE SUBJECT TO RETURN ON DEMAND AND MAY NOT BE DIRECTLY OR INDIRECTLY FOR ANY OTHER PURPOSE THAN AS EXPRESSLY DETERMINED IN WRITING BY Gershwinn Pty. Ltd.		MACHINE FINISHES = 32 = ± 1°		3RD ANGLE PROJECTION	
DO NOT SCALE DRAWING		WEIGHT: N/A		SHEET SIZE: A3	

REV. No.	REVISION DESCRIPTION	DRAWN	DATE	APP. BY	DATE
A	INITIAL RELEASE - PREVIOUS REVISIONS SUPERSEDED				
REVISION HISTORY					