



Report No	2370/7999995	This Report consists of 4 pages
Client	Smart Systems Limited Arnolds Way Bristol BS49 4QN	
Authority & date	Request by Client dated 14 May 2013	
Items tested	1 off Aluminium Alloy window, Smart Systems Alitherm 800 Internally Glazed Casement Window System	
Specification	BS EN 14351: 2006 Windows and doors – Product standard, performance characteristics Part1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics Clause 4.8 load bearing capacity of safety devices. BS EN 14609 : 2004 Windows – Determination of the resistance to static torsion	
Results	Pass	
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Authorized by	M Manito 	(Senior Engineer)
Issue Date	22 May 2013	
Conditions of issue	<p>This Test Report is issued subject to the conditions stated in current issue of CP0322 'General conditions relating to acceptance of 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.</p>	



## **TEST AND EXAMINATION OF ONE ALUMINIUM ALLOY WINDOW SUBMITTED FOR ASSESSMENT**

### **INTRODUCTION**

At the request of Smart Systems Limited, the Aluminium Alloy window detailed on page 3, was tested and assessed to the requirements of BS EN 14609: 2004 Windows – Determination of resistance to static torsion, as indicated on the following pages of this Report. This request was made by BSI Quotation referenced BSI0000460100 dated 14 May 2013. It is emphasized that assessments have not been made against the other Clauses of the Specification.

### **TEST SAMPLES**

1 off projecting side hung next to projecting side hung window (with one restrictor)

(Equipment Record No 10142113)

Date sample received: 16 May 2013

Date of test: 16 May 2013

Laboratory temperature: 19.0°C

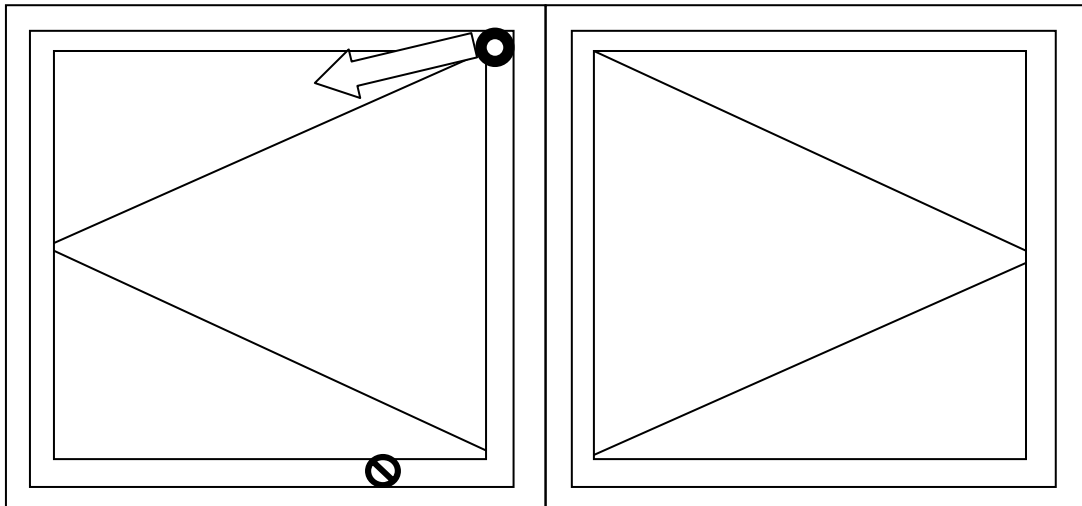
Laboratory Humidity: 37.4%

Atmospheric pressure: 101.1

## DESCRIPTION OF SAMPLE

<b>Sample type -</b>	Projecting side hung next to projecting side hung
<b>Material -</b>	Aluminium Alloy
<b>Construction -</b>	Cleated
<b>Fittings -</b>	Friction stays: 16" Securistyle side hung stays (a restrictor was fitted to the bottom of the left hand sash)  Locking: a five point locking (five mushroom bolts) Trojan espagnolette system operated by a key locking handle 12 of run up blocks 2 of sets of Securistyle hinge protectors
<b>Glass -</b>	Double glazed, 4-16-4mm toughened glass sealed units
<b>Glazing system -</b>	Internal beads and gaskets
<b>Sample dimensions -</b>	For information only (nominal sizes)  Overall size Length: 1445mm      Height: 1460mm  Sash sizes Length: 700mm      Height: 1400mm

## SUMMARY OF RESULTS



- The test specimen was opened and closed 5 times before test then opened to engage restrictor ready for the 350N force to be applied.
- A 350N load was put onto the opposite corner to the restrictor and held for 1 minute
- Position of eyebolt attachment ●
- Position of restrictors ⊘
- Direction of load labelled by arrow
- Window had no permanent damage after test and restrictor did not fail. **Pass**

**END OF REPORT**