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# TEST REPORT

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## FORCED ENTRY - HINGED



CLIENT — CLASSIC BLINDS & SHUTTERS

PRODUCT — CLASSIC PREMIUM SHUTTER

NATA ACCREDITED LABORATORY

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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 Aim

To test the sample as per the test methods detailed in:

AS 5041-2003 Methods of test - Security screen doors and window grilles.

- Required by customer for testing
  - o Section 3 — Dynamic Impact Test
  - o Section 4 — Jemmy Test
  - o Section 5 — Pull Test
- Not required for testing
  - o Section 6 and 7 — Probe and Shear Test not required due to the design
  - o Section 8 — Knife Shear Test not required due to the design

## 2 Details

### 2.1 Overall

<b>Model No./Name</b>	Classic Premium Shutter
<b>Manufactured By</b>	Classic Blinds & Shutters
<b>Address</b>	50 Munibung Road, Cardiff NSW 2285
Date of Test	08/07/2019
<b>Test Number</b>	AZT0290.19
<b>Test Sample Size</b>	1544 mm (Height) x 791 mm (Width)

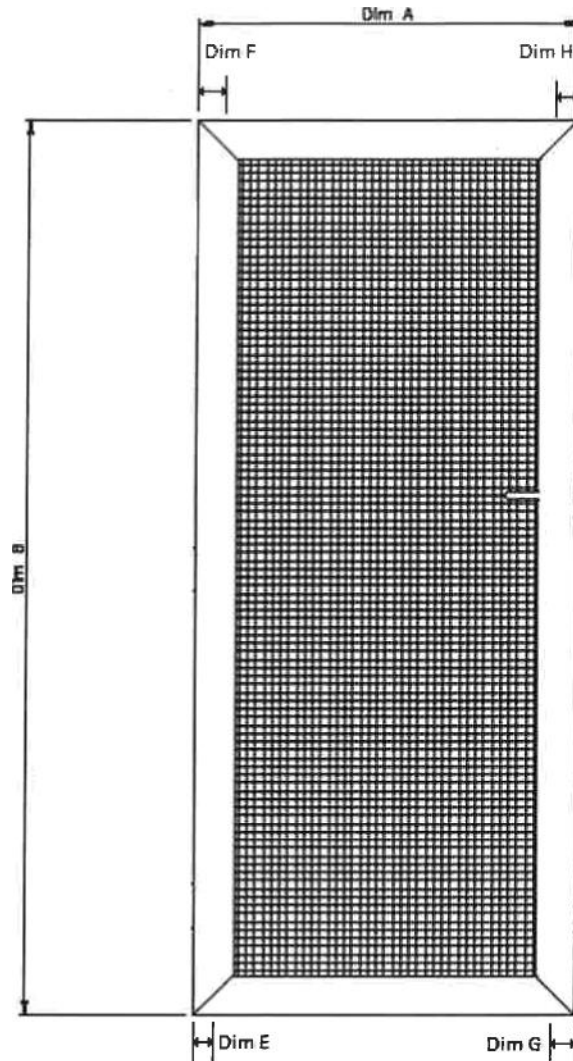
### 2.2 Test Sample Infill (Louvre Blade)

<b>Manufactured By</b>	Pan Asia	<b>Type</b>	Does not conform to Type I, II or III
<b>Materials Thickness</b>	1.15 mm (Information Supplied by Customer) Aluminium 6063—T6	<b>Spacing</b>	80 mm
<b>Material Type</b>	(Information Supplied by Customer)	<b>Aperture</b>	Closed — 0 mm Open — 70 x 607 mm
<b>Louvre Size</b>	88 (W) x 17 (T) x 607 (L) mm	<b>Quantity</b>	16 Blades

### 2.3 Test Sample Information

Gap between lock side and door	3.83 mm
Gap between hinge side and door	1 13 mm
Lock Description	Classic Blinds Hurricane Lock
Hinge Description	Classic Blinds Security Pivot Hinge
Type of material used in mounting frame	Aluminium
Hinges within 200 mm of top and bottom	Hinges are pivot hinges
Lock within 200 mm either side of centreline	Sample contains top and bottom flush bolts
Test Sample Description	Aluminium door with 16 louvre blades and internal operating system. Door has flush bolts at top and bottom which is key operated at the centre. Door frame is mounted to an aluminium frame by two pivot hinges. Test specimen was provided by the customer.

### 3 Test Door Dimensions



<b>Dimension A</b>	747 mm
<b>Dimension B</b>	1496 mm
<b>Dimension C</b>	No centre lock
<b>Dimension D</b>	No centre hinge
<b>Dimension E</b>	10 mm
<b>Dimension F</b>	10 mm
<b>Dimension G</b>	25 mm
<b>Dimension H</b>	25 mm
<b>Left or Right Hand</b>	Right

## 4 Dynamic Impact Test

### 4.1 Measurements

The weight (W) of Impact bag was checked and was measured as 43.8 Kilograms. The measured height (h<sub>i</sub>) from the finished ground level to the impact point is 665 mm.

Drop height (h) of Impact bag for 100 Joule blow is calculated using the following equation:

$$h = \frac{10204}{W} - \frac{10204}{43.8} = 232.97 \text{ mm} \quad (1)$$

The total height (H) the impact bag will be raised to from the finished ground level is determined to be:

$$H = h + h_i = 232.97 + 665 = 897.97 \text{ mm} \quad (2)$$

### 4.2 Procedure

1. Attach specimen to the support frame with the specimen positioned such that the impactor strikes the outside face of the screen door.
2. Check the mass of the impactor.
3. The impactor is attached to a suspension cable and suspended such that the side of the bag rests against the face of the infill and the cable is vertical. The length of the suspension cable is adjusted such that the centre of gravity of the impactor is aligned with a point 600 +/- 25 mm from the bottom edge of the test door frame and 250 +/- 25 mm from the edge of the specimen.
4. The impactor is lifted until the drop height distance (calculated from equation (1)) is reached and the following is observed:
  - (a) Line of swing is perpendicular to the plane of the infill.
  - (b) The suspension cable is taut; and
  - (c) The bridle is not angling the impactor through contact at top edge of same.
5. The impactor is released such that it is not impeded or jerked, and the swing is clean. The impactor is prevented from hitting a second time after the first impact.
6. The test sample is examined for signs of damage i.e. cracks, gaps or breakage.
7. Steps 4 to 6 were repeated for a total of 5 impacts.

8. Record any deformation or fracture of the test specimen infill material and the size of the largest hole in the infill material. Record any deformation or fracture of the test specimen infill material to framing section interface and the size of the largest hole formed at that interface.
9. For a Type I infill material attempt to pass a 65 0.5 mm x 25 0.5 mm x 15 -I- 0.5 mm probe (see AS 5039) through any part of the infill material (including the infill to framing section) using reasonable manual force.
10. For a Type II infill material, where the supplied aperture size in either direction is greater than 300 mm, attempt to pass a rigid spherical probe of 150 mm diameter through any opening in the test specimen using reasonable manual force. Where the supplied aperture size in both directions is less than 300 mm, attempt to pass a rigid spherical probe of 213 mm diameter through any opening in the test specimen using reasonable manual force.
11. For a Type III infill material, the infill material (including the infill to framing section interface) shall not be breached in any way; no part of the edge of the security screen door or window grille shall have deflected to the extent that the gap between the security screen door or window grille and the door or window frame is greater than 150 mm, perpendicular to the door or window frame, after the dynamic impact test has been completed.

### 4.3 Results

<b>Standard</b>	30 mm
Impact 1	31 mm
Impact 2	33 mm
Impact 3	36 mm
Impact 4	38 mm
Impact S	40 mm
Result	PASS

**Remarks:** Nil

## 5 Jemmy Test

### 5.1 Procedure

#### 5.1.1 Lock Attack

1. The point of application of the lever shall be within 50 mm of the centre of the lock bolt and shall bear on the lock body.
2. The test shall be applied to all locking points. If the test cannot be applied within 50 mm from a locking point, the test shall be applied as close as possible to the locking point.
3. The lever shall be inserted using reasonable manual force and manipulation without the aid of any other hand tools. If the necessary depth cannot be achieved within three minutes, the test shall be continued at the insertion depth obtained. Alternatively, the lever may be mechanically inserted to a maximum force of 980 N, or until the lever reaches the door or window grille stop.
4. Whilst performing this test, the lever shall be secured in relation to the pivot point with a hold in force of 700 N.
5. Should the lever be displaced during the test; the above directions shall be repeated a second time. Should the lever disengage the second time, the next test shall be carried out.
6. When testing type 3 products, if a gap of 15 mm x 90 mm is achieved, which is large enough to allow the insertion of the testing pull bracket, a pull test shall be required.
7. The lever shall then be subjected to a force that will result in a maximum torque of 450 Nm being applied to the lever about the axis of rotation, for the full movement arc of the lever. The test shall be repeated at all locking points on the door.
8. The load shall be applied for 20 s after the maximum load or displacement is reached.

#### 5.1.2 Hinge Attack

1. The lever shall be inserted between the door and the jamb within 25 mm of the edge of the hinge leaf so that the tip of the lever is aligned with the back edge of the door frame. The test shall be applied to all hinge points. If the test cannot be applied within 25 mm from a hinge point, the test shall be applied as close as possible to the hinge point.
2. The lever shall be loaded as per the lock attack sequence and repeated at all hinge points. Attack points are below the top hinge and above the centre and bottom hinges. The load shall be applied for 20 s after the maximum load or displacement is reached.

## 5.2 Results

Location	Result	Force (N)	Remarks
Top Lock	Pass	751.2N	Remained Locked
Centre Lock	Pass	N/A	No centre lock
Bottom Lock	Pass	249.7N	Remained Locked
Top Hinge	Pass		Cannot engage screwdriver in opening due to the small dimension — 2 attempts made with reasonable manual force
Centre Hinge	Pass	N/A	No centre hinge
Bottom Hinge	Pass		Cannot engage screwdriver in opening due to the small dimension — 2 attempts made with reasonable manual force
Result	Pass		

Remarks: Nil



## 6 Pull Test

### 6.1 Procedure

1. Test sample is rigged up to a force gauge and pulley system and is set up as detailed in the AS 5041-2003 Section 5 based on the type of infill and the previous results in obtained in Section 5 of this report.
2. The test sample is pulled to the required forces at the required angles and held for 20 seconds or displacement occurs.
3. Outcome of test is recorded.

### 6.2 Results

Location/Forces	Centre 1.5 kN	Bottom 2 kN	Top 1.5 kN	Centre of Top Panel 1.5 kN
A (150 mm max.)	5.03 mm	0 mm	5.76 mm	5.2 mm
B (450 mm max.)	39 mm	9 mm	10 mm	21.31 mm
C (100 x 100 mm max.)	Nil	Nil	Nil	Nil
D	No	No	No	No
E	Yes	Yes	Yes	Yes
<b>Result</b>	Pass	Pass	Pass	Pass

A - Maximum size of any gap between Edge of Door and Frame after removal of force (static).

B - Maximum size of gap at full Deflectional Load (dynamic).

C- The size of any gap occurring as a result of the test.

D - Whether any part of the infill broke away completely from the remainder of the door framing as a result of the test.

E - Whether the hinges and lock bolts continued to retain the door in a closed position.

**Remarks:** Nil

## 7 Probe Test

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Not applicable due to the design of the test specimen

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## 8 Shear Test

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Not applicable due to the design of the test specimen

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## 9 Knife Shear

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Not applicable due to the design of the test specimen

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## 10 Conclusion & Signatories

### 10.1 Result Summary

Test	Testing Required	Result
Dynamic Impact Test	Yes	Pass
Lock and Hinge Jemmy Test	Yes	Pass
Pull Test	Yes	Pass
Probe Test	No	N/A
Shear Test	No	N/A
Knife Shear Test	No	N/A

### 10.2 Signatories

Tested By: \_\_\_\_\_

*Ash Horne*

Signature: \_\_\_\_\_

*AHorne*

Date: \_\_\_\_\_

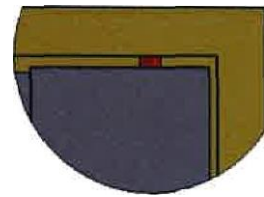
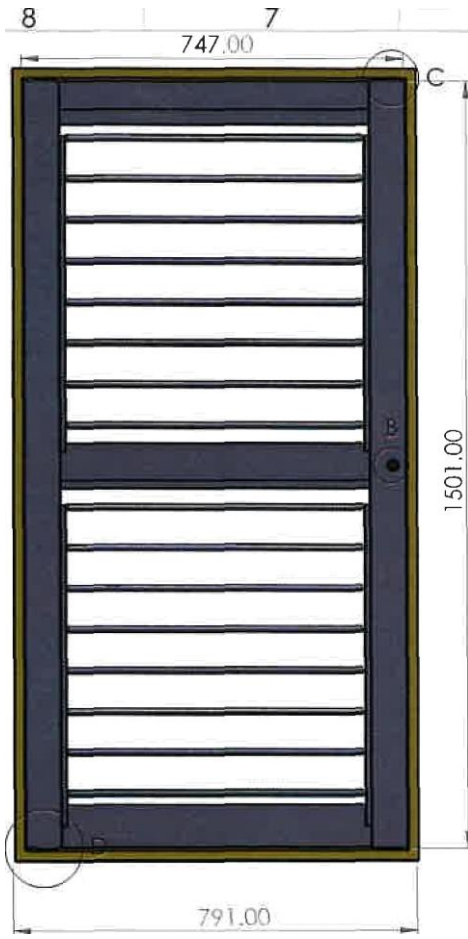
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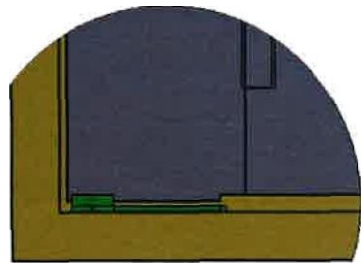
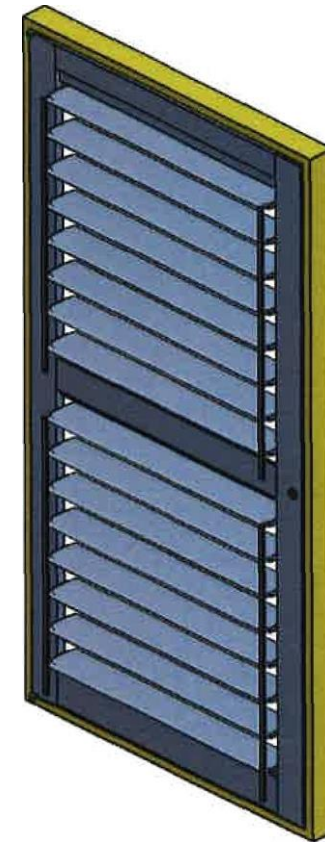
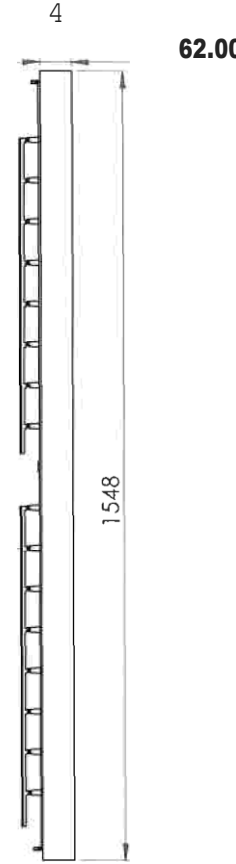
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**8mm 316 Stainless 20mm throw lock**  
**DETAIL C**  
**SCALE 1:2**

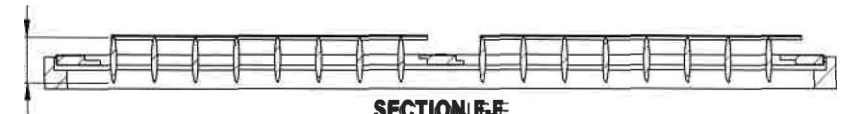
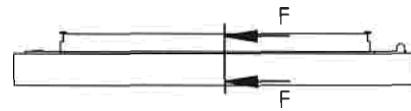


**DETAIL B**  
**SCALE 1:5**



Security pivot hinge

**DETAIL D**  
**SCALE 1:2**



**SECTION F-F**  
**SCALE 1:10**

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TOLERANCES:					
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Classic Premium Shutter

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