A.C.N. 086 451 907

ASSA ABLOY AUSTRALIA
235 Huntingdale Rd
Oakleigh, VIC 3166

TEST REPORT (6181)

Security Window Grille

FOR

(Prowler Proof – Gershwin
122 Buchanan Rd
Banyo
QLD)

NATA
WORLD RECOGNISED ACCREDITATION

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:

Test Report Security Window Grille			
Test Report Number:	6181	**PAM Number:**	
Manufactured By:	Prowler Proof	**Date of Submission:**	
Tested By:	D Gough	**Date:**	6/2/2019
Certified By:	C Korvin	**Date:**	6/2/2019
Witnessed By:	Adam How	**Date:**	6/2/2019

Details of Test Window

Type and Class:	Movable Class B
Make or Model:	Hinge window security screen with Forcefield® security mesh
Sample Number:	P01-000261
Frame Size:	1640 x 1045mm
Framing Material:	Pine

Constructional Description of Test Security Window Grille:

An Aluminium hinge window security screen containing woven stainless steel mesh infill.

Details of Test Window Infill

Type and Fabrication Method:	Stainless steel wire mechanically bonded to aluminium frame
Manufacturer's Name / Part Number:	Forcefield® 141412

Type 1 Mesh Infill (if applicable)

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):	

Type 3 Mesh Infill (if applicable)

Material Type and Grade:	316 Stainless steel woven mesh
Mass per m^2 (kg):	Not supplied
Knife Shear Test:	Yes. Meshtec International. Cert CER-KS10-001 21/1/2019. 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): 10mm			
Test	**Remarks**	**Pass**	**Fail**
Impact One:	25mm deformation –no access	Yes	
Impact Two:	25mm deformation – no access	Yes	
Impact Three:	25mm deformation – no access	Yes	
Impact Four:	25mm deformation – no access	Yes	
Impact Five:	25mm deformation – no access	Yes	
150mm Diameter Probe			
Infill Type Probe test:	Passes <3mm gaps		

Jemmy Tests – AS 5039/5041-2003

Location	**Remarks**	**Pass**	**Fail**
Centre Locking Point:	No preliminary access points could be created to utilise the Jemmy fixture. So passes by default.	Yes	
Bottom Locking Point:	As above	Yes	
Top Locking Point:	As above	Yes	
Centre Hinge:	As above	Yes	
Bottom Hinge	As above	Yes	
Top Hinge:	As above	Yes	

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.

Force Probe Test (type 2 infill material only)

150mm Spherical Probe Test (1.5kN):	Pass		Fail	
Remarks:				

Overall Test Passes the requirements of AS5039 and AS5041

Remarks: No access was created by impacting.

No preliminary points for jemmying could be created. Even when some of the corner was bent back, the screw driver could rotate to the limit allowed in the Standard, without gaining any leverage to create damage. Jemmying deemed futile.

This signature indicates that testing has been conducted in accordance to the current AS 5039-2003, and test results reflect the test findings.

Authorised Signature ..... Print Name/Title ... C Korvin .....Lab Manager..... Date 20/2/2019

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

General

Model Number / Name:	Hinge Window security screen with Forcefield® security mesh
Sample Number:	P01-000261
Manufactured By:	Prowler Proof
Date of Submission:	6/2/2019
Description:	An aluminium hinge window security screen containing woven stainless steel mesh infill
	DRWG P01-000261

This information to be clearly marked on test window.

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- Welded

Manufacturer's-	**Name:** Prowler Proof	**Section Number:**	NA
Attached Dimensional Drawing-	**Number:** NA	**Issue:**	NA

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	x	St.Steel		Monel		Steel		OTHER	

Surface Finish:	Machine finish converted and powder coated to Qualicoat standards
Length and Diameter:	NA

(Attach drawings if necessary)

Mid Rail (If applicable)

Type:	NA			
Manufacturer's-	**Name:**		**Section Number:**	
Attached Dimensional Drawing-	**Number:**		**Issue:**	
Material Type and Grade:				
Mass per Meter Length (kg):				
Surface Finish:				

Means of Securing to-

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	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:**	Diecast 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 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		Screw		Rivet		Other	x

(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		St.Steel		Monel		Steel		OTHER	

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		Screw	x	Rivet		Other	

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		St.Steel		Monel		Steel	x	OTHER	

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: NA

Manufacturer's- **Name:** **Part Number:**

Attached Dimensional Drawing- **Number:** **Issue:**

Material Type and Grade:

Surface Finish:

Fastener Details:

Type: **Part Number:**

Material Alum ☐ St.Steel ☐ Monel ☐ Steel ☐ OTHER ☐

Surface Finish:

Length and Diameter:

Number Used and Location:

(indicate on figure 1) (Attach drawings if necessary)

Interlock (If applicable)

Type: NA

Manufacturer's- **Name:** **Part Number:**

Attached Dimensional Drawing- **Number:** **Issue:**

Material Type and Grade:

Surface Finish:

Fastener Details:

Type: **Part Number:**

Material Alum ☐ St.Steel ☐ Monel ☐ Steel ☐ OTHER ☐

Surface Finish:

Length and Diameter:

Number Used and Location:

(indicate on figure 1) (Attach drawings if necessary)

Rollers (If applicable)

Type: NA

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:	P01-000261

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

All Dimensions in Millimetres.

1500
Refer to DRWG P01-000261

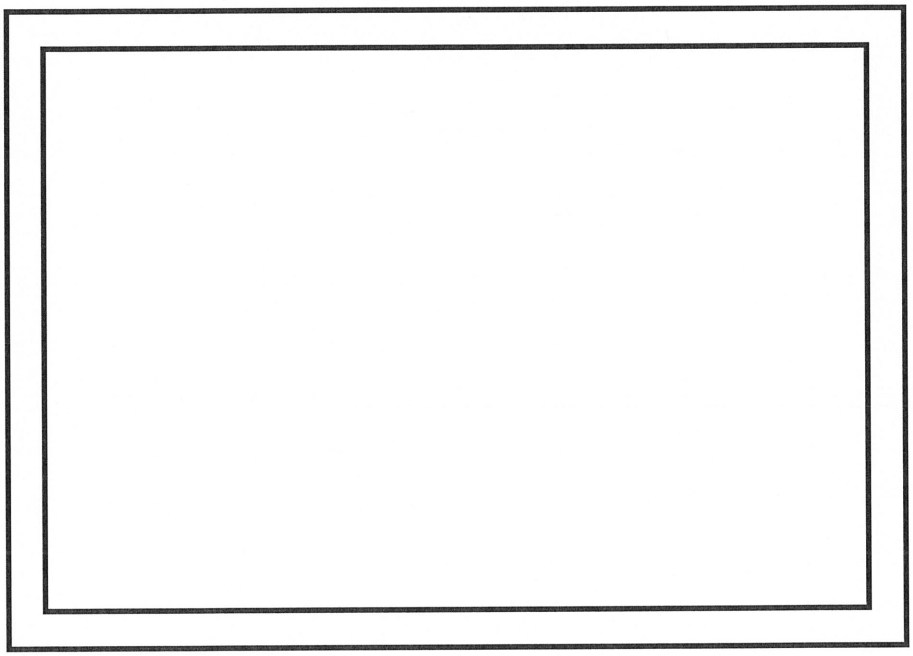


Figure 1

Manufactured By:	Prowler Proof
Sample Number:	P01-000261

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

All Dimensions in Millimetres.

Fitted to internal part of frame extrusion all around perimeter

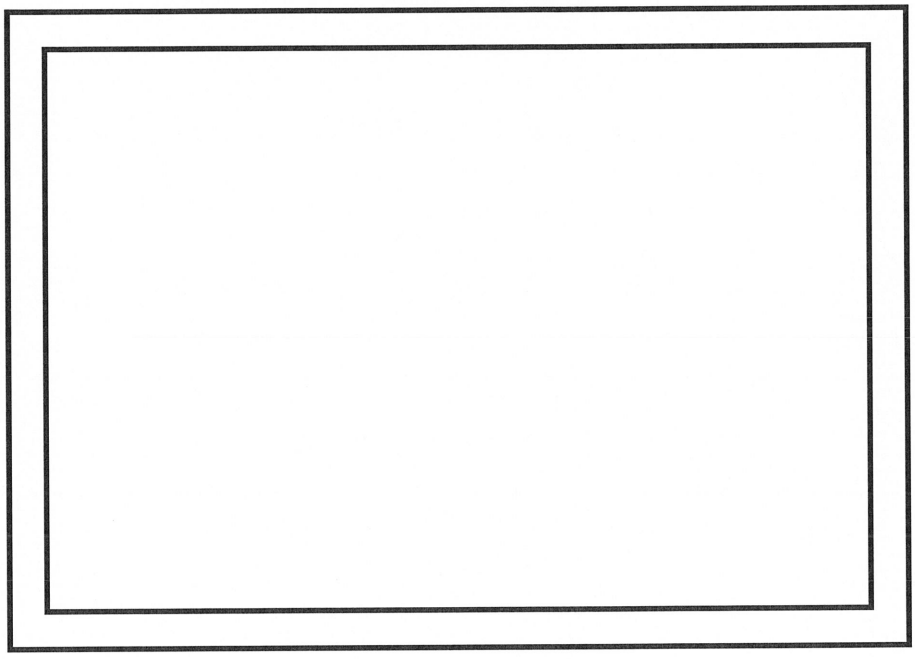


Figure 2

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

NSC-TISI-TIS 17025
TESTING 0243

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

Certificated No.: MFT-0138-18

Expiry dates: 24 / May / 2020

%Humidity = 69 % (Less than 80%)

Temp.= 23 °C At time= 09.00 A.M.

(23± 5°C for force gauge)

RESULTS

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

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.

Tested by	Reviewed by	Approved by
Name: Jakkrit Udom	Name: Kritsada Wongwan	Name: Wichian Kaewnasri
Date: 21 / January / 2019	Date: 21 / January / 2019	Date: 21 / January / 2019

---------- *End of Report* ----------

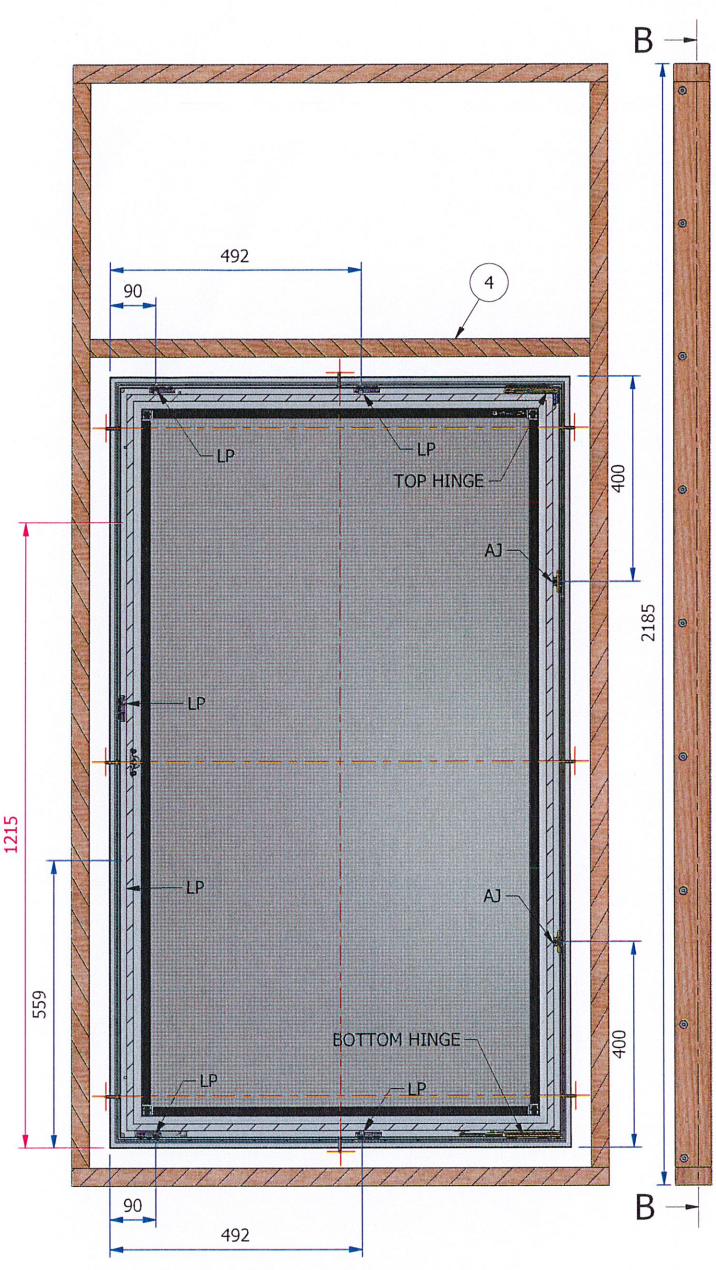
- TISI accredited testing laboratory No. 0243
- This Certificate is issued in accordance with the conditions of accreditations granted by the Thai Industrial Standards Institute which has assessed the measurement capability of the laboratory accredited for compliance with ISO 17025.
- This certificate 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.

IF IN DOUBT ASK

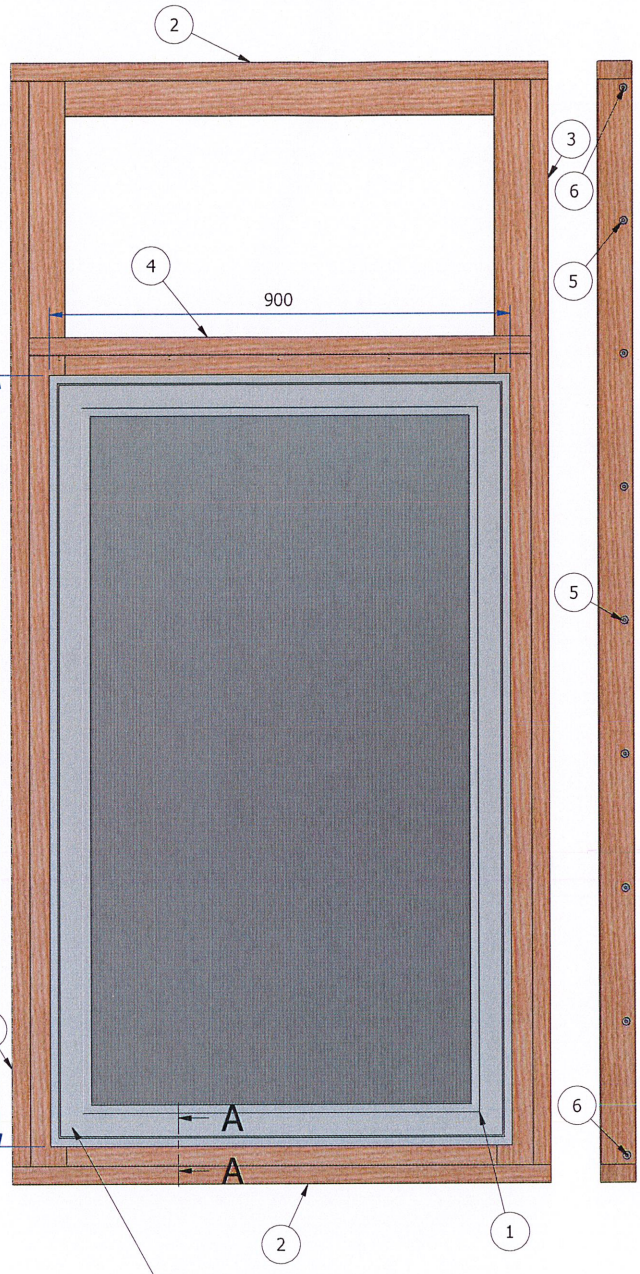
NOTES:
- AJ = ANTI-JEMMY
- LP = LOCKING POINT
- FRAME FIXED AT CENTRES, TOP, BOTTOM, LEFT, RIGHT AND 100mm FROM CORNERS ON LONGEST SIDES. (FIXING POINTS INDICATED BY RED CENTRELINES)

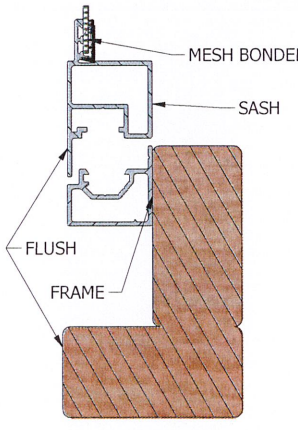
BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	P01-000210	HINGED WINDOW SYSTEM DESIGN	1
2	P01-000260	TEST FRAME STRUCTURAL SUPPORT TOP/BOTTOM	2
3	P01-000259	TEST FRAME STRUCTURAL SUPPORT SIDES	2
4	P01-000258	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	8

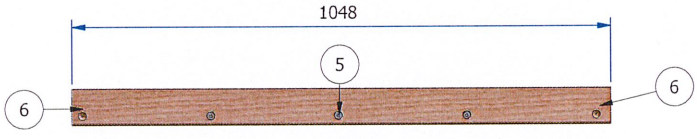


SECTION B-B





SECTION A-A



Prowler Proof
Gershwin Pty Ltd

PROWLER PROOF

122 BUCHANAN RD
BANYO, QLD. 4014
PH: +61 7 3363 0666
FAX: +61 7 3267 5411

DRAWN: A.HOW	DATE: 18-Jan-19	TITLE: HINGE WINDOW SYSTEM - FORCEFIELD TEST FRAME	SHEET 1 OF 1
CHECKED	DATE		
APPR.	DATE	PART NUMBER: P01-000261	DRAWING DOCUMENT FILE NAME: P01-000257.idw; MODEL DOCUMENT FILE NAME: P01-000257.iam; SCALE: SEE VIEW
RAW MATERIAL		PROWLER PROOF PROJECT CODE:	REV:

UNLESS OTHERWISE SPECIFIED
X = ±1mm
X.X = ±0.5mm
X.XX = ±0.25mm
MACHINE FINISHES = 3.2
= ± 1°

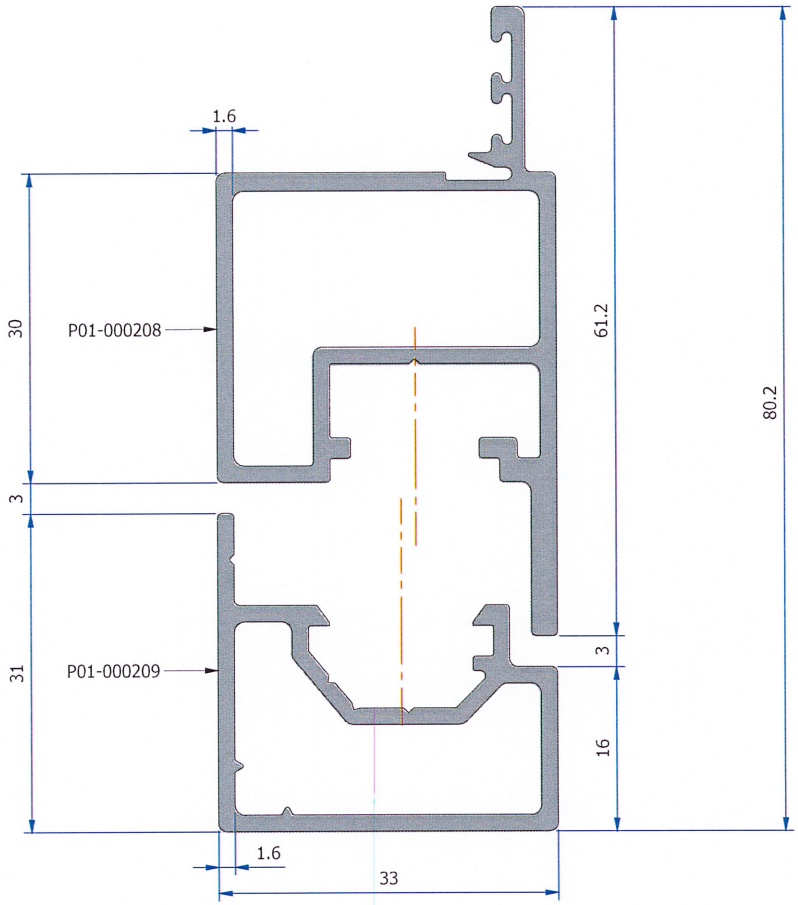
ALL DIMENSIONS IN MILLIMETERS
ALL THREAD TO BE METRIC COARSE
ALL WELDS TO AS1554
ALL BURRS AND SHARP EDGES TO BE REMOVED

3RD ANGLE PROJECTION

DO NOT SCALE DRAWING | WEIGHT: N/A | SHEET SIZE: A3

FILE NAME:PP DRAWING.idw-Jan 2017

P01-261



◁ OUTSIDE FACE

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

REVISION HISTORY

Prowler Proof
Gershwin Pty Ltd
PROWLER PROOF
122 BUCHANAN RD
BANYO, QLD. 4014
PH: +61 7 3363 0666
FAX: +61 7 3267 5411

DRAWN: Draw	DATE: 05-Feb-18	TITLE: HINGED WINDOW SYSTEM (CONTROL SKETCH)	SHEET 1 OF 1
CHECKED	DATE		
APPR.	DATE	PART NUMBER: P01-000207	DRAWING DOCUMENT FILE NAME: P01-000207.idw MODEL DOCUMENT FILE NAME: P01-000207.ipt
			SCALE: SEE VIEW
RAW MATERIAL: Generic		PROWLER PROOF PROJECT CODE:	REV: C

UNLESS OTHERWISE SPECIFIED
X = ±1mm
X.X = ±0.5mm
X.XX = ±0.25mm
MACHINE FINISHES = 3.2
= ± 1°

ALL DIMENSIONS IN MILLIMETERS
ALL THREAD TO BE METRIC COARSE
ALL WELDS TO AS1554
ALL BURRS AND SHARP EDGES TO BE REMOVED

3RD ANGLE PROJECTION

DO NOT SCALE DRAWING | WEIGHT: N/A | SHEET SIZE: A3

FILE NAME:PP DRAWING.idw-Jan 2017