#### ASSA ABLOY AUSTRALIA

## **TEST REPORT 2012034-5**

## Welded SD Hinged Security Screen Door Sample Number – 142216-1

### FOR

# Gershwin Pty Ltd Trading as Prowler Proof



NATA Accredited Laborator Number: 14426

Accredited for compliance with ISO/IEC 17025

Date of issue: 22/05/2012

## **ASSA ABLOY Australia**

	Test Repo Hinged Security So		
Test Report Number:	2012034-5	Project Number:	10237
Manufactured By:	Prowler Proof	Date of Submission:	17/05/2012
Tested By:	A Sterrenberg and C Horton	Date:	17/05/2012
Certified By:	A Sterrenberg	Date:	17/05/2012
Witnessed By:	Andries Botha	Date:	17/05/2012

#### **Details of Test Door**

	Hinged security screen door						
Welded SD							
142216-1							
Lock side:	3.27mm						
Hinge side:	3.26mm						
2040mm (H) x 870mm (W)							
Pinus Radiata.							
on of Test Se	curity Hinged Door:						
or with infill we	elded to frame. Frame corners welded						
1	42216-1  Lock side: Hinge side: 040mm (H) x Pinus Radiata. on of Test Se						

#### **Details of Test door Infill**

Type and Fabrication Method:	Extruded and expanded large diamond grille			
Manufacturer's Name / Part Number:	Prowler Proof – PPSD125			
Type 1 Infill (if applicable)				
1) Number of Intersected Strands in a 150	0mm Circle: 12			
2) Breaking Force in Shear of One Strand	d (min 3kN): 3.93, 4.00			
Multiplication of Above Points 1 and 2 (m	nin 30kN): 47.18, 48.22			

Refer attached Shear test report

(Above details supplied by customer not by testing authority)

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Report No. 2012034 -5

#### Test Report Hinged Security Screen Door

#### Dynamic Impact Test - AS 5039 / 5041

Test	Remarks	Pass	Fail
Impact One:	24mm Deflection from datum. Grille secure to frame.	1	
Impact Two:	28mm Deflection from datum. Grille secure to frame.	1	4.
Impact Three:	31mm Deflection from datum. Grille secure to frame.	1	/40
Impact Four:	31mm Deflection from datum. Grille secure to frame.	1	
Impact Five:	32mm Deflection from datum. Grille secure to frame.	1	-
150mm Diameter Probe test using R.M.F:		1	

#### Jemmy Tests - AS 5039 / 5041

Location	Remarks	Pass	Fail	
Centre Locking Point:	253Nm at full rotation of lever. Locking point secure.	1	(*)	
Bottom Locking Point:	160Nm at full rotation of lever. Locking point secure.	1	-	
Top Locking Point:	213Nm at full rotation of lever. Locking point secure.	<b>✓</b>	190	
Centre Hinge:	104Nm at full rotation of lever. Hinge point secure.	✓		
Bottom Hinge	114Nm at full rotation of lever. Hinge point secure	1		
Top Hinge:	174Nm at full rotation of lever. Hinge point secure	1	-	

#### Infill Pull Tests - AS 5039/ 5041

Location	A 450mm Maximum	B 150mm Maximum	C 100x100mm Maximum	D	E	Pass	Fail
Centre Grille (1.5kN):	1	1	<b>✓</b>	1	1	1	-
Bottom corner – Lock side (2kN @ 18°)	1	1	1	✓	1	1	
Bottom corner – Lock side (2kN @ 18°)	1	1	1	<b>✓</b>	1	1	

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

Overall Test	Pass
Remarks:	Land to the second seco
	Impact test –Pass.
	Jemmy tests – Pass
	Pull tests – Pass

This signature indicates that testing has been conducted in accordance to the current test methods of AS 5039, and test results reflect the test findings. This report is true for the test sample presented on the day of testing.

Authorised Signature

Print Name

Date

24/05/12

Accredited for compliance with ISO/IEC 17025

#### Identification Details for Security Hinged Door Submitted for Type Testing in Accordance to AS 5039/5041

(Informative)

#### General

 Model Number / Name:
 Welded SD

 Sample Number:
 1142216-1

 Manufactured By:
 Gershwin Pty Ltd trading as Prowler Proof

 Date of Submission:
 17/05/12

 Description:
 Hinged security screen door

 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- Attached Dimensional Drawing- Material Type and Grade: Surface Finish: Mass per Metre Length (kg): Mounting Frame Material:		Name:	Prowler Proof	Section Number:		
		Number:	-	Issue:		
		6060-T5				
		Powder coated				
		-				
		See attach	ed CAD drawings			
		(A	attach drawings if necessar	y)		

#### Corner Stake - N/A, Welded corners

#### Locks

Type: (Description of mechanism including	Lockwood 8654 triple point security screen door lock containing a Lockwood Euro 5 pin cylinder.						
cylinder)							
Manufacturer's-	Name:	Assa Abloy	Part Number:	8654			
Construction Material-	Body:	Cast zinc and steel backing	Striker:	8654 standard striker plate secured with 8g, 40mm screws			
Number of Locking Points:	Three (3)						
Handle (furniture) Identification:	8654 Lock furniture – Prowler Proof						
Means of Mounting:	As per manufacturer's instructions						
Mounting Location:	See attached CAD drawings						

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	This report is to be reproduced in full	

### <u>Infill</u>

Type and Fabrication Method:	Small Diamond Grille							
Manufacturer's-	Name:	Prow	ler Proof	Part Number:	PPSD125			
Attached Dimensional Drawing-	Number:	-		Issue:				
Material Type and Grade:	6063-T5							
Surface Finish: Powder coated								
Diameter of Type 3 Infill: (If applicable)	See attached							
Means of Securing:	Weld	1	Screw	Rivet	Other			
(If mean	ns of securing i	SOTHE	R, submit full deta	ails on a separate sheet)				
Weld Details:								
Type of Weld and Pattern: Wel	elded - double welded in corners then every second contact point							
Fastener Details: N/A								
			(Attach draw	vings if necessary)				

#### **Hinges**

Type: Whitco Se	ecurity Door Hinge - Ste	el Fixed Pin		Number	Fitted:	Three (3)
Manufacturer's- Name:		Assa Abloy		Part N	umber:	W831417
Attached Dimensional D	Drawing- Number:	-			Issue:	9
Material Type and Grade	e- Leaves:	Steel			Pin:	Steel fixed pin
Surface Finish:						
Means of Securing:	Weld	Sc	rew	Rivet	1	Other
	(If means of securing i	s OTHER, sub	mit full details or	a separate sheet		
Weld Details: N/A						
Fastener Details:						
Type: 5-2 blind rivet			Part Number:			
Material	Alum St.	Steel 🗸	Monel	Steel		OTHER
Surface Finish:	Stainless steel					
Length and Diameter:	5-2					
Number Used and Loca	tion: Nine (9) – see a	ttached				
(indicate on figure 1)		(/	Attach drawings	if necessary)		

Manufactured By: Prowler Proof

Sample Number: 142216-1

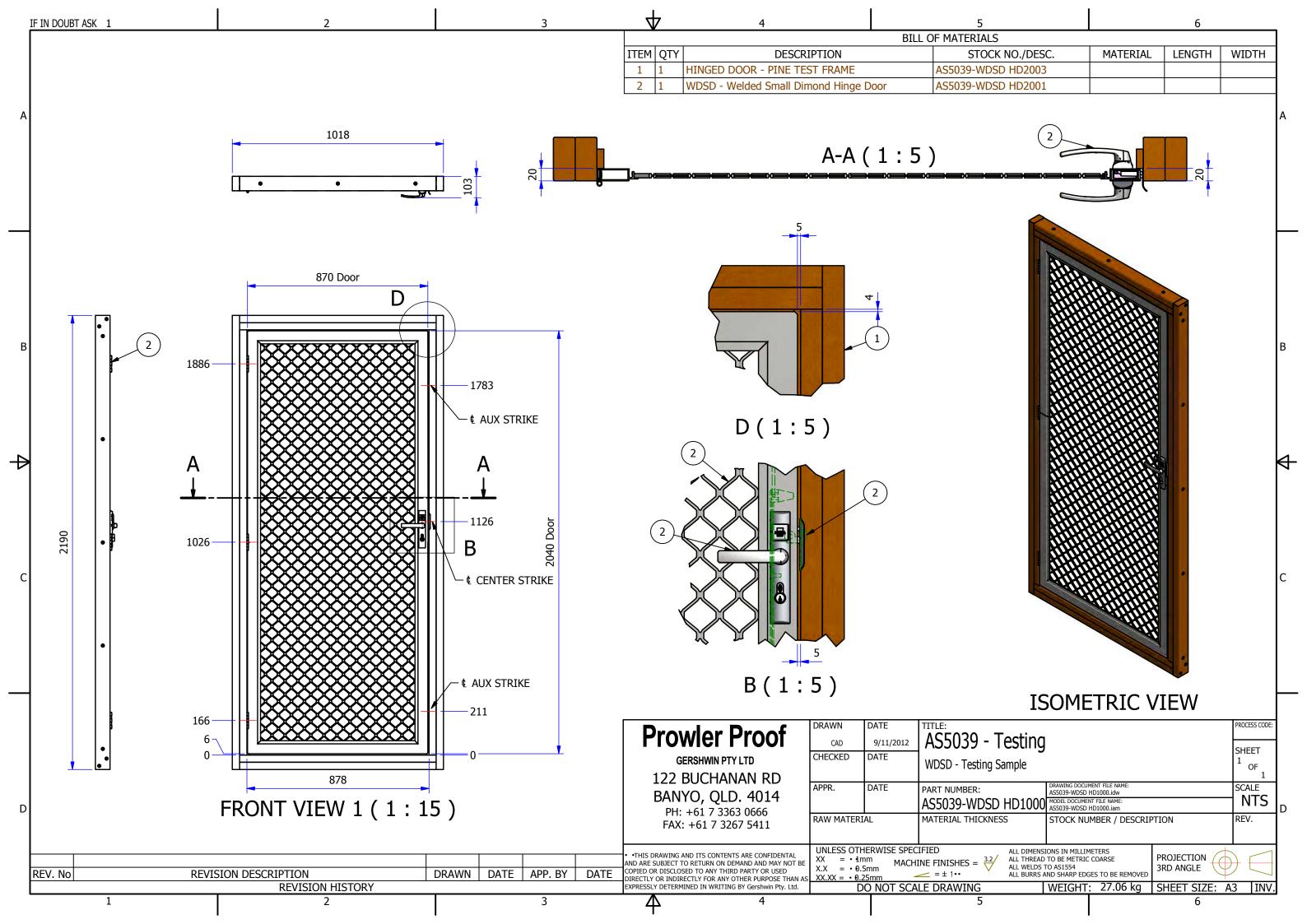
Size of Door and Location of Locking Points, Hinges and Mid-Rail - Refer attached CAD Drawing WDSD - Testing

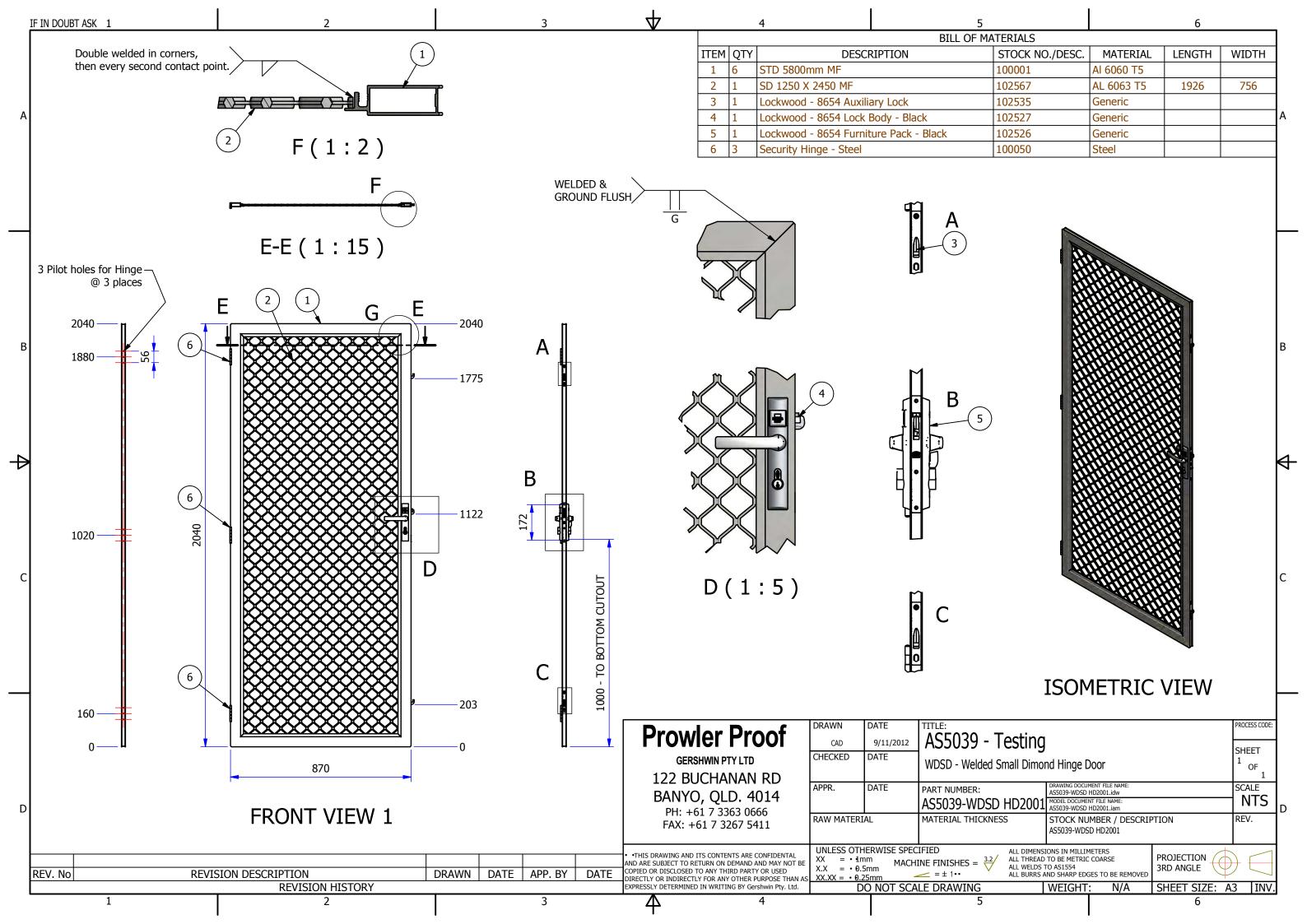
Sample.

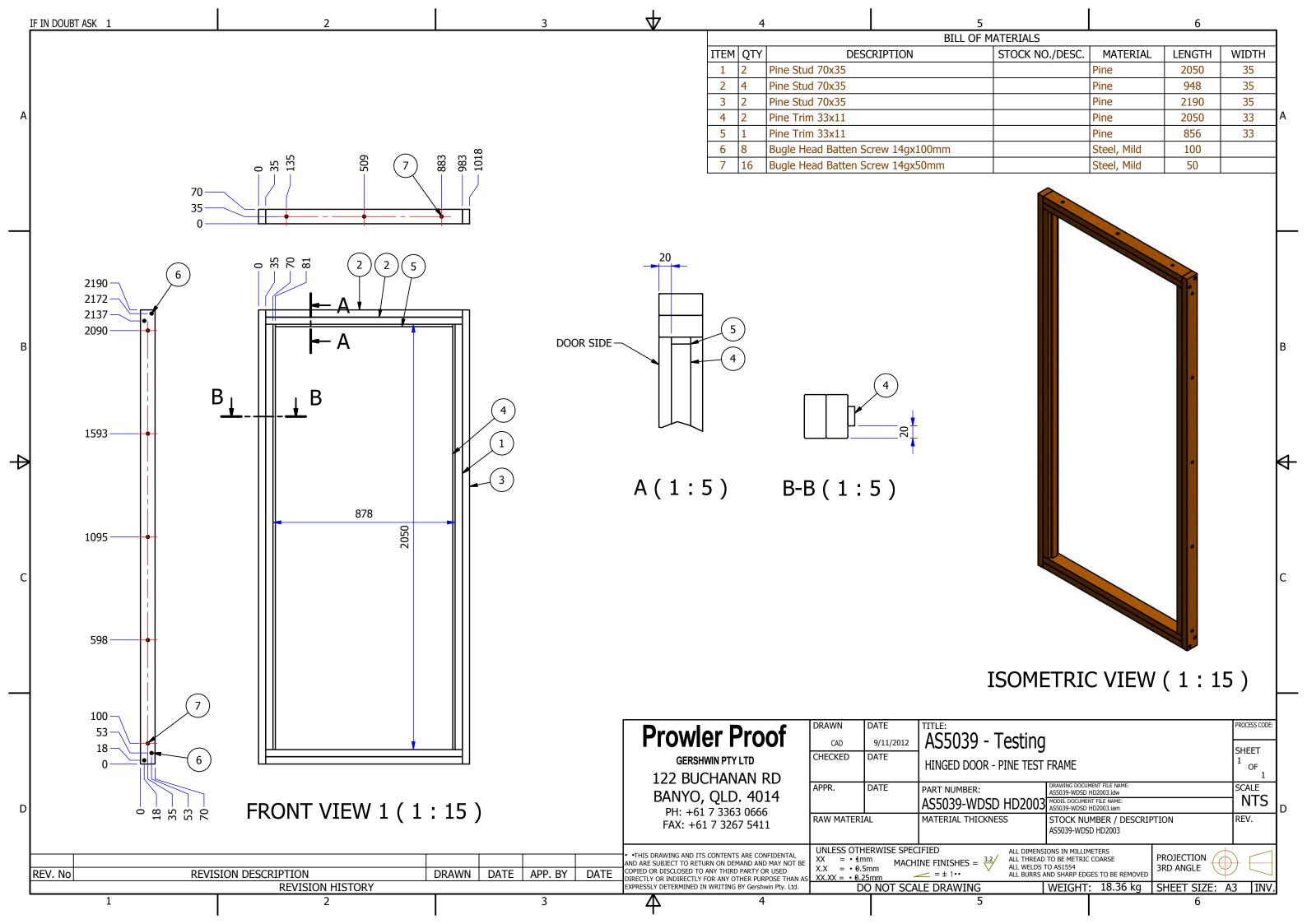
Means of Securing Infill to Framing, Location of Welds / Fasteners - Refer attached CAD Drawing WDSD - Welded

Small Diamond Hinged door.

End













## AS5039

# TEST REPORT (Shear test only)

#### Azuma Design Pty Ltd





#### SHEAR TEST REPORT

AZT Number:	AZT0065.12	
Date:	1 <sup>st</sup> May 2012	-
Manufactured By: _	PROWLER PROOF	
Sample identificatio	n: KAU 1859, Alloy Temper 6	063
Surface finish:	Mill finish	Aperture: 42mm
Type:I	_	
Aim: To test the san Screen Doors and W	•	7 of AS5041-2003-Methods of test- Security

#### Method:

- Transpose a circle of 150 mm diameter onto the infill of the test specimen. Count and record the number of chords/strands of the infill material/grille that are intersected by the circle.
- Choose a sample chord from the test specimen. For infill material of a regular, uniform design, the sample shall be a typical strand, clear of any knuckles or webs. For infill materials of irregular design and varying strand size, the thinnest structural strand intersected by the 150 mm circle shall be taken.
- Position the sample in the shear apparatus so that its orientation in relation to the cutting edges corresponds approximately to the direction of attack within a cutting tool in situ in an infill.
- Apply a load to the test sample at a rate of 19 mm/min cross-head travel and increase the load until fracture occurs.
- Record the shear force at fracture. If a double shear tool is used, the shear force recorded shall be half that which was measured.

#### Requirements:

- (a) The breaking force of the chords shall be not less than 30 kN.
- (b) The shear force of any chord shall be not less than 3 kN.

#### Test equipment:

Azuma Hydraulic test rig Double shear tool

#### Azuma Design Pty Ltd

Address: 160 Newton Rd Wetherill Park NSW 2164 Australia PH: 61(02)9604 0255 FAX: 61(02)9604 0466

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#### SHEAR TEST REPORT

#### Results;

Sample C

Shear	Orientation	Double shear force	Shear force (Half of double shear force)
1	Vertical	6980	3490
2	Vertical	7350	3675
3	Vertical	7480	3740
4	Horizontal	8140	4070
5	Horizontal	8420	4210
6	Horizontal	8460	4230
7	Diagonal	8020	4010
8	Diagonal	8080	4040
9	Diagonal	7850	3925
		Average =	3932.22 N

1	Number of Intersections of Strands by 150mm Dia Circle: _	12	
2	Average Breaking Force in Shear of one Strand (min 3kN):	3.93 kN	
	Multiplication of above points 1 and 2 (min 30kN):	47.18 kN	
Remarks:	PASSED		

#### Azuma Design Pty Ltd





#### SHEAR TEST REPORT

Shear	Orientation	Double shear force	Shear force (Half of double shear force)
1	Vertical	7710	3855
2	Vertical	7300	3650
3	Vertical	7500	3750
4	Horizontal	8750	4375
5	Horizontal	8220	4110
6	Horizontal	8770	4385
7	Diagonal	8400	4200
8	Diagonal	7820	3910
9	Diagonal	7870	3935
		Average =	4018 88 N

3	Number of Intersections of Strands by 150mm Dia Circle: 12	
4	Average Breaking Force in Shear of one Strand (min 3kN): 4.01 kN	
	Multiplication of above points 1 and 2 (min 30kN): 48.22 kN	
Remarks:	PASSED_	

#### CONCLUSION

From the results achieved it is evident that the sample satisfies requirement 7.6 of AS5039-2008-Security screen doors and window grilles.

SIGNATORY NAME:	Rob Irwin
SIGNATURE:	
DATE:	1 <sup>st</sup> May 2012

#### Azuma Design Pty Ltd





DATE:	1st May 2012

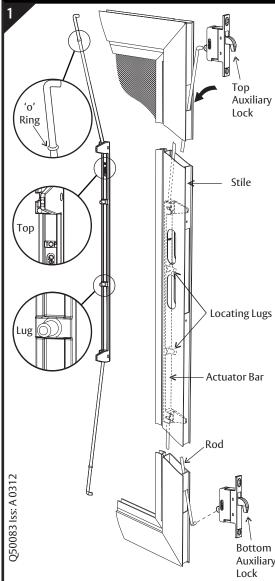
#### EQUIPMENTS USED TO PERFORM THE ABOVE TEST

EQUIPMENT NAME	EQUIPMENT NUMBER	√ IF USED
Tape Measure	AZTAPE0001	
1500mm Steel Rule	AZRULE0001	
Shear Test Apparatus	AZTEST0009	
Hydraulic Load Test Rig Readout	AZTEST0008	
200 mm Digital Caliper	AZCALI0010	
Knife Shear Knife	AZKNIF0001	
Knife Shear Blade	AZBLAD0001	

Azuma Design Pty Ltd

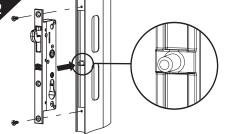


#### 3 Point Kit and Standard Lock Installation



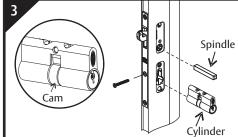
#### Fitting the Actuator Bar and Auxiliary Locks Note: For ease of fitment remove door from the door frame.

- Assemble the Actuating Bar and Rods as shown prior to
- fitting to the door stile. With the "TOP" mark facing the front.
- Keep the locating lugs of the Actuating Bar facing the front edge of
- Insert the Actuator Bar and rod assembly through the top cut-out and slide it through the door stile.
- With the Auxiliary locks in the locked position (as shown), Important: Connect the top Auxiliary lock first to the end of the rod followed by the bottom Auxiliary lock.
- Then push them both into the door stile.



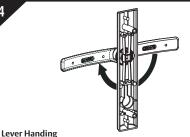
#### **Fitting Central Lock**

With the central lock in the factory set **Deadlock** position, insert into the stile. Locate and engage the lug on the Actuating Bar with the lock, then secure with screws. Important: The lock must be installled in the position shown, product warranty cannot be assured if installed upside down.

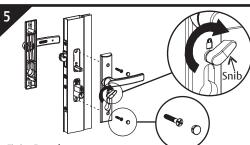


#### Fitting Cylinder & Spindle

- Insert cylinder so cam turns towards front of door.
- Losely fix cylinder with screw.
- Then insert spindle into lock body.

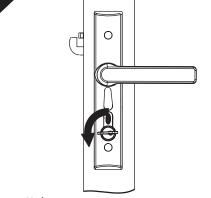


If necessary prepare escutcheon by rotating levers 180 degrees downwards to required handing position.



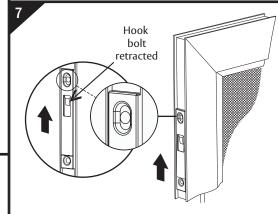
#### Fitting Escutcheon

- Fit escutcheon with snib on the inside face of the door.
- Ensure snib is to 90 degrees in the direction of the lever..
- Secure inside and outside escutcheons with screws and screw hole plugs.



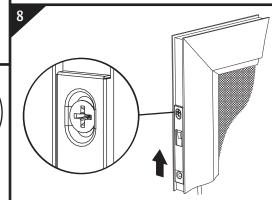
#### Passage Mode

With the central lock in the factory set **Deadlock** position, insert key and rotate 90 degrees away from the lever to the unlocked position or **Passage** mode. Snib rotates to the vertical position.



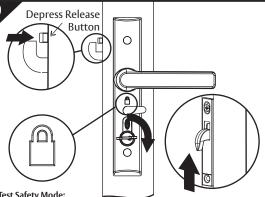
#### **Drilling Hole in Top and Bottom Auxiliary Locks**

- Gently push the top Auxiliary lock upwards to retract the hook bolt.
- Then drill a 3mm hole in the centre of the slotted hole.
- Repeat this step for the bottom Auxiliary lock.



#### Fixing Screw to Top and Bottom Auxiliary Locks

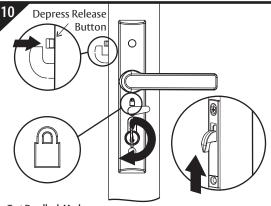
- Gently push the top Auxiliary lock upwards to retract the hook bolt.
- Lightly fix screw in slotted hole.
- Repeat this step for the bottom Auxiliary lock.



#### **Test Safety Mode:**

**Important:** Release button above hook bolt must be depressed. Rotate key or snib 90 degrees towards the lever:

- Padlock symbol is visible.
- Inside and outside levers are locked.
- Auxiliary hook bolts are thrown and locked, push hook bolts upwards to check.
- Repeat STEP 6 to return lock to Passage mode.



#### Test Deadlock Mode:

**Important:** Release button above hook bolt must be depressed. Rotate key 180 degrees towards the lever:

- Snib rotates 90 degrees towards the lever, padlock symbol is visible.
- Inside and outside levers are locked.
- Auxiliary hook bolts are thrown and locked, push hook bolts upwards

Important: Reposition top and bottom Auxiliary locks if necessary to achieve Safety and Deadlock modes, then fully tighten fixing screws in STEP 8.

