



A Z U M A
Design

AS5039

TEST REPORT

Window Grille

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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NATA Accredited Laboratory No: 15147



SECURITY WINDOW GRILLE

AZT Number: AZT0042.12

Manufactured By: Secureview

Tested By: Nathan Olsen Date: 17th April 2012

Certified By: Nathan Olsen Date: 17th April 2012

Witnessed By: Rob Irwin Date: 17th April 2012

Details of Test Window

Sample Identification: Secureview perforated security window

Size: 1500mm x 900mm Class A,B,C or D: A

Mounting method used (ie rebate, face fixed...): Face fixed

Gap between Window and Mounting Frame Lock Side (mm): -

Hinge Side (mm): -

Type of Material Used in Mounting Frame: Radiata Pine

Constructional Description of Test Window: Perforated mesh secured in security window frame via wedge system and face fixed to timber frame via tamperproof fixings spaced at approximately 330mm centres

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Details of Window Infill

Manufactured By: Secureview

Type: III

If type 1 (ie diamond grille) fill out the following:

- 1 Number of Intersections of Strands by 150mm Dia Circle: -
- 2 Breaking Force in Shear of one Strand (min 3kN): -
- 3 Multiplication of above points 1 and 2 (min 30kN): -

Dynamic Impact Test

Check weight of Impact bag: 44.090 kilograms

Drop Height of Impact bag for 100 J blow: (using formula $\frac{10204}{w} = h$)

w = weight of bag in kilograms
h = drop height in millimeters

Observations

Standard: 5mm

Impact 1: 23mm

Impact 2: 26mm

Impact 3: 28mm

Impact 4: 29mm

Impact 5: 30mm

Result: PASSED

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Lock/Hinge and/or fixing Lever Test

| LOCATION | PASS | FAIL | FORCE (N) | REMARKS |
|-----------------------|------|------|--------------|--|
| Top LH side Fixing | | | | Could not insert screwdriver with the required force and in the required time period. |
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Note: Could not insert screwdriver to perform test, therefore a pass result is granted.

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Pull Tests

| <i>LOCATION/FORCES</i> | <i>A</i> <i>150mm</i> <i>max.</i> | <i>B</i> <i>450mm</i> <i>max.</i> | <i>C</i> <i>100 x</i> <i>100mm</i> <i>max.</i> | <i>D</i> | <i>E</i> | <i>PASS</i> | <i>FAIL</i> |
|------------------------|---|---|---|----------|----------|-------------|-------------|
|------------------------|---|---|---|----------|----------|-------------|-------------|

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
| | | | | | | | |

A – Max. size of any gap between Edge of Security Window Grille and Frame after removal of force (static).

B – Max. 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 Security Window Grille framing as a result of the test.

E – Whether the Window Grille remained in a fixed position.

Remarks: N/A

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Probe test (Only applicable to type II products)

Force applied in either direction: _____

Tested with probe (yes/no) : _____

Size of gap (max 150mm): _____

Remarks: N/A

Shear test

If type I (ie diamond grille) fill out the following:

| Shear | Orientation | Double shear force | Shear force (Half of double shear force) |
|-----------|-------------|--------------------|---|
| 1 | Vertical | | |
| 2 | Vertical | | |
| 3 | Vertical | | |
| 4 | Horizontal | | |
| 5 | Horizontal | | |
| 6 | Horizontal | | |
| 7 | Diagonal | | |
| 8 | Diagonal | | |
| 9 | Diagonal | | |
| Average = | | | |

1. Number of Intersections of Strands by 150mm Dia Circle: _____

2. Average Breaking Force in Shear of one Strand (min 3kN): _____

Multiplication of above points 1 and 2 (min 30kN): _____

Remarks: N/A

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Knife shear test

DID NOT TEST

CONCLUSION

| <u>Test</u> | <u>Result</u> |
|----------------------------|---------------------------------------|
| Dynamic Impact test: | PASSED |
| Lock and Hinge lever test: | PASSED Could not fit apparatus |
| Pull test: | N/A |
| Probe test: | N/A |
| Shear test: | N/A |
| Knife shear test: | DID NOT TEST |

SIGNATORY NAME: Nathan Olsen

SIGNATURE: 

DATE: 20th April 2012

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