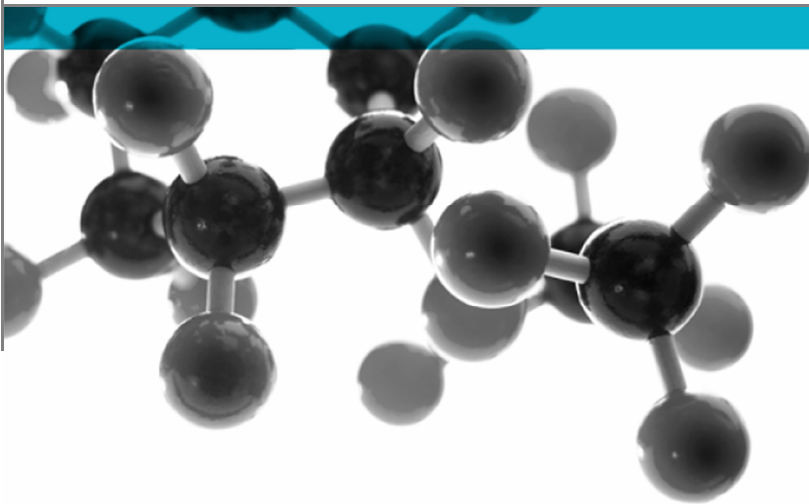


Exova Warringtonfire  
Key Industrial Park  
Fernside Road  
Willenhall  
West Midlands  
WV13 3YA

T : +44 (0) 1902 722 122  
F : +44 (0) 1902 727 242  
E : [willeshall@exova.com](mailto:willeshall@exova.com)  
W : [www.exova.com](http://www.exova.com)



# BS EN 14351-1:2006



**Test of: Autolacth and Sinidex restricted hinge  
tested on side hung and top hung windows**

**Windows and doors – Product standard,  
performance characteristics**

A Report To: Cotswold Architectural Products Ltd

Document Reference: WIL 327795

Date: 11/04/2013

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Page 1

Testing  
Advising  
Assuring



## TEST CONCLUSIONS

Samples of:

Manufacturer           Cotswold Architectural Products Ltd  
 Product                 Top hung and side hung window  
 Model                    Autolatch restrictor and Sinidex restricted hinge

have been tested in accordance with: BS EN 14351-1:2006

By Exova Warringtonfire Willenhall, a UKAS accredited Testing Laboratory (No. 0621) and EC Notified Body number (No. 1104)

At Key Industrial Park, Fernside Rd, Willenhall, West Midlands, WV13 3YA.

Results and comments as detailed below:

Clause No.	Description	Compliance
4.8	Load bearing capacity of safety devices – 350N Side hung window with Auto Latch restrictor	Yes
4.8	Load bearing capacity of safety devices – 350N Side hung window with Sinidex restricted hinge	Yes
4.8	Load bearing capacity of safety devices – 350N Top hung window with auto Latch restrictor	Yes
4.8	Load bearing capacity of safety devices – 350N Top hung window Sinidex restricted hinge	Yes

No inferences can be made regarding performance against other requirements of this standard

Tests marked “ N/A” are not applicable to the sample under test.

Tests marked “N/T” were not applied to the sample under test

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Client: Cotswold Architectural Products Ltd

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## AUTHORISATION

Tests performed by: Chris Bryan, Test Engineer

Report issued by: Chris Bryan, Test Engineer



Signed

Date 11<sup>th</sup> April 2014

For and on behalf of Exova Warringtonfire

Report authorised by: Mark West, Assistant Operations Manager



Signed

Date 11<sup>th</sup> April 2013

For and on behalf of Exova Warringtonfire

Report issued: 11 April 2013



0621

**NOTE.**

Tests marked "Not UKAS Accredited" are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

The laboratory has tested the product supplied by the client as sampled in accordance with their own requirements

Exova Warringtonfire is an EC Notified Body Number 1104

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## TEST DETAILS

### CLIENT DETAILS

Company name Cotswold Architectural Products Ltd  
 Address Manor Park Industrial Estate  
 Manor Road  
 Cheltenham  
 Postcode GL51 9SQ  
 Contact Tim Firkin

### ORDER DETAILS

Order number 03904  
 Dated 18/03/2013

### SAMPLE DETAILS

Product Top hung and side hung window  
 Model Autolatch Restrictor and Sinindex restricted hinge  
 Manufacturer Cotswold Architectural Products Ltd  
 Frame Dimensions 700 x 1300 mm (side hung window) 1200 x 1200 mm (Top hung window)  
 Sash Dimensions 643 x 1243 mm (side hung window) 1140 x 1140 mm (Top hung window)  
 Material PVC-u  
 Details of Hardware  
 Hinges Cotswold  
 Lock Kenricks  
 Markings None  
 Date of Manufacture Unknown  
 Other information None

### TEST DETAILS

Test specification BS EN 14351 :2006  
 Full test Yes  
 Test to clauses 4.8 Load bearing capacity of safety device  
 Test Method BS EN 14609:2004 strength of safety devices

Sample received 25/03/2013  
 Test started 29/03/2013  
 Test completed 29/03/2013

Special Test requirements  
 Other reports to be used in conjunction with this report

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## TEST PROCEDURE

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<b>Introduction</b>	<p>This test report should be read in conjunction with the Standard BS EN 14351-1:2006: Windows and doors – Product standard, performance characteristics – Part 1: Windows and external pedestrian door set's with out resistance to fire and/or smoke leakage characteristics.</p> <p>The specimens were judged on their ability to comply with the performance criteria as required in BS EN 14351-1:2006, with test methods BS EN 14609.</p>
<b>Instruction To Test</b>	<p>The test was conducted on the 29<sup>th</sup> March 2013 on behalf of Cotswold Architectural Products Ltd.</p> <p>Initial requirement was as defined in BS6375-2, requiring a performance of a threshold value of 350N for load-bearing capacity of safety devices.</p>
<b>Test Specimen Construction</b>	<p>A description of the test construction is given in the Schedule of Components. The description is based on a detailed survey of the specimens and information supplied by the sponsor of the test.</p>
<b>Sampling</b>	<p>The samples were not independently witnessed or selected and were provided direct from the test sponsor.</p>
<b>Installation</b>	<p>The sample was supplied mounted within a timber sub-frame of nominal section 75mm x 100mm fitted flush with the exterior face, in accordance with the clients fitting instructions.</p>
<b>Test Climate</b>	<p>The sample was conditioned in the laboratory in the range 10-30 °C and 25-75% humidity.</p> <p>The temperature and humidity in the lab was maintained in the range 13.7-23.6°C and 21.9-44.1% humidity for the duration of the test.</p>

---

## INITIAL OBSERVATIONS

---

The external face  
of the sample



Autolatch  
Restrictor



Sinidex restricted  
hinge



---

Do not scale. All dimensions are in mm

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## SCHEDULE OF COMPONENTS – TOP HUNG WINDOW AUTO LATCH RESTRICTOR

(Refer to Figures 1 to 3)  
 (All values are nominal unless stated otherwise)  
 (All other details are as stated by the sponsor)

### Variants

None

<u>Item</u>	<u>Description</u>
<b>1. Window frame head</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70MM X 53MM
Rebate	: 18MM
Fixing jamb to head joints	
i. type	: Crimping
ii. size	: 14mm
iii. quantity	: 4
Details of adhesive	
i. supplier	: Arboseal
ii. reference	: White Silicone
<b>2. Window frame jamb</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70mm X 53mm
Rebate	: 18mm
Fixing jamb to sill joints	
i. type	: Crimping
ii. material	: Aluminium
iii. size	: 14mm
iv. quantity	: 4
Details of adhesive	
i. supplier	: Arboseal
ii. reference	: White Silicone
<b>3. Window frame weather seals outer</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In

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<u>Item</u>	<u>Description</u>
<b>4. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>5. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>6. Window casement (s)</b>	
Overall Size	
i. top hung sash	: 1142 X 1142
Supplier	: Beaufort
Profile codes	: AW624
Corner fixing method	:
i. type	: Crimping
ii. size:	: 14mm 14.2 Cleats
iii. quantity	: 8
<b>7. Window casement glass</b>	
Supplier:	: Glass solution
Thickness:	: 28mm
Overall size	
i. top hung sash	: 1052 x 1052
Nominal edge clearance	: 10mm
<b>8. Glazing setting blocks</b>	
Supplier	: Glazpart
Material	: PVC
Thickness	: 4mm & 1mm
Overall size	:
<b>9. Glazing gasket</b>	
Supplier	: Beaufort
Reference:	: E Gasket
Fixing method	: Clip In
<b>10. Glazing beads</b>	
Glazing method:	: Internally beaded
Supplier	: Beaufort
Profile code	: AW513
Material	: Steel
Density	: kg/m <sup>3</sup> (stated)
Overall size	: 4.2 m
Fixing method	: Clip in

<u>Item</u>	<u>Description</u>
<b>11. Hinges</b>	
Supplier	: Cotswold
Description	: HS24" Sinindex
Reference	: W1075
Quantity	: 2
Fixing hinge to sash	
i. type	: Stainless
ii. size	: 4.2x16
iii. quantity	: 3
Fixing hinge to frame	Stainless
i. type	: 4.2x13
ii. size	: 4.2x13
iii. quantity	: 3
<b>12. Hinge protectors</b>	
Supplier	: Securistyle
Description	: Hinge Claw
Reference	: XA740
Quantity	: 4
Position	: 2x Frame 2x Sash
Fixing device to sash	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
Fixing device to frame	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
<b>13. Lock</b>	
Supplier	: Beaufort
Description	: Offset Shootbolt
Reference	: XA484 R/H
Fixings	
i. type	: Stainless
ii. size	: 3.5 x 16 & 4.3 x 19
iii. quantity	: 8 of 3.5 & 4 of 4.3
<b>14. Lock Keeps</b>	
Supplier	: Beaufort
Description	: Centre keep L/H & Centre keep R/H & End keep
Reference	: XA587L & XA587R & XA588 End keep
Quantity	: 2 X L/H 2 X R/H 2X End keep
Fixing keeps to frame	
i. type	: Stainless
ii. size	: 4.3 x 19
iii. quantity	: 12

**Item****Description****15. Lever handles**

Supplier	:	Fab & Fix
Description	:	Monaco R/H
Reference	:	F0011
Material	:	Cast
Fixings	:	M5
i. type	:	Stainless
ii. size	:	16 mm
iii. quantity	:	2

**16. Restrictor**

Supplier	:	Cotswold
Description	:	Autolatch Restrictor
Reference	:	F0006
Fixing restrictor to sash		
i. type	:	Stainless
ii. size	:	4.2 x 16
iii. quantity	:	2
Fixing restrictor to frame		
i. type	:	Stainless
ii. size	:	4.2 x 16
iii. quantity	:	2

## SCHEDULE OF COMPONENTS – 16” SIDE HUNG WINDOW HINGE RESTRICTOR

(Refer to Figures 1 to 3)  
 (All values are nominal unless stated otherwise)  
 (All other details are as stated by the sponsor)

### Variants

None

<u>Item</u>	<u>Description</u>
<b>1. Window frame head</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70MM X 53MM
Rebate	: 18MM
Fixing jamb to head joints	
iv. type	: Crimping
v. size	: 14mm
vi. quantity	: 4
Details of adhesive	
iii. supplier	: Arboseal
iv. reference	: White Silicone
<b>2. Window frame jamb</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70mm X 53mm
Rebate	: 18mm
Fixing jamb to sill joints	
i. type	: Crimping
ii. material	: Aluminium
iii. size	: 14mm
iv. quantity	: 4
Details of adhesive	
iii. supplier	: Arboseal
iv. reference	: White Silicone
<b>3. Window frame weather seals outer</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In

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<u>Item</u>	<u>Description</u>
<b>4. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>5. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>6. Window casement (s)</b>	
Overall Size	
ii. top hung sash	: 1142 X 1142
Supplier	: Beaufort
Profile codes	: AW624
Corner fixing method	:
iv. type	: Crimping
v. size:	: 14mm 14.2 Cleats
vi. quantity	: 8
<b>7. Window casement glass</b>	
Supplier:	: Glass solution
Thickness:	: 28mm
Overall size	
ii. top hung sash	: 1052 x 1052
Nominal edge clearance	: 10mm
<b>8. Glazing setting blocks</b>	
Supplier	: Glazpart
Material	: PVC
Thickness	: 4mm & 1mm
Overall size	:
<b>9. Glazing gasket</b>	
Supplier: Beaufort	:
Reference:	: E Gasket
Fixing method	: Clip In
<b>10. Glazing beads</b>	
Glazing method:	: Internally beaded
Supplier	: Beaufort
Profile code	: AW513
Material	: Steel
Density	: kg/m <sup>3</sup> (stated)
Overall size	: 4.2 m
Fixing method	: Clip in

<u>Item</u>	<u>Description</u>
<b>11. Hinges</b>	
Supplier	: Cotswold
Description	: HSR16 SINIDEX RESTRICTOR AND HS216 SINIDEX SIDE HUNG
Reference	: SINIDEX RETRICTED
Quantity	: 2
Fixing hinge to sash	
i. type	: Stainless
ii. size	: 4.2x16
iii. quantity	: 3
Fixing hinge to frame	Stainless
i. type	: 4.2x13
ii. size	: 4.2x13
iii. quantity	: 3
<b>12. Hinge protectors</b>	
Supplier	: Securistyle
Description	: Hinge Claw
Reference	: XA740
Quantity	: 4
Position	: 2x Frame 2x Sash
Fixing device to sash	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
Fixing device to frame	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
<b>13. Lock</b>	
Supplier	: Beaufort
Description	: Offset Shootbolt
Reference	: XA484 R/H
Fixings	
i. type	: Stainless
ii. size	: 3.5 x 16 & 4.3 x 19
iii. quantity	: 8 of 3.5 & 4 of 4.3
<b>14. Lock Keeps</b>	
Supplier	: Beaufort
Description	: Centre keep L/H & Centre keep R/H & End keep
Reference	: XA587L & XA587R & XA588 End keep
Quantity	: 2 X L/H 2 X R/H 2X End keep
Fixing keeps to frame	
i. type	: Stainless
ii. size	: 4.3 x 19
iii. quantity	: 12

**Item****Description****15. Lever handles**

Supplier	:	Fab & Fix
Description	:	Monaco R/H
Reference	:	F0011
Material	:	Cast
Fixings	:	M5
i. type	:	Stainless
ii. size	:	16 mm
iii. quantity	:	2

## SCHEDULE OF COMPONENTS – TOP HUNG RESTRICTED STAY WINDOW

(Refer to Figures 1 to 3)  
 (All values are nominal unless stated otherwise)  
 (All other details are as stated by the sponsor)

### Variants

None

<u>Item</u>	<u>Description</u>
<b>1. Window frame head</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70MM X 53MM
Rebate	: 18MM
Fixing jamb to head joints	
i. type	: Crimping
ii. size	: 14mm
iii. quantity	: 4
Details of adhesive	
i. supplier	: Arboseal
ii. reference	: White Silicone
<b>2. Window frame jamb</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70mm X 53mm
Rebate	: 18mm
Fixing jamb to sill joints	
i. type	: Crimping
ii. material	: Aluminium
iii. size	: 14mm
iv. quantity	: 4
Details of adhesive	
i. supplier	: Arboseal
ii. reference	: White Silicone
<b>3. Window frame weather seals outer</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In

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<u>Item</u>	<u>Description</u>
<b>4. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>5. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>6. Window casement (s)</b>	
Overall Size	
i. top hung sash	: 1142 X 1142
Supplier	: Beaufort
Profile codes	AW624
Corner fixing method	
vii. type	: Crimping
viii. size:	: 14mm 14.2 Cleats
ix. quantity	: 8
<b>7. Window casement glass</b>	
Supplier:	: Glass solution
Thickness:	: 28mm
Overall size	
i. top hung sash	: 1052 x 1052
Nominal edge clearance	: 10mm
<b>8. Glazing setting blocks</b>	
Supplier	: Glazpart
Material	: PVC
Thickness	: 4mm & 1mm
<b>9. Glazing gasket</b>	
Supplier	: Beaufort
Reference:	: E Gasket
Fixing method	: Clip In
<b>10. Glazing beads</b>	
Glazing method:	: Internally beaded
Supplier	: Beaufort
Profile code	: AW513
Material	: Steel
Density	: kg/m <sup>3</sup> (stated)
Overall size	: 4.2 m
Fixing method	: Clip in

<u>Item</u>	<u>Description</u>
<b>11. Hinges</b>	
Supplier	: Cotswold
Description	: HSR24" Sinidex Restricted
Reference	: 24" Top Hung Sinidex Restricted
Quantity	: 2
Fixing hinge to sash	
i. type	: Stainless
ii. size	: 4.2x16
iii. quantity	: 3
Fixing hinge to frame	Stainless
i. type	: 4.2x13
ii. size	: 4.2x13
iii. quantity	: 3
<b>12. Hinge protectors</b>	
Supplier	: Securistyle
Description	: Hinge Claw
Reference	: XA740
Quantity	: 4
Position	: 2x Frame 2x Sash
Fixing device to sash	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
Fixing device to frame	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
<b>13. Lock</b>	
Supplier	: Beaufort
Description	: Offset Shootbolt
Reference	: XA484 R/H
Fixings	
i. type	: Stainless
ii. size	: 3.5 x 16 & 4.3 x 19
iii. quantity	: 8 of 3.5 & 4 of 4.3
<b>14. Lock Keeps</b>	
Supplier	: Beaufort
Description	: Centre keep L/H & Centre keep R/H & End keep
Reference	: XA587L & XA587R & XA588 End keep
Quantity	: 2 X L/H 2 X R/H 2X End keep
Fixing keeps to frame	
i. type	: Stainless
ii. size	: 4.3 x 19
iii. quantity	: 12

**Item****Description****15. Lever handles**

Supplier	:	Fab & Fix
Description	:	Monaco R/H
Reference	:	F0011
Material	:	Cast
Fixings	:	M5
i. type	:	Stainless
ii. size	:	16 mm
iii. quantity	:	2

## SCHEDULE OF COMPONENTS – TOP HUNG RESTRICTED STAY WINDOW

---

(Refer to Figures 1 to 3)  
 (All values are nominal unless stated otherwise)  
 (All other details are as stated by the sponsor)

### Variants

None

<u>Item</u>	<u>Description</u>
<b>1. Window frame head</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70MM X 53MM
Rebate	: 18MM
Fixing jamb to head joints	
vii. type	: Crimping
viii. size	: 14mm
ix. quantity	: 4
Details of adhesive	
v. supplier	: Arboseal
vi. reference	: White Silicone
<b>2. Window frame jamb</b>	
Supplier	: Beaufort
Profile code	: AW622
Material	: Aluminium
Grade	: 6063 T6
Gauge	:
Overall section size	: 70mm X 53mm
Rebate	: 18mm
Fixing jamb to sill joints	
i. type	: Crimping
ii. material	: Aluminium
iii. size	: 14mm
iv. quantity	: 4
Details of adhesive	
i. supplier	: Arboseal
ii. reference	: White Silicone
<b>3. Window frame weather seals outer</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In

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<u>Item</u>	<u>Description</u>
<b>4. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>5. Window frame weather seals</b>	
Supplier	: Beaufort
Reference	: Bubble Seal AGS234
Material	: Gasket
Fixing method	: Clip In
<b>6. Window casement (s)</b>	
Overall Size	
i. top hung sash	: 1142 X 1142
Supplier: Beaufort	:
Profile codes	: AW624
Corner fixing method	:
i. type	: Crimping
ii. size:	: 14mm 14.2 Cleats
iii. quantity	: 8
<b>7. Window casement glass</b>	
Supplier:	: Glass solution
Thickness:	: 28mm
Overall size	
i. top hung sash	: 1052 x 1052
Nominal edge clearance	: 10mm
<b>8. Glazing setting blocks</b>	
Supplier	: Glazpart
Material	: PVC
Thickness	: 4mm & 1mm
<b>9. Glazing gasket</b>	
Supplier	: Beaufort
Reference:	: E Gasket
Fixing method	: Clip In
<b>10. Glazing beads</b>	
Glazing method:	: Internally beaded
Supplier	: Beaufort
Profile code	: AW513
Material	: Steel
Density	: kg/m <sup>3</sup> (stated)
Overall size	: 4.2 m
Fixing method	: Clip in

<u>Item</u>	<u>Description</u>
<b>16. Hinges</b>	
Supplier	: Cotswold
Description	: HSR24" Sinidex Restricted
Reference	: 24" Top Hung Sinidex Restricted
Quantity	: 2
Fixing hinge to sash	
i. type	: Stainless
ii. size	: 4.2x16
iii. quantity	: 3
Fixing hinge to frame	
i. type	: Stainless
ii. size	: 4.2x13
iii. quantity	: 3
<b>17. Hinge protectors</b>	
Supplier	: Securistyle
Description	: Hinge Claw
Reference	: XA740
Quantity	: 4
Position	: 2x Frame 2x Sash
Fixing device to sash	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
Fixing device to frame	
i. type	: Stainless
ii. size	: 4.2 x 9.5
iii. quantity	: 4
<b>18. Lock</b>	
Supplier	: Beaufort
Description	: Offset Shootbolt
Reference	: XA484 R/H
Fixings	
i. type	: Stainless
ii. size	: 3.5 x 16 & 4.3 x 19
iii. quantity	: 8 of 3.5 & 4 of 4.3
<b>19. Lock Keeps</b>	
Supplier	: Beaufort
Description	: Centre keep L/H & Centre keep R/H & End keep
Reference	: XA587L & XA587R & XA588 End keep
Quantity	: 2 X L/H 2 X R/H 2X End keep
Fixing keeps to frame	
i. type	: Stainless
ii. size	: 4.3 x 19
iii. quantity	: 12

**Item****Description****20. Lever handles**

Supplier	:	Fab & Fix
Description	:	Monaco R/H
Reference	:	F0011
Material	:	Cast
Fixings	:	M5
i. type	:	Stainless
ii. size	:	16 mm
iii. quantity	:	2

## PERFORMANCE CRITERIA & TEST RESULTS

Clause	Result	Pass/Fail
<b>4.8 Load-bearing capacity of safety devices</b>  <b>(Auto latch on the Side hung window)</b>	<p>The window was tested with the restrictor engaged on the bottom rail. A load was then applied to the leading edge of the bottom rail. The restrictor held a load of 350N for 60 seconds. The restrictor still operated after the test. The same test was the repeated on the un restricted leading edge. The restrictor held a load of 350N for 60 seconds and still continued to operate.</p>	<b>PASS</b>
<b>4.8 Load-bearing capacity of safety devices</b>  <b>(Sinidex restricted hinge on the Side hung window)</b>	<p>The window was tested with the restrictor engaged on the bottom rail. A load was then applied to the leading edge of the bottom rail. The restrictor held a load of 350N for 60 seconds. The restrictor still operated after the test. The same test was the repeated on the un restricted leading edge. The restrictor held a load of 350N for 60 seconds and still continued to operate.</p>	<b>PASS</b>
<b>4.8 Load-bearing capacity of safety devices</b>  <b>(Auto Latch on the Top hung window)</b>	<p>The window was tested with the restrictors engaged down both stiles. A load was then applied to the leading edge of the bottom rail. The restrictor held a load of 350N for 60 seconds. The restrictor still operated after the test.</p>	<b>PASS</b>
<b>4.8 Load-bearing capacity of safety devices</b>  <b>(Sinidex restricted hinge on the Top hung window)</b>	<p>The window was tested with the restrictors engaged down both stiles. A load was then applied to the leading edge of the bottom rail. The restrictor held a load of 350N for 60 seconds. The restrictor still operated after the test.</p>	<b>PASS</b>

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## CONCLUSIONS

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**Evaluation against objective** The sample as provided by the client was subjected to operational & strength testing in accordance with BS EN 14351-1:2006 and achieved the requirements of clause 4.8 Load-bearing capacity of safety devices.

**Observations & comments**

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## LIMITATIONS

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**Limitations** The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of test. They are not intended to be the sole criteria for assessing the potential performance of the element in use, nor do they reflect the actual behaviour in use.

**Range of window assemblies covered by this report** It is our opinion that the range of window assemblies covered by this report are limited to the following

- Assemblies with identical hardware fitted no further apart than in the tested assembly
- Assemblies of the same or smaller overall dimensions to the tested assembly

**Uncertainty of Measurement** The uncertainties of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.

The standard specifies the following tolerances

- Forces:  $\pm 2\%$
  - Distances:  $\pm 1\text{mm}$  for tape measures  $\pm 0.01\text{mm}$  for dial gauges
  - Times:  $\pm 5\text{s}$
- 

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## REVISION HISTORY

<b>Issue No :</b>	<b>Re - Issue Date :</b>
<b>Revised By:</b>	<b>Approved By:</b>
<b>Reason for Revision:</b>	

<b>Issue No :</b>	<b>Re - Issue Date :</b>
<b>Revised By:</b>	<b>Approved By:</b>
<b>Reason for Revision:</b>	

**END OF REPORT**

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