CE

DECLARATION OF CONFORMITY
REF: 111
BS EN 1279
GLASS IN BUILDING INSULATING GLASS UNITS

This is to certify that:
CS Glazing (North Wales) Ltd
Chester Road/Jubilee Road
Buckley
Clwyd CH7 3AL

Have conformed to BS EN 1279-5 ANNEX ZA submitting plain insulating glass units to BSI for testing to BS EN 1279 Part 2 and Part 3 and successfully meeting all requirements.

Please refer to test reports.
371/7636/231 – 371/7375/469
Produced by:
BSI Product Services
Maylands Avenue, Hemel Hempstead
Herts HP2 4SQ

Instigating and implementing a system of factory production control complying with BS EN 1279 Part 6

Producing a technical file containing the test report and performance indication papers for all components.

Signed: ..... **Date:** 1.5.2013

Director

TECHNICAL FILE

A. EVALUATION OF CONFORMITY

B. FACTORY PRODUCTION CONTROL

C. TEST REPORTS

D. SUPPLIERS C E DECLARATION OF CONFORMITY

E. C. E. CONFORMITY IDENTIFICATION

EVALUATION OF CONFORMITY

TO BS EN 1279 – 5

EVALUATION OF CONFORMITY TO BS EN 1279-5

Table ZA.3.2 – Assignment of evaluation of conformity tasks for thermally toughened soda lime silicate safety glass under system 3

Task		Content of the task	Evaluation of conformity clauses to apply
Task for the Manufacturer	Factory production control (F.P.C.)	Parameters related to all relevant characteristics of Table ZA.	5.3
	Initial type testing	All other relevant characteristics of Table ZA.1 other than those shown below	5.2
Tasks for the notified boy	Initial type testing	Reaction to fire (Classes A1, A2, B,C,D,E) External fire performance. Burglar resistance. Pendulum body impact resistance. Direct airborne sound insulation. Thermal properties. Ratiation properties: - light transmittance and reflection. - solar energy characteristics	5.2

FACTORY PRODUCTION CONTROL

QUALITY PLAN

FACTORY PRODUCTION CONTROL

1. INTRODUCTION

This procedure describes the disciplines necessary to control the manufacture of double glazed units.

2. METHOD

2.1 On receipt of an order all essential details are checked as defined in procedure MP3.2.

2.2 A production slot is allocated for all items required by the Estimating and Production Manager or nominated computer operator, in the daily production schedule (Appendix 1). When an order is received and the installation date has not been specified by the customer, the order is allocated a date that suits the production Schedule.

The Production Schedule is only used by the Production Planning Computer Operator to check the daily production level and to produce the items as listed in 2.5.

2.3 Information essential for the manufacture of the units together with details or delivery and installation requirements when applicable is processed by the Production Planning Computer.

2.4 Once the order has been entered on the computer an acknowledgment of the order is printed. This acknowledgment is then pass to a nominated member of staff to check.

2.4.1 If any non-conformities are found the acknowledgment is corrected and returned to the production planning computer. Once the order has been corrected, the order can proceed.

2.5 The Production Planning Computer produces the following information and documentation:-

2.5.1 A computer floppy disc containing information required for the computer aided cutting bench for all pieces of glass to be cut to size.

2.5.2 A label for each Double glazed Unit to identify the work order number, customer name, size reference, spacer details, unit make-up, size and type of glass and room location.

2.5.3 Two labels are produced for a double glazed unit were the make up does not contain 2 leaves of 4mm float.

2.5.4 Optimising run-out to enable the cutting bench operator to identify each piece of glass cut from each sheet.

2.5.5 Spacer bar cutting list which specifies the quantity width and height of unit, section size, colour (only when a unit contains a non silver bar) window decoration details, (Appendix 4)

2.5.6 Delivery Note (Appendix 5)

2.5.7 Invoice (Appendix 6).

2.5.8 A copy of the customers order that contains shaped units.

2.6 Item 2.5.1 to 2.5.5 and 2.5.8 are placed in a production file and then passed to the Cutting Bench Operator. Items 2.5.6 and 2.5.7 are filed in the production office.

2.7 The glass is cut, placed on a mobile rack along with the labels and spacer bar cutting list.

2.8 Only the following units have a double sided tape applied to the spacer bar (see MP8.2.14) prior to cutting.

1. **SHAPE UNITS.**

2.9 Once the spacer bars are assembled spacer bars that require a Butyl Primary Seal are passed to the P.I.B. Operator (see MP8.2.13).

2.10 Glass for units requiring decoration is handled as described in Procedure MP8.2.7 to MP8.2.11.

2.11 All glass is washed prior to assembly.

2.12 The unit is assembled using the prepared glass and spacer bars and placed in a mobile rack, segregated and identified by the label.

2.13 All units are transferred for applications of the double glazing sealant (Prepared in accordance with MP8.2.5). Silver or black tape is then applied to the edges of the unit.

2.14 The units for installation are then transferred to numbered racks for Final Inspection, units for supply only are transferred to the trade racks and numbered racks.

2.15 The following procedures define the methods of inspection.

MP9.2 - In Process Inspection
MP9.3 - Final Inspection

2.16 The flow diagram (Appendix 8) gives a graphic form of this procedure.

3. RESPONSIBILITIES

3.1 The Production Manager schedules production slot for orders.

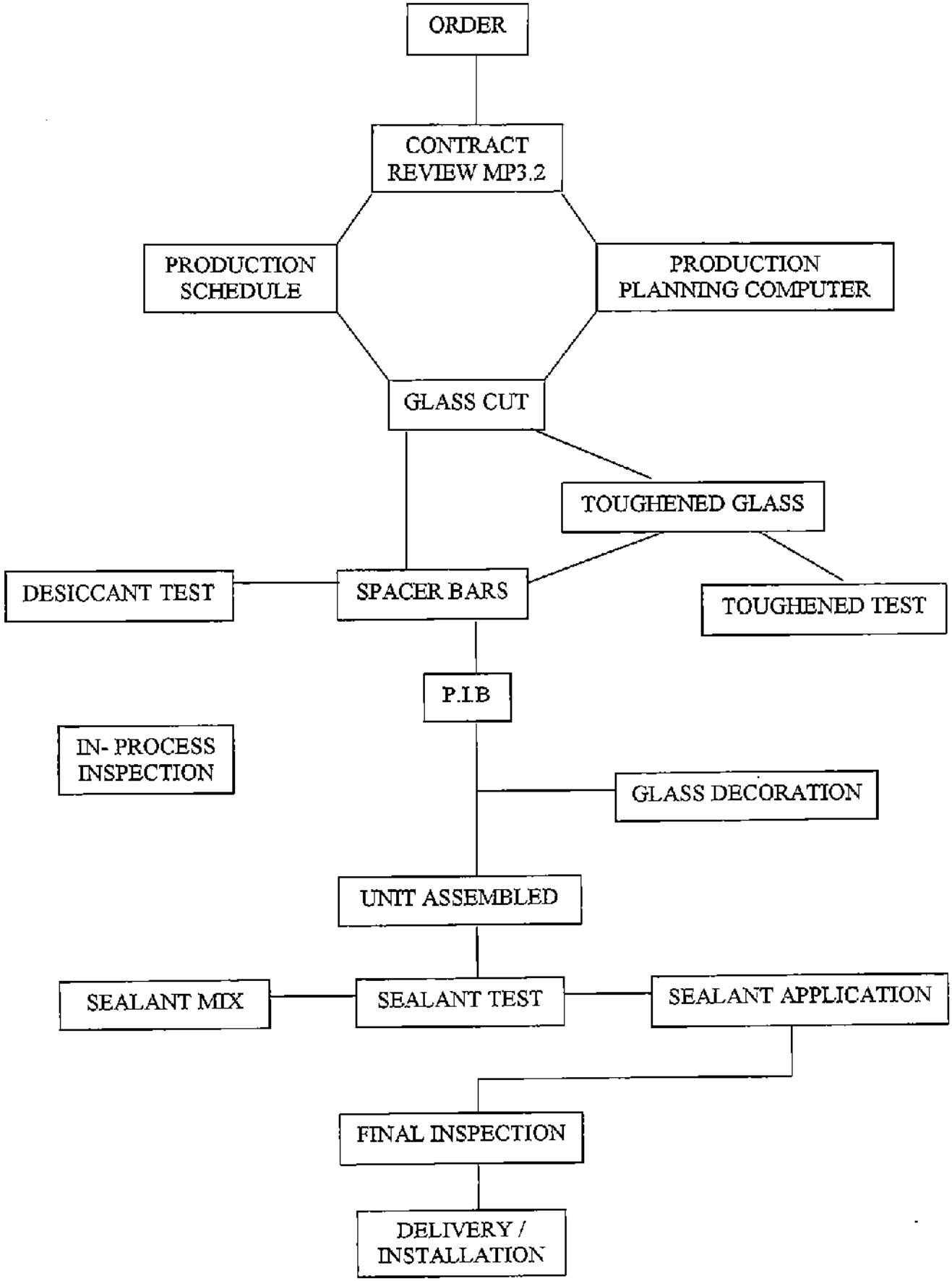
3.2 The Production Planning Computer Operator converts order information to production specifications.

3.3 The Production Manager is responsible for all manufacturing operations.

4. APPENDICES

I	Daily Production Schedule (Example)
II	Glass Identification Label (Example)
III	Optimising Run Out (Example)
IV	Spacer Bar Cutting List (Example)
V	Delivery Note (CSF14.1)
VI	Invoice (CSF1)
VII	Order (white copy)
VIII	Process Control Flow Diagram

PRODUCTION FLOW DIAGRAM



CS GLAZIERS (N W) LTD

Issue No. 2 Date: 5.01.04 Authorised by: [signature]

TEST PROCEDURES

MP 9.2.1	-	GLASS CUTTING MANUAL/ AUTOMATIC PROCEDURE
MP9.2.2	-	SEALANT TESTING PROCEDURE
MP 9.2.2A	-	PRIMARY SEAL APPLICATION TEST PROCEDURE
MP 9.2.3	-	DESICCANT TEST PROCEDURE
MP 9.2.4	-	DEW POINT AND DAILY INSPECTION PROCEDURE
MP 9.2.6	-	SEALANT ADHESION TEST PROCEDURE
MP 9.2.7	-	TAPE MEASURE CHECKING TEST PROCEDURE
MP 9.2.8	-	RETEST REQUIREMENT PROCEDURE
MP 9.2.9	-	SPACER ABR CHECKING PROCEDURE

C S GLAZIERS (NW) LTD

ISSUE NO. 1 **DATE:** 05.01.04 **AUTHORISED BY:**

TEST RECORDS – GLASS

MPF 9.2.1	-	GLASS CUTTING
MPF 9.2.2	-	SEALANT TEST RECORD
MPF 9.2.2A	-	PRIMARY SEAL (BUTYL) WEIGHT SHEET
MPF 9.2.3	-	DESSICANT TEST RECORD
MPF 9.3.4	-	DEW POINT TEST RECORD
MPF 9.3.5	-	DAILY INSPECTION RECORD
MPF 9.3.5A	-	SAMPLE INSPECTION PLAN
MPF 9.2.6	-	ADHESION TEST
MPF 9.2.6A	-	SEALANT ADHESION TEST
MPF 9.2.9	-	SPACER BAR CHECK
MPF 9.3.7	-	LIST OF TAPE MEASURE HOLDERS
MPF 9.3.8	-	TAPE MEASURE ACCURACY CHECK

CS GLAZIERS (NW) LTD

MANDATORY PROCEDURE

DATE: 05/01/04

REGISTER OF WORK STATION PROCEDURES

MP 8.2.1	HAND CUTTING
MP 8.2.2	SPACER CUTTING
MP 8.2.3	FILLING SPACER WITH DESICCANT
MP 8.2.4	GLASS LOADING TO WASHING MACHINE
MP 8.2.5	SEALING OF DOUBLE GLAZED UNITS
MP 8.2.6	ASSEMBLY OF DOUBLE GLAZED UNITS
MP8.2.7	GEORGIAN BAR CUTTING
MP 8.2.8	SPACER BAR DRILLING
MP 8.2.9	MANUFACTURE GEORGIAN GLASS UNITS
MP 8.2.10	ADHESIVE LEADING
MP 8.2.11	ADHESIVE LEADING & COLOUR FILMING
MP 8.2.12	AUTOMATIC CUTTING
MP 8.2.13	BUTYL APPLICATION
MP 8.2.14	TAPE APPLICATION TO SPACER BAR

TEST REPORTS

TEST AND EXAMINATION OF INSULATING GLASS UNITS SUBMITTED FOR PERIODIC TEST ASSESSMENT

INTRODUCTION

At the request of BSI the insulating glass units, detailed below and submitted by CS Glaziers (North Wales) Limited, were tested and assessed to the applicable requirements of BS EN 1279-6:2002 Annex B and Annex C as indicated on the following pages of this report. This request was made on Service Management Order No. 7636231, dated 17 April 2012. The test items were received on 28 August 2012 and identified under Equipment Record No. 10121768.

TEST ITEMS

6 off insulating glass units each nominally 502mm x 352mm with a 12 mm air gap between the two panes of 4 mm glass were submitted for test to BS EN 1279-6:2002 Annex B.4. In addition 2 off each type nominally 502mm x 352mm with a 12 mm air gap were submitted for test to BS EN 1279-6:2002 Annex C. The components used in the construction were declared by the manufacturer as follows:

Desiccant -	Molecular sieve - Eurosiv 3A
Spacer bar -	Aluminium ,bendable - Thermoseal
Corner keys -	Not applicable - Connector
Primary sealant -	Butyl - Tremco JS680
Secondary sealant -	Hot melt - Bostik 5000
Cavity gas -	Air
Lead -	Regalead
Georgian bar -	Not applicable
Coloured film -	Regafilm
Date of manufacture -	16 July 2012

SUMMARY OF RESULTS

The insulating glass units described above exhibited the following characteristics:

Characteristic	Specified	Actual	Assessment
Sample 1 moisture penetration index	8.5%	1.3% [1]	Pass
Sample 5 moisture penetration index	8.5%	1.7% [1]	Pass
UV fogging test result	No fogging or contamination was observed on the interior glass surface(s)		Pass

[1] NOTE. In the determination of the moisture penetration index a standard moisture absorption capacity of 20.0% has been used.

TEST PROCEDURE, BS EN 1279-6:2002 Annex B.4 - Periodic testing and inspection

Conditioning and dimensional measurement

The insulating glass units were received at BSI on 28 August 2012 and stored in standard laboratory conditions of 23 ±2°C and 50 ±5%RH for a period of not less than 14 days. During this period the seal geometry was inspected and recorded.

Initial moisture content

The desiccant from units 2 and 4 was removed and the initial moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950°C drying method.

Climatic test

Units 1 and 5 were placed in the climatic test chamber and subjected to 3 weeks at a constant temperature of +58°C and a humidity of 95%RH or greater. This climatic test commenced on 14 September 2012. Following this climatic test the units were conditioned in standard laboratory conditions for a further 14 days.

Final moisture content

The desiccant from units 1 and 5 was removed and the final moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950°C drying method.

Test results

Unit Number	Initial Moisture Content	Final Moisture Content	Moisture penetration index
1	N/A	**2.26%**	**1.26%**
2	**2.09%**	N/A	N/A
4	**1.98%**	N/A	N/A
5	N/A	**2.35%**	**1.73%**

The desiccant has been declared as Molecular sieve - Eurosiv 3A, with a generally accepted value for the standard moisture absorption capacity of 20.0%.

TEST PROCEDURE, BS EN 1279-6:2002 Annex C - Fogging test

2 off insulating glass units were assessed in accordance with BS EN 1279-6:2002 Annex C. The principles of the test were conducted in accordance with Clause C.2, using the test parameters as specified in Clause C.3.

Initial inspection & conditioning

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces and then conditioned for seven days under laboratory conditions.

Fogging test

2 off samples were mounted in an ultraviolet test box with a UV radiation intensity of 40 W/m². The air temperature within the test box was maintained at between 50 ±3°C and 60 ±3°C. A cooling plate was placed on the geometric centre of each sample, with water at 25 ±2°C flowing through the plate. After a test period of 168 ±4 hours the samples were removed from the fogging chamber and inspected. If fogging/contamination was observed the sample was conditioned at 23 ±2°C for a further seven days and re-inspected.

Final inspection

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces.

Test results

Sample type	Lead and coloured film
Initial inspection	No evidence of dirt or other contamination was observed
Test data	The test started on 5 September 2012. The hot spot temperature was 59.2°C. The cold spot temperature was 28.4°C. The test finished on 12 September 2012. There were no deviations in the test.
Final inspection	No evidence of condensation or other contamination was observed
Assessment	**Pass**

End of report

Test Report

Report No	371/7375469 — This report consists of 4 pages
Licence/Certificate No	KM 35192
Client	CS Glaziers North Wales Limited Chester Road/Jubilee Road Buckley Flint CH7 3AE
Authority & date	BSI Service Management Order No. 7375469, dated 17 April 2010. Equipment Record No. 10106132.
Items tested	8 off Insulating glass units Desiccant - Molecular sieve - Molsiv XL8 Primary sealant - Butyl - Evostik 2900 Secondary sealant - Two part polysulphide - PRC DeSoto PRC565 Spacer bar - Aluminium bendable - UKAE Date of manufacture - Before 28 May 2010
Specification	BS EN 1279-6:2002 Annex B.4 and Annex C Periodic testing for audit assessment
Results	**Pass**
Prepared by	S Gurney S. J. Gurney. (Senior Technician Engineer)
Authorized by	F Merrison (Laboratory Manager)
Issue Date	23 September 2010
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of CP 0322 'Conditions of contract for testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI , who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

TEST PROCEDURE, BS EN 1279-6:2002 Annex B.4 - Periodic testing and inspection

Conditioning and dimensional measurement

The insulating glass units were received at BSI on 28 May 2010 and stored in standard laboratory conditions of 23 ±2ºC and 50 ±5%RH for a period of not less than 14 days. During this period the seal geometry was inspected and recorded.

Initial moisture content

The desiccant from units 2 and 4 was removed and the initial moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950 ºC drying method.

Climatic test

Units 1 and 5 were placed in the climatic test chamber and subjected to 3 weeks at a constant temperature of +58 ºC and a humidity of 95%RH or greater. This climatic test commenced on 14 July 2010. Following this climatic test the units were conditioned in standard laboratory conditions for a further 14 days.

Final moisture content

The desiccant from units 1 and 5 was removed and the final moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950 ºC drying method.

Test results

Unit Number	Initial Moisture Content	Final Moisture Content	Moisture penetration index
1	N/A	2.59%	0.91%
2	2.45%	N/A	N/A
4	2.40%	N/A	N/A
5	N/A	2.56%	0.78%

The desiccant has been declared as Molecular sieve - Molsiv XL8, with a generally accepted value for the standard moisture absorption capacity of 20.0%.

TEST PROCEDURE, BS EN 1279-6:2002 Annex C - Fogging test

2 off insulating glass units were assessed in accordance with BS EN 1279-6:2002 Annex C. The principles of the test were conducted in accordance with Clause C.2, using the test parameters as specified in Clause C.3.

Initial inspection & conditioning

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces and then conditioned for seven days under laboratory conditions.

Fogging test

2 off samples were mounted in an ultraviolet test box with a UV radiation intensity of 40 W/m². The air temperature within the test box was maintained at between 50 ±3°C and 60 ±3°C. A cooling plate was placed on the geometric centre of each sample, with water at 25 ±2°C flowing through the plate. After a test period of 168 ±4 hours the samples were removed from the fogging chamber and inspected. If fogging/contamination was observed the sample was conditioned at 23 ±2°C for a further seven days and re-inspected.

Final inspection

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces.

Test results

Sample type	Georgian bar
Initial inspection	No evidence of dirt or other contamination was observed
Test data	The test started on 7 June 2010. The hot spot temperature was 55.7°C. The cold spot temperature was 25.7°C. The test finished on 14 June 2010. There were no deviations in the test.
Final inspection	No evidence of condensation or other contamination was observed
Assessment	**Pass**

End of report

Test Report

Report No	371/7375469 — This report consists of 4 pages
Licence/Certificate No	KM 35192
Client	CS Glaziers North Wales Limited Chester Road/Jubilee Road Buckley Flint CH7 3AE
Authority & date	BSI Service Management Order No. 7375469, dated 17 April 2010. Equipment Record No. 10106132.
Items tested	8 off Insulating glass units Desiccant - Molecular sieve - Molsiv XL8 Primary sealant - Butyl - Evostik 2900 Secondary sealant - Two part polysulphide - PRC DeSoto PRC565 Spacer bar - Aluminium bendable - UKAE Date of manufacture - Before 28 May 2010
Specification	BS EN 1279-6:2002 Annex B.4 and Annex C Periodic testing for audit assessment
Results	**Pass**
Prepared by	S Gurney (Senior Technician Engineer)
Authorized by	F Merrison (Laboratory Manager)
Issue Date	23 September 2010
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of CP 0322 'Conditions of contract for testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI , who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

TEST AND EXAMINATION OF INSULATING GLASS UNITS SUBMITTED FOR PERIODIC TEST ASSESSMENT

INTRODUCTION

At the request of BSI the insulating glass units, detailed below and submitted by CS Glaziers North Wales Limited, were tested and assessed to the applicable requirements of BS EN 1279-6:2002 Annex B.4 and Annex C as indicated on the following pages of this report. This request was made on Service Management Order No. 7375469, dated 17 April 2010. The test items were received on 28 May 2010 and identified under Equipment Record No. 10106132.

TEST ITEMS

6 off insulating glass units each nominally 502mm x 352mm with a 12 mm air gap between the two panes of 4 mm glass were submitted for test to BS EN 1279-6:2002 Annex B.4. In addition 2 off each type nominally 502mm x 352mm with a 12 mm air gap were submitted for test to BS EN 1279-6:2002 Annex C. The components used in the construction were declared by the manufacturer as follows:

Desiccant -	Molecular sieve - Molsiv XL8
Spacer bar -	Aluminium bendable - UKAE
Corner keys -	Nylon - UKAE
Primary sealant -	Butyl - Evostik 2900
Secondary sealant -	Two part polysulphide - PRC DeSoto PRC565
Cavity gas -	Air
Lead -	Not applicable
Georgian bar -	Aluminium - UKAE
Coloured film -	Not applicable
Date of manufacture -	Before 28 May 2010

SUMMARY OF RESULTS

The insulating glass units described above exhibited the following characteristics:

Characteristic	Specified	Actual	Assessment
Sample 1 moisture penetration index	8.5%	0.9% [1]	Pass
Sample 5 moisture penetration index	8.5%	0.8% [1]	Pass
UV fogging test result	No fogging or contamination was observed on the interior glass surface(s)		Pass

[1] NOTE. In the determination of the moisture penetration index a standard moisture absorption capacity of 20.0% has been used.

TEST PROCEDURE, BS EN 1279-6:2002 Annex B.4 - Periodic testing and Inspection

Conditioning and dimensional measurement

The insulating glass units were received at BSI on 28 May 2010 and stored in standard laboratory conditions of 23 ±2ºC and 50 ±5%RH for a period of not less than 14 days. During this period the seal geometry was inspected and recorded.

Initial moisture content

The desiccant from units 2 and 4 was removed and the initial moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950°C drying method.

Climatic test

Units 1 and 5 were placed in the climatic test chamber and subjected to 3 weeks at a constant temperature of +58°C and a humidity of 95%RH or greater. This climatic test commenced on 14 July 2010. Following this climatic test the units were conditioned in standard laboratory conditions for a further 14 days.

Final moisture content

The desiccant from units 1 and 5 was removed and the final moisture content was established in accordance with BS EN 1279-2:2002 Annex B - The 950°C drying method.

Test results

Unit Number	Initial Moisture Content	Final Moisture Content	Moisture penetration index
1	N/A	**2.59%**	**0.91%**
2	**2.45%**	N/A	N/A
4	**2.40%**	N/A	N/A
5	N/A	**2.56%**	**0.78%**

The desiccant has been declared as Molecular sieve - Molsiv XL8, with a generally accepted value for the standard moisture absorption capacity of 20.0%.

TEST PROCEDURE, BS EN 1279-6:2002 Annex C - Fogging test

2 off insulating glass units were assessed in accordance with BS EN 1279-6:2002 Annex C. The principles of the test were conducted in accordance with Clause C.2, using the test parameters as specified in Clause C.3.

Initial inspection & conditioning

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces and then conditioned for seven days under laboratory conditions.

Fogging test

2 off samples were mounted in an ultraviolet test box with a UV radiation intensity of 40 W/m². The air temperature within the test box was maintained at between 50 ±3°C and 60 ±3°C. A cooling plate was placed on the geometric centre of each sample, with water at 25 ±2°C flowing through the plate. After a test period of 168 ±4 hours the samples were removed from the fogging chamber and inspected. If fogging/contamination was observed the sample was conditioned at 23 ±2°C for a further seven days and re-inspected.

Final inspection

The samples were inspected for any evidence of dirt or other contaminants on the interior of their glass surfaces.

Test results

Sample type	Georgian bar
Initial inspection	No evidence of dirt or other contamination was observed
Test data	The test started on 7 June 2010. The hot spot temperature was 55.7°C. The cold spot temperature was 25.7°C. The test finished on 14 June 2010. There were no deviations in the test.
Final inspection	No evidence of condensation or other contamination was observed
Assessment	**Pass**

End of report

SECTION D

SUPPLIERS C.E. DECLARATION OF CONFORMITY

A. PILKINGTON

B. GUARDIAN

C. ST. GOBAIN

GUARDIAN **PLUS**
PROGRAMME

Nov 2012

EC Declaration of Conformity

The undersigned, representing

Guardian Europe S.à r.l.

herewith declares that the basic soda lime silicate glass intended to be used in buildings and construction works

Float 0300 to Float 1000

produced by Guardian Industries U.K.Ltd., Goole is in conformity with the provisions of the following EC Directives when installed in accordance with the installation instructions contained in the product documentation

89/106/ EEC Construction Product Directive – system 3
2002/95/EC RoHS Directive

This product applies to the standard : EN 572-9:2004

Initial Type testing by: CSTB
Identification number: 079
F – 38400 Saint Martin d'Hères
France

Name: René Fiorese

PILKINGTON

EC Declaration of Conformity

CE DOC 001

CE

The undersigned, representing the following:

Manufacturer	
Pilkington plc **Head Office** **Prescot Road** **St Helens** **WA10 3TT** **United Kingdom**	
Manufacturing plants:	See Product Matrix Report No. P 2012 AT15 (Technical File)

herewith declare that the products Pilkington **Optifloat™**, **Arctic Blue™**, **EverGreen™** and **Optiwhite™**

are in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

89/106/EEC Construction Products Directive

and that the product standard referenced below has been applied:

EN 572-9: Glass in building – Basic soda lime silicate glass products – Part 9: Evaluation of conformity/Product standard

and that the supporting standards referenced below have been applied:

EN 410: Glass in building – Determination of luminous and solar characteristics of glazing

EN 572-1: Glass in building – Basic soda lime silicate glass products – Part 1: Definitions and general physical and mechanical properties

EN 572-2: Glass in building – Basic soda lime silicate glass products – Part 2: Float glass

EN 673: Glass in building – Determination of thermal transmittance (U value) – Calculation method

EN 12758: Glass in building – Glazing and airborne sound insulation – Product descriptions and determination of properties

EN 13501-1: Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests

Provisions to which the product conforms:

Directive	Product standard	Report
Construction Products Directive	EN 572-9	TC-RAP-05-13225

Characteristic	Performance declaration	Report
Resistance to fire	NPD	N/A
Reaction to fire	(See Note. below)	CWFT (EN 572-9)
External fire performance	NPD	N/A
Bullet resistance	NPD	N/A
Explosion resistance	NPD	N/A
Burglar resistance	NPD	N/A
Pendulum body impact resistance	NPD	N/A
Resistance against sudden temperature changes and temperature differentials	(See Note. below)	N/A
Wind, snow, permanent and imposed load resistance	(See Note. below)	N/A
Direct airborne sound insulation	(See Note. below)	EN 12758
Thermal properties	(See Note. below)	TFS 0153
Radiation properties:		
Light transmittance and reflectances	(See Note. below)	TFS0007. 0012. 0016. 0020. 0030. 0092. 0099. 0104. 0115. 0044. 0047. 0051. 0054. 0129. 0120. 0122. 0070. 0101. 0113. 0138. 0145
Solar transmittance and reflectances	(See Note. below)	TFS0007. 0012. 0016. 0020. 0030. 0092. 0099. 0104. 0115. 0044. 0047. 0051. 0054. 0129. 0120. 0122. 0070. 0101. 0113. 0138. 0145

Note: Declared values for each characteristic can be found at www.pilkington.com/CE

Description of the product: Pilkington **Optifloat™, Arctic Blue™ , EverGreen™** and **Optiwhite™**

Basic soda lime silicate glass, intended to be used in buildings and construction works. [Product description for Float Glass conforming with hEN 572-9' P 2012 AT07 – Technical File.]

Name and address of notified laboratories involved:

Spectroscopy Laboratory, Hall Lane, Lathom, L40 5UF, United Kingdom, notified under registration number 1680

TNO Science & Industry, PO Box 6235, 5600 HE Eindhoven, The Netherlands, notified under registration number 1154

Manufacturer:	
Name: Reinhard Banasch Position: Commercial Director, Building Products Europe Date: 9th June 2005	PKMcKeon Name: Paul McKeon Position: Operations & Technology Director, Building Products Worldwide Date: 9th June 2005

PILKINGTON

June 2006

Declaration of Conformity to ROHS

Pilkington **Activ™**
Pilkington **K-Glass™**
Pilkington **Optifloat™** (Clear, Green, Grey, Bronze)
Pilkington **Optilam™**
Pilkington **Optiwhite™**
Pilkington **Optiwhite™**
Pilkington **Textured**
Pilkington **Safety Glass**
Pilkington **Optitherm™**
Pyroshield

Declaration

We declare that the products listed above do not contain any substance of the following categories:

- carcinogenic
- mutagenic
- harmful to reproduction capabilities
- substances according to the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (as amended) labelled hazardous
- substances according to European Regulation 2003/11/EG and European Regulation article 4 2002/95/EG
- substances according to Annex IV of the regulation on hazardous substances and Annex IV of the RL67/548/EWG

According to the European Regulation on Hazardous Substances, there is no labelling/classification required. The products mentioned do not represent any harm to humans or the environment when handled correctly. The products can be recycled.

All plants involved in the manufacture of these products has an environmental management system and have been certified to ISO 14001.

The manufacturing sites are regulated under the Pollution Prevention and Control Regulations which implements the Integrated Pollution Protection and Control Directive in the UK.

Some glass may have a pattern or design printed, painted or fired on to its surface. You are advised to check with the glass processor that the material used which is non-Pilkington is itself ROHS compliant.

S G Randle

Graham Randle
Head of EH&S, Europe

Christopher Pye
UK Occupational Hygiene Manager

Pilkington plc

Prescot Road St Helens England WA10 3TT Telephone +44 (0)1744 28882 Fax +44 (0)1744 692660
Registered Office Prescot Road St Helens WA10 3TT Registered in England Company Number 41495

SAINT-GOBAIN
GLASS

Dear Sir or Madam ,

CERTIFICATE OF CONFORMITY

This confirms that the Float glass manufactured by Saint-Gobain Glass UK Ltd is in line with the requirements of BS EN 572 and that coated products we supply are in line with EN 1096.
We are also internally regulated to ensure that our control measures meet the requirements for CE marking for Float, Coated and Laminated glasses.

Yours faithfully,

Ian H. Anderson
Quality Systems Manager
Saint-Gobain Glass UK Ltd

06 December 2012

Saint-Gobain Glass UK Ltd
Eggborough Plant, Weeland Road, Goole, East Riding of Yorkshire, DN14 0FD
Telephone: 01977 668100 Fax: 01977 666248
Registered in England. Company number: 946300

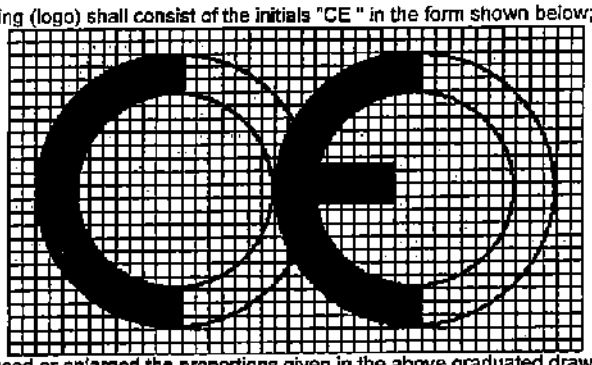
SECTION E

C. E. CONFORMITY IDENTIFICATION

Questions & Answers EC REP Wellkang Ltd (www.CE-marking.eu)
29 Harley St., London W1G 9QR, UK

CE Marking Logo
CE mark logo download
Free download CE marking logo

1. The CE conformity marking (logo) shall consist of the initials "CE " in the form shown below;



2. If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected. - The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm;
3. The affixing of markings on the products which are likely to deceive third parties as to the meaning and form of the CE marking shall be prohibited. Any other marking may be affixed to the products or the data plate provided that the visibility and legibility of the CE marking is not thereby reduced;

Attention:
It should be noted that the C and E are not formed by perfect semi-circles, i.e. the top and bottom arms extend one square beyond the semi-circles, and the middle arm of the E stops one square short.

Left are correct and real CE Conformity Marking

上边为正确的和真正的CE标志(标记)

下面为不正确的或假冒的CE标志(标记)

Below are mis-use or fake CE Conformity Marking