



BS EN 14351-1:2006 + A1:2010

WINDOWS AND EXTERNAL PEDESTRIAN DOORSETS WITHOUT  
RESISTANCE TO FIRE AND/OR SMOKE LEAKAGE CHARACTERISTICS

# DECLARATION OF PERFORMANCE

THIS IS TO CERTIFY THAT

**MC ILHATTON & CO LIMITED**

of

Unit 5B Ballybrakes Business Park

Ballybrakes Road

Ballymoney

Co. Antrim

BT53 6LW

HAVE CONFORMED WITH EN 14351-1:2006 + A1:2010 ANNEX ZA

FOR

CASEMENT, TILT & TURN WINDOWS, FULLY REVERSIBLE AND SINGLE, DOUBLE, BI-FOLD, & COMPOSITE DOORS  
INTENDED TO BE USED IN DOMESTIC AND COMMERCIAL LOCATIONS

INSTIGATING AND IMPLEMENTING A SYSTEM OF FACTORY PRODUCTION  
CONTROL COMPLYING WITH EN 14351-1:2006 + A1:2010 ANNEX ZA

PRODUCING A TECHNICAL FILE CONTAINING THE TEST REPORT AND  
PERFORMANCE INDICATION PAPERS FOR ALL COMPONENTS  
INCLUDING THE FOLLOWING MANDATORY REQUIREMENTS

DANGEROUS SUBSTANCES - Clause 4.6

LOAD BEARING CAPACITY OF SAFETY DEVICES - Clause 4.8

THERMAL CHARACTERISTICS - Clause 4.12

Signed: .....

Position: .....

Date: .....

*Paul J. ...*  
*Managing Director*

*11/ June 2013*



BS EN 14351-1:2006 + A1:2010

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RESISTANCE TO FIRE AND/OR SMOKE LEAKAGE CHARACTERISTICS

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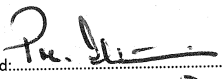
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DANGEROUS SUBSTANCES - Clause 4.6

LOAD BEARING CAPACITY OF SAFETY DEVICES - Clause 4.8

THERMAL CHARACTERISTICS - Clause 4.12

Signed:   
Position: MANAGING DIRECTOR

Date: 14 JUNE 2013

# Epwin Window Systems Division

## Declaration of non toxicity for compliance to BS EN 14351

We declare that the following products supplied by Epwin Window Systems Division will not give rise to toxic emissions in normal use:

Window and Door Profiles manufactured from virgin and recycled PVC-U.

Ancillary and Custom extrusions manufactured from virgin, recycled and composite polymers.

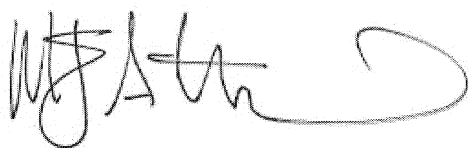
Steel and aluminium sections.

Window and door hardware and fixings.

Gaskets and weather strips.

Mouldings and castings.

Decorative and durable finishes applied to all products.

A handwritten signature in black ink, appearing to read 'M Althorpe', followed by a large, sweeping circular flourish.

Martin Althorpe,

Technical Director.

04.04.13



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(8mm Air Space, 90% Argon Gas fill) Planilux 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Planilux Float Glass  
8mm Cavity  
90% Argon Gas Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/8/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.7 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.79 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.56 / 0.21/ 0.66

Bill Carey - Managing Director

20<sup>th</sup> April 2009





Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(20mm Air Space, Argon Gas 90% Filled) Diamant 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Diamant Glass  
20mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/20/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.16 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p`v	0.80 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.60 / 0.25/ 0.71

Bill Carey - Managing Director

20<sup>th</sup> April 2009



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(6mm Air Space, Argon Gas 90% Filled) Diamant 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Diamant Glass  
6mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/6/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	2.0 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p`v	0.80 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.60 / 0.25/ 0.69

Bill Carey - Managing Director

20<sup>th</sup> April 2009



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(8mm Air Space, Argon Gas 90% Filled) Diamant 4mm

CE Marking of Insulating Glass Units to EN 1279



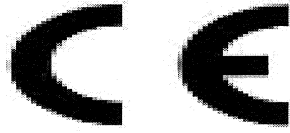
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4mm Diamant Glass  
8mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

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5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/8/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.7 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.80 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.60 / 0.25/ 0.70

Bill Carey - Managing Director

20<sup>th</sup> April 2009



MC ILHATTON & CO LIMITED

Unit 5B Ballybrakes Business Park

Ballybrakes Road

Ballymoney

Co. Antrim

BT53 6LW

13

EN 14351-1:2006 + A1:2010

WINDOWS AND EXTERNAL PEDESTRIAN DOORSETS WITHOUT  
RESISTANCE TO FIRE AND/OR SMOKE LEAKAGE CHARACTERISTICS

System: Spectus PVCu Windows and Doors

Characteristics	Declared Value
Dangerous Substances	None
Thermal Transmittance	$\leq 3.4W/(m^2K)$
Load Bearing Capacity of Safety Devices	Passed
Resistance to Wind Load	npd
Resistance to snow and permanent load	npd
Reaction to fire	npd
External Fire Performance	npd
Water tightness	npd
Impact Resistance	npd
Radiation Properties	npd
Acoustic Performance	npd
Air Permeability	npd

This declaration relates to a worst case scenario and as such all our products will give an equal to or better (lower) than performance to that quoted

Signed: 

Date: 14 June 2013

Position: Managing Director

# Epwin Window Systems Division

## Declaration of non toxicity for compliance to BS EN 14351

We declare that the following products supplied by Epwin Window Systems Division will not give rise to toxic emissions in normal use:

Window and Door Profiles manufactured from virgin and recycled PVC-U.

Ancillary and Custom extrusions manufactured from virgin, recycled and composite polymers.

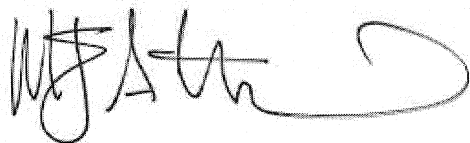
Steel and aluminium sections.

Window and door hardware and fixings.

Gaskets and weather strips.

Mouldings and castings.

Decorative and durable finishes applied to all products.

A handwritten signature in black ink, appearing to read 'M Althorpe', followed by a large, sweeping circular flourish.

Martin Althorpe,

Technical Director.

04.04.13

22 April 2013

McIlhatton & Co Ltd

Unit 5B Ballybrakes Business Park

Ballymoney

Co. Antrim.

BT53 6LW

Dear Paddy,

Re: CE MARKING / EN 14351-1:2006

**MANDATORY STANDARD CLAUSE DECLARATION**

From the 1st July 2013 it will become a mandatory requirement for external pedestrian door sets & windows without resistance to fire and/or smoke leakage characteristics to be CE marked.

CE Marking is simply a legal Declaration of Performance (DoP) by the manufacturer that the product meets the essential health & safety requirements.

The window and door standard to enable door sets to be CE marked is EN 14351-1:2006. As part of this standard hardware suppliers need to declare certain mandatory performance criteria.

**Clause 4.6 Dangerous Substances**

Mila confirms that, in accordance with the requirements of EN 14252-1:2006, the hardware supplied to McIlhattons, listed on page 2, does not cause any detrimental emissions or migration during the normal intended use which are potentially dangerous to hygiene, health or the environment.

**Clause 4.8 Load Bearing Capacity of Safety Devices**

The safety devices supplied to McIlhattons meet the necessary requirements of EN 14351-1:2006. Please find enclosed certification issued by a notified body.

**Clause 4.12 Thermal Transmittance**

Thermal transmittance requirements are not applicable to the hardware supplied to McIlhattons & Co Ltd.

**Clause 7.3 Factory Process Control**

The manufacture of products supplied to McIlhattons is controlled through processes and procedures as part of the quality management system. Attached is certification issued by LRQA to show our current accreditation to ISO 9001.

Yours sincerely,

Ken Lawlor

Managing Director.

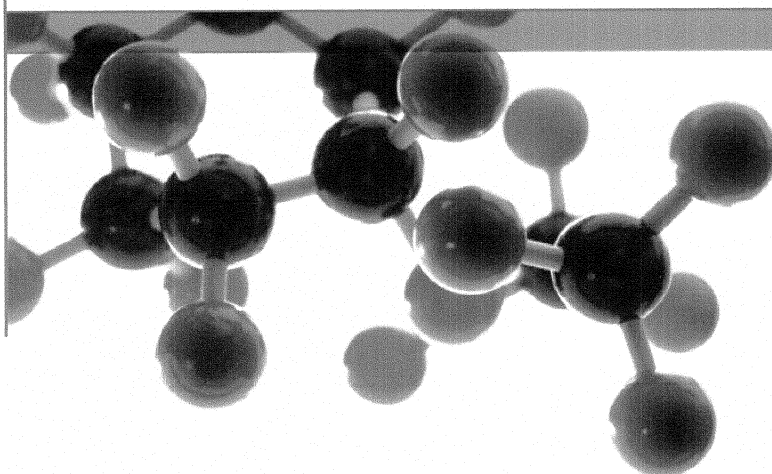
Mila

Exova Warringtonapt  
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Fernside Road  
Willenhall  
West Midlands  
WV13 3YA

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W: [www.exova.com](http://www.exova.com)



## BS EN 14351-1:2006



**Test of: Ideal restrictor arm and restricted friction hinge**

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

A Report To: Mila Hardware Ltd

Document Reference: 310901

Date: 19/09/2011

Copy: 1

Issue No.: 1

Page 1

Testing  
Advising  
Assuring

Registered Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Reg No.SC 70429  
This report is issued in accordance with our terms and conditions, a copy of which is available on request.



0621



**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**

Document No.: 310901  
Author: C Bryan  
Client: Mila Hardware Ltd

Page No.: 14 of 14  
Issue Date: 19/09/2011  
Issue No.: 01



## CONCLUSIONS

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<b>Evaluation against objective</b>	The sample as provided by the client was subjected to operational & strength testing in accordance with BS EN 14351-1:2006 and passed to clause 5.3
<b>Observations &amp; comments</b>	

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## LIMITATIONS

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<b>Limitations</b>	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.
<b>Range of window assemblies covered by this report</b>	<p>It is our opinion that the range of window assemblies covered by this report are limited to the following</p> <ul style="list-style-type: none"><li>▪ Assemblies with identical hardware fitted no further apart than in the tested assembly</li><li>▪ Assemblies of the same or smaller overall dimensions to the tested assembly</li></ul>
<b>Uncertainty of Measurement</b>	<p>The uncertainties of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.</p> <p>The standard specifies the following tolerances</p> <ul style="list-style-type: none"><li>▪ Forces: <math>\pm 2\%</math></li><li>▪ Distances: <math>\pm 1\text{mm}</math> for tape measures <math>\pm 0.01\text{mm}</math> for dial gauges</li><li>▪ Times: <math>\pm 5\text{s}</math></li></ul>

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**PERFORMANCE CRITERIA & TEST RESULTS**

<b>Clause</b>	<b>Result</b>	<b>Pass/Fail</b>
<b>5.3 Load-bearing capacity of safety devices (062050C/51C)</b>	<p>The restrictor was pulled parallel to the plane of the window with a force of 350N from the leading edge of the restricted stile.</p> <p>The restrictor held the load for 60 seconds and still continued to operate after the test.</p>	<b>PASS</b>
<b>5.3 Load-bearing capacity of safety devices (ANG8312C)</b>	<p>The restrictor was pulled parallel to the plane of the window with a force of 350N from the leading edge of the restricted stile.</p> <p>The restrictor held the load for 60 seconds and still continued to operate after the test.</p>	<b>PASS</b>
<b>5.3 Load-bearing capacity of safety devices (ANG8313C)</b>	<p>The restrictor was pulled parallel to the plane of the window with a force of 350N from the leading edge of the restricted stile.</p> <p>The restrictor held the load for 60 seconds and still continued to operate after the test.</p>	<b>PASS</b>
<b>5.3 Load-bearing capacity of safety devices (MSR201-16")</b>	<p>The restrictor was pulled parallel to the plane of the window with a force of 350N from the leading edge of the restricted stile.</p> <p>The restrictor held the load for 60 seconds and still continued to operate after the test.</p>	<b>PASS</b>

<u>Item</u>	<u>Description</u>
Reference	: 062050C – 062051C
Fixing restrictor to sash	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
Fixing restrictor to frame	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
<b>16. Restrictor 4</b>	
Supplier	: Mila Hardware
Description	: Ideal Friction Hinge Restricted
Reference	: 022824 - 022825 MSR201-16"C-17mmSK-L
Quantity	: 2
Fixing hinge to sash	
v. type	: SFG
vi. size	: 25mm
vii. quantity	: 4
Fixing hinge to frame	
iv. type	: SFG
v. size	: 25mm
vi. quantity	: 4

<u>Item</u>	<u>Description</u>
iii. quantity	: 12
<b>11. Lock Keeps</b>	
Supplier	: Mila Hardware
Description	: 8 series
Reference	: 038895
Quantity	: 4
Fixing keeps to frame	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 3
<b>12. Lever handles</b>	
Supplier	: Mila Hardware
Description	: Pro-Linea inline espag handle
Reference	: 581007
Material	: Zinc
i. type	: M5
ii. size	: 50mm
iii. quantity	: 2
<b>13. Restrictor 1</b>	
Supplier	: Mila Hardware
Description	: Ideal Restrictor Arm
Reference	: 060610 - 060615
Fixing restrictor to sash	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
Fixing restrictor to frame	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
<b>14. Restrictor 2</b>	
Supplier	: Mila Hardware
Description	: Ideal Restrictor Catch Enhanced
Reference	: ANG8312A – ANG8313A
Fixing restrictor to sash	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
Fixing restrictor to frame	
i. type	: CFG
ii. size	: 25mm
iii. quantity	: 2
<b>15. Restrictor 3</b>	
Supplier	: Mila Hardware
Description	: Ideal Restrictor Catch

Document No.: 310901  
 Author: C Bryan  
 Client: Mila Hardware Ltd

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<u>Item</u>	<u>Description</u>
<b>5. Window casement (s)</b>	
Overall Size	700mm x 1300mm
i. side hung sash	: SH
Supplier	: Eurocell
Profile codes	
i. stile profile code	: EWS7005
Material	: PVC
Sash framing section sizes	
i. rail	: 636mm x 1236mm
Corner fixing method	:
i. type	: Welded
ii. quantity	: 4
<b>6. Window casement glass</b>	
Supplier	: Logic Wnds
Thickness	: 28mm
Overall size	
i. side hung sash	: 600mm x 1200mm
<b>7. Glazing gasket</b>	
Supplier	: Eurocell
Reference	:
Fixing method	: Co-Ex
<b>8. Glazing beads</b>	
Glazing method	: Internally beaded
Supplier	: Eurocell
Profile code	: n/a
Material	: PVC
<b>9. Hinges</b>	
Supplier	: Mila Hardware
Description	: Ideal Friction Hinge Side Hung
Reference	: 022676 MI90C-16"-17mm
Quantity	: 2
Fixing hinge to sash	
ii. type	: SFG
iii. size	: 25mm
iv. quantity	: 4
Fixing hinge to frame	
i. type	: SFG
ii. size	: 25mm
iii. quantity	: 4
<b>10. Lock</b>	
Supplier	: Mila Hardware
Description	: Pro-Linea Twin Cam espag
Reference	: 031812
i. type	: CFG
ii. size	: 25mm

## SCHEDULE OF COMPONENTS

(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	: Eurocell
Profile code	: EWS7021
Material	: PVC
Overall section size	: 70mm
Rebate	: 20mm
Fixing jamb to head joints	:
i. type	: Welded
ii. quantity	: 2
<b>2. Window frame jamb</b>	
Supplier	: Eurocell
Profile code	: EWS7021
Material	: PVC
Density	: kg/m <sup>3</sup> (stated)
Overall section size	: 70mm
Rebate	: 20mm
Fixing jamb to sill joints	:
i. type	: Welded
ii. quantity	: 2
<b>3. Window frame sill</b>	
Supplier	: Eurocell
Profile code	: EWS7021
Material	: PVC
Density	: kg/m <sup>3</sup> (stated)
Overall section size	: 70mm
Rebate	: 20mm
<b>4. Window frame weather seals</b>	
Supplier	: Eurocell
Reference	: n/a
Material	:
Fixing method	: Co-ex

Document No.: 310901  
 Author: C Bryan  
 Client: Mila Hardware Ltd

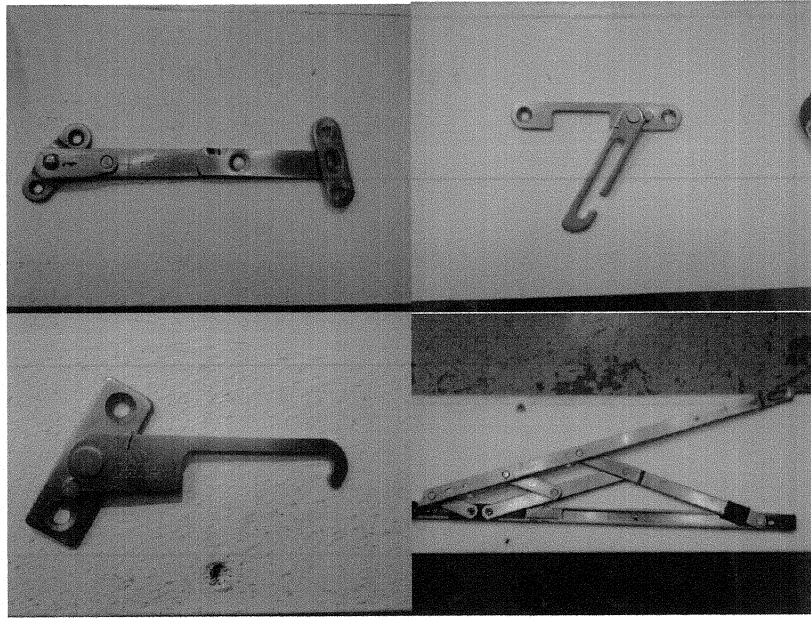
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## INITIAL OBSERVATIONS

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### Restrictors



Document No.: 310901  
Author: C Bryan  
Client: Mila Hardware Ltd

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Issue Date: 19/09/2011  
Issue No.: 01





## 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.</p> <p>The specimens were judged on their ability to comply with the performance criteria as required in BS EN 14351-1:2006</p>
<b>Instruction To Test</b>	<p>The test was conducted on the 31<sup>st</sup> August 2011 on behalf of Mila Hardware Ltd.</p> <p>Mr Strafford Cooke, a representative of Mila Hardware Ltd witnessed the test.</p> <p>Initial requirement was as defined in BS EN 14351-1:2006, 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>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. The sample was then installed into the test apparatus by a representative of Exova warringtonapt on the 31.08.2011.</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 20.3-25.9°C and 34-55% humidity for the duration of the test.</p>

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**TEST DETAILS****CLIENT DETAILS**

Company name Mila Hardware Ltd  
 Address 1 Brunel Close  
 Drayton Fields Ind est  
 Daventry  
 Northamptonshire

Postcode NN11 8RB

Contact Paul Pearson

**ORDER DETAILS**

Order number 21036  
 Dated 23/08/2011

**SAMPLE DETAILS**

Product Restriction device's  
 Model Ideal Restrictor Catch – ANG 8312A – 8313A  
 Ideal Restrictor Arm – 062050C/51C  
 Ideal Friction hinge – MSR201 – 16" 17mm SK  
 Manufacturer Mila Hardware Ltd  
 Frame Dimensions 800 x 1400 mm  
 Sash Dimensions 740 x 1355 mm  
 Material U-PVC  
 Details of Hardware  
 Hinges Ideal friction hinge 022676 MI90C-16"-17mm and  
 Ideal Friction hinge restricted 022824 MSR201-16" 17 mm  
 Lock Pro-Linea Twin Cam espag 031812  
 Markings None  
 Date of Manufacture Unknown  
 Other information None

**TEST DETAILS**

Test specification BS EN 14351-1 :2006  
 Full test Yes  
 Test to clauses 4.8  
 Test methods BS EN 14351-1 :2006

Sample received 31/08/2011  
 Test started 31/08/2011  
 Test completed 31/08/2011

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

Document No.: 310901  
 Author: C Bryan  
 Client: Mila Hardware Ltd

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Document No.: 310901  
Author: C Bryan  
Client: Mila Hardware Ltd

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Issue Date: 19/09/2011  
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**AUTHORISATION**

Tests performed by: Chris Bryan, Laboratory Technician

Report issued by: Chris Bryan, Laboratory Technician

Signed 

Date 19<sup>th</sup> September 2011

For and on behalf of Exova Warrington APT

Report authorised by: Mark West, Assistant Operations Manager

Signed 

Date 19<sup>th</sup> September 2011

For and on behalf of Exova Warrington APT

Report issued: 19 September 2011

**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 Warringtonapt is an EC Notified Body Number 1104

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Document No.: 310901

Author: C Bryan

Client: Mila Hardware Ltd

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Issue Date:

19/09/2011

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01



## TEST CONCLUSIONS

Samples of:

Manufacturer Mila Hardware Ltd

Product Restriction device's

Model Ideal restrictor arm and restricted friction hinge

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

By Exova Warrington APT, 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
5.3	Load bearing capacity of safety devices – 350N (062050C/51C)	Yes
5.3	Load bearing capacity of safety devices – 350N (ANG8312C/13C)	Yes
5.3	Load bearing capacity of safety devices – 350N (06010/15)	Yes
5.3	Load bearing capacity of safety devices – 350N (MSR201-16")	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

Document No.: 310901

Author: C Bryan

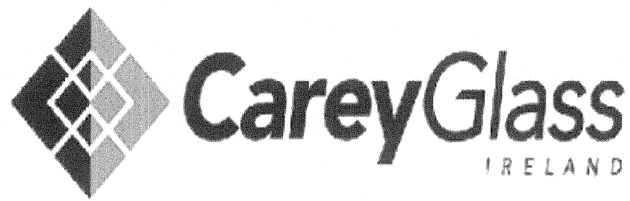
Client: Mila Hardware Ltd

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## **Declaration of Conformity**

Level 3

Carey Glass  
Limerick Road  
Nenagh  
Co. Tipperary  
Republic of Ireland

Declares that all of the Insulating Glass Products under the brand names of:

**Vistatherm**  
**Vistatherm Elite**  
**Vistatherm Elite SE**

Intended to be used in Building and Construction Works

Complies with the requirements of EN 1279-5, Annex ZA

Bill Carey

A handwritten signature in black ink, appearing to read "Bill Carey".

Managing Director  
Carey Glass



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works Planilux 4mm (16mm Air Space,  
Air Filled) Planilux 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:

4mm Planilux  
16mm Cavity  
Air Filled  
4mm Planilux

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/16/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	2.7 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.81 / 0.15-0.15
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.70 / 0.13/ 0.76

Bill Carey - Managing Director

20<sup>th</sup> April 2009



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works Planilux 4mm (16mm Air Space,  
Argon 90% Filled) Planilux 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:

4mm Planilux  
16mm Cavity  
Argon 90% Filled  
4mm Planilux

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN 1356)	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/16/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	2.6 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.81 / 0.15-0.15
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.70 / 0.13/ 0.76

Bill Carey - Managing Director

20<sup>th</sup> April 2009





Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(16mm Air Space, Argon Gas 90% Filled) Diamant 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Diamant Glass  
16mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/16/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.16 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.80 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.60 / 0.25/ 0.71

Bill Carey - Managing Director

20<sup>th</sup> April 2009



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(16mm Air Space, Argon Gas 90% Filled) Diamant 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Diamant Glass  
16mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/16/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.16 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.80 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.60 / 0.25/ 0.71

Bill Carey - Managing Director

20<sup>th</sup> April 2009



Carey Glass Limited  
Limerick Road  
Nenagh  
Co. Tipperary  
ROI

EN 1279-5 Insulating glass units  
intended to be used in buildings and construction works SGG PLANITHERM T 4mm  
(16mm Air Space, Argon Gas 90% fill) Planilux 4mm

CE Marking of Insulating Glass Units to EN 1279



Declaration of Performances for:  
4mm Planilux Float Glass  
16mm Cavity  
Argon Gas 90% Filled  
4mm Planitherm Total Float Glass

**Characteristics:**

1. Resistance to Fire (EN13501-2)	NPD
2. Reaction to Fire (EN13501-1)	NPD
3. External Fire Performance	NPD
4. Bullet Resistance (EN 1063)	NPD
5. Explosion Resistance (EN 13541)	NPD
6. Burglar Resistance (EN )356	NPD
7. Pendulum Body Impact Resistance (EN 12600)	NPD
8. Resistance against sudden Temperature Change And Temperature Differentials	40k / 40k
9. Wind, Snow, Permanent and Imposed Load Resistance	4/16/4
10. Direct Airborne Sound Reduction (EN 12758) Rw (C, Ctr)	NPD
11. Thermal Properties: - U Value - Normal Emissivity (EN12898)	1.16 NPD
12. Light Transmission / Reflection (EN 410: tv /pv/p'v	0.79 / 0.12-0.12
13. Solar Energy Transmission / Reflection (EN 410): g Value	0.56 / 0.21/ 0.66

Bill Carey - Managing Director

20<sup>th</sup> April 2009