Introduction.

This report has been prepared by Adam Pearce and relates to the activity detailed below:

<table>
<thead>
<tr>
<th>Job/Registration Details</th>
<th>Client Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job number:</strong> 8365614</td>
<td>Smart Systems Limited</td>
</tr>
<tr>
<td><strong>Job type:</strong> Testing Samples Submitted</td>
<td>Incorporating Smart Extrusions</td>
</tr>
<tr>
<td><strong>Start Date:</strong> 05/09/2016</td>
<td>Arnolds Way</td>
</tr>
<tr>
<td><strong>Test type:</strong> Type</td>
<td>Yatton</td>
</tr>
<tr>
<td><strong>Sample ID:</strong> 10156882</td>
<td>BS49 4QN</td>
</tr>
<tr>
<td><strong>Registration:</strong> KM 530838</td>
<td>United Kingdom</td>
</tr>
<tr>
<td><strong>Scheme:</strong> BS 4873 / PAS24</td>
<td></td>
</tr>
<tr>
<td><strong>Protocol:</strong> PP519</td>
<td></td>
</tr>
<tr>
<td><strong>Scheme Mgr:</strong> Lorraine Balch</td>
<td></td>
</tr>
<tr>
<td><strong>Quality system:</strong> ISO 9001:2008</td>
<td></td>
</tr>
</tbody>
</table>

Smart Systems Limited
Incorporating Smart Extrusions
Arnolds Way
Yatton
BS49 4QN
United Kingdom

The report has been approved for issue by Mark Manito – Team Manager

Approved For Issue

Issue Date: 17 March 2017

Objectives.

Type test for product certification.

Product Scope.

Visofold 1000 Aluminium Bi-fold Doors

Report Summary.

The samples were received on 31 August 2016 and the testing was started on 7 September 2016.

The samples submitted complied with the requirements of the test work conducted.
## Description of Test Sample

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outer Frame width</strong></td>
<td>2700 &amp; 3740</td>
<td></td>
</tr>
<tr>
<td><strong>Outer Frame height</strong></td>
<td>2570</td>
<td></td>
</tr>
<tr>
<td><strong>Outer Frame Part Numbers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top</td>
<td>DV14</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>Bottom</td>
<td>DV14</td>
<td>Product Name</td>
</tr>
<tr>
<td>Lock Side</td>
<td>DV14</td>
<td>Product Code</td>
</tr>
<tr>
<td>Hinge Side</td>
<td>DV14</td>
<td>Threshold</td>
</tr>
<tr>
<td><strong>Outer Frame section dimensions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>51.5</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Reinforcing</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Smart</td>
<td></td>
</tr>
<tr>
<td>Product Name</td>
<td>Head</td>
<td>Corner Cleat</td>
</tr>
<tr>
<td>Product code</td>
<td>Foot</td>
<td>Corner Cleat /Screwport</td>
</tr>
<tr>
<td><strong>Leaf</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>1200</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>2510</td>
<td></td>
</tr>
<tr>
<td>Part Numbers</td>
<td>DV23</td>
<td></td>
</tr>
<tr>
<td>Top</td>
<td>DV23</td>
<td>Product Name</td>
</tr>
<tr>
<td>Bottom</td>
<td>DV23</td>
<td>Product Code</td>
</tr>
<tr>
<td>Lock side</td>
<td>DV23</td>
<td>Leaf Midrail</td>
</tr>
<tr>
<td>Hinge Side</td>
<td>DV23</td>
<td></td>
</tr>
<tr>
<td><strong>Leaf section size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>60.5</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>74.5</td>
<td></td>
</tr>
<tr>
<td><strong>Reinforcing</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Smart</td>
<td></td>
</tr>
<tr>
<td><strong>Bead</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Smart</td>
<td></td>
</tr>
<tr>
<td><strong>Bead Size</strong></td>
<td>22 x 17</td>
<td></td>
</tr>
</tbody>
</table>

---

8365614-Test Report.

bsi.

...making excellence a habit.
### Description of Test Sample (continued)

<table>
<thead>
<tr>
<th>Glazing Unit</th>
<th>Glazing Gasket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer:</td>
<td>Gasket Type: Epdm</td>
</tr>
<tr>
<td>Inner Thickness:</td>
<td>6</td>
</tr>
<tr>
<td>Spacer Material:</td>
<td>16</td>
</tr>
<tr>
<td>Outer Thickness:</td>
<td>6</td>
</tr>
<tr>
<td>Unit Sizes:</td>
<td>Glazing Clip: N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glazing Tape Details</th>
<th>Manufacturer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glazing Tape Details</th>
<th>Manufacturer:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glazing Tape Details</th>
<th>Manufacturer:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glazing Tape Details</th>
<th>Manufacturer:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Glazing Panel Details

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Product Code</th>
<th>Fixings</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinges:</td>
<td>ACDV331</td>
<td>Refer to Fabrication Manual</td>
<td></td>
</tr>
<tr>
<td>Hinge Protectors:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lock:</td>
<td>ACDV722/723</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>Cylinder:</td>
<td>ACDV258</td>
<td>(with handle ACDV480)</td>
<td>“</td>
</tr>
<tr>
<td>Security Cylinder:</td>
<td>ACCCY50/50S3</td>
<td>(with handle ACDV251)</td>
<td>“</td>
</tr>
<tr>
<td>Handle:</td>
<td>ACDV251, 480</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>Cylinder Support:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cylinder Escutcheon:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeps:</td>
<td>Full height</td>
<td>Included in lock kits above</td>
<td>“</td>
</tr>
<tr>
<td>Drip Bar</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Guide</td>
<td>ACDV333/381</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>Roller</td>
<td>ACDV332/380</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>Run-up block</td>
<td>ACDV080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-lift block</td>
<td>ACDV081</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PAS24:2012 Type Test.

Product Description (Security Testing)

1 off three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold

Note: An additional cylinder test was conducted, see sample description for details.

(Sample ID No 10156882)

Date samples received: 31 August 2016

Test Results.

1. Manipulation  Test sample met the requirements of the Specification in respect of B.4.3
2. Infill removal  Test sample met the requirements of the Specification in respect of B.4.4
3. Mechanical loading  Test sample met the requirements of the Specification in respect of B.4.5
4. Manual check test  Test sample met the requirements of the Specification in respect of B.4.6
5. Soft body impact  Test sample met the requirements of the Specification in respect of B.4.8
6. Hard body impact  Test sample met the requirements of the Specification in respect of B.4.9.2.2
7. Security hardware and cylinder test  Test sample met the requirements of the Specification in respect of Annex A
8. Additional hardware Security and cylinder test  Test sample met the requirements of the Specification in respect of Annex A
9. Letter plate  None fitted
Sample Selection.

The sample submitted for tests were selected using the PCP Scheme Document Specification. The sample was submitted for test mounted in a 75mm x 100mm timber subframe in accordance with the manufacturer's installation requirements. Sample manufactured by the client.

Clause 5 Sequence of Tests.

The sequence of testing the sample followed that detailed in Clause 5 of BS 6375-1:2015.

Clause 5 Performance Requirements.

The performance of the sample was assessed against the requirements detailed in Table 1 Exposure categories and classifications.
Description of Sample. (Sample 1)

Sample type - A three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold

Material - Aluminium

Finish - Painted

Fittings - Master door
A five point (D KT) locking (two hook bolts, two cams, one dead bolt) Fuhr espagnolette system with four pin hinges.

Handle and Cylinder - ACDV258 cylinder, key locking Mila Pro Secure handle
Handle and Cylinder - Yale ACCY50/503S 3* cylinder, key locking standard handle

Fittings - Two Sliding leaves
A two point locking (two shoot bolts), twelve pin hinges and two rollers

Weathersealing - Doubled sealed plastic weather strips

Glass - Double glazed with 4-20-4 mm toughened glass sealed units

Glass retention system - Internal beads and gaskets

Sample dimensions -
Overall - Length: 2700mm
Master Leaves - Length: 880mm
Salve Leaves - Length: 850mm
Height: 2570mm
Height: 2510mm
Height: 2510mm

Date of test - 06 September 2016

Laboratory temperature - 25.3°C

Laboratory humidity - 73.3%
Elevation Drawing of Door Assembly.

- Master Leaf
- Bifold Leaf
- Handle
- Hinge
- Cylinder
- Cam
- Shoot Bolt
- Dead Bolt
- Dead Bolt
- Hook Bolt
CLAUSE 7 PERFORMANCE REQUIREMENTS

B.4.3 Manipulation Test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out in accordance with the given objective of this Annex using the procedure detailed in B.4.3.1 and the tools described in Group A and B where applicable.

The sample was closed and locked and the key removed.

Although there is no overall time limit no one technique was used for more than 3 minutes.

No tools were effective by any technique after 3 minutes Pass

B.4.4 Cutting and Infill medium removal test

B.4.4.2 Infill Manual Test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out in accordance with the requirements of this Annex using the tools described tools in Group A and B where applicable.

A craft knife was used to cut a 'V' in the profile. No entry was gained.

No entry could be effected within 3 minutes Pass

B.4.4.3 Infill Mechanical Test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out with a perpendicular to plane load of 2.0kN applied to each corner of the glazing and each corner of the boundaries of components in turn as specified.

No evidence of bead failure
No entry could be effected Pass

B.4.4.4 Manual Cutting Test

Not applicable
PERFORMANCE REQUIREMENTS

B.4.5 Mechanical Loading Test

The sample was mounted, vertically and square, in the test rig.

The test was carried out in accordance with the procedures detailed in B.4.5, using loading cases B.1 to B.6 and Figures B.12 for loading sequence and using the test apparatus detailed in Figures B.6 to B.9.

Diagram of points of application of loads
PERFORMANCE REQUIREMENTS

B.4.5 Mechanical Loading Test

B.4.5.2 Loading Procedures

Point of application of load

First Sequence

1. Hinge (head of left jamb)
   
   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

2. Hinge (upper left jamb)
   
   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

3. Hinge (lower left jamb)
   
   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

4. Hinge (threshold of left jamb)
   
   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

5. Cam (lower false mullion)
   
   Standard loading case used: 8
   Load applied in plane: 1.5kN along edge in a direction to disengage the cam
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   1.5kN at the mullion to oppose the above load
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds
Test Results (Continued).

PERFORMANCE REQUIREMENTS

B.4.5 Mechanical Loading Test

B.4.5.2 Loading Procedures

Point of application of load

6. Hook Bolt (lower false mullion)

   Standard loading case used: 8
   Load applied in plane: 1.5kN along edge in a direction to disengage the bolt
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   1.5kN at the mullion to oppose the above load
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

7. Dead bolt (centre false mullion)

   Standard loading case used: 9
   Loads applied in plane: 1.5kN at right angles to the edge and away from the opposite edge
   1.5kN at the mullion to oppose the above load
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

8. Hook Bolt / Hinge (upper false mullion)

   Standard loading case used: 8 / 2
   Load applied in plane: 1.5kN along edge in a direction to disengage the bolt
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   1.5kN at the mullion to oppose the above load
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

9. Cam (upper false mullion)

   Standard loading case used: 8
   Load applied in plane: 1.5kN along edge in a direction to disengage the cam
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   1.5kN at the mullion to oppose the above load
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds
PERFORMANCE REQUIREMENTS

B.4.5 Mechanical Loading Test

B.4.5.2 Loading Procedures

Point of application of load

10. Roller / Hinge (upper false mullion)

    Standard loading case used: 11/2
    Load applied in plane: 1.5kN along edge in a direction to disengage the roller
    Load applied perpendicular to plane: 1.5kN applied for 10 seconds

    Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
    1.5kN at the mullion to oppose the above load
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds

11. Hinge (lower false mullion)

    Standard loading case used: 1
    Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds

12. Roller / Hinge (lower false mullion)

    Standard loading case used: 11/2
    Load applied in plane: 1.5kN along edge in a direction to disengage the roller
    Load applied perpendicular to plane: 1.5kN applied for 10 seconds

    Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds

13. Shoot / Hinge (lower false mullion)

    Standard loading case used: 5/2
    Load applied in plane: 1.5kN along edge in a direction to disengage the shoot bolt
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds

    Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds

14. Hinge (lower false mullion)

    Standard loading case used: 1
    Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
    Load applied perpendicular to plane: 4.5kN applied for 10 seconds
PERFORMANCE REQUIREMENTS

B.4.5 Mechanical Loading Test

B.4.5.2 Loading Procedures

Point of application of load

15. Hinge (upper false mullion)

   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

16. Shoot / Hinge (upper false mullion)

   Standard loading case used: 5/2
   Load applied in plane: 1.5kN along edge in a direction to disengage the shoot bolt
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds
   
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

17. Hinge (head of right jamb)

   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

18. Hinge (upper right jamb)

   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

19. Hinge (lower right jamb)

   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

20. Hinge (threshold of right jamb)

   Standard loading case used: 1
   Load applied in plane: 1.5kN at right angles to the edge and towards the opposite edge
   Load applied perpendicular to plane: 4.5kN applied for 10 seconds

   No entry effected

   Pass
PERFORMANCE REQUIREMENTS

B.4.8 Soft Body Impact Test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out in accordance with the requirements, objectives and procedures detailed in B.4.8.1 using the impact point and procedure described in B.4.8.2 and B.4.8.3 and Figure B.10

Diagram of points of application of loads
## Test Results (Continued).

### PERFORMANCE REQUIREMENTS

#### B.4.8 Soft Body Impact Test

<table>
<thead>
<tr>
<th>Impact point</th>
<th>Position from floor level</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.80m</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>0.80m</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>0.80m</td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>0.80m</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>1.25m</td>
<td>None</td>
</tr>
<tr>
<td>6</td>
<td>1.25m</td>
<td>None</td>
</tr>
<tr>
<td>7</td>
<td>1.25m</td>
<td>None</td>
</tr>
<tr>
<td>8</td>
<td>1.25m</td>
<td>None</td>
</tr>
<tr>
<td>9</td>
<td>1.70m</td>
<td>None</td>
</tr>
<tr>
<td>10</td>
<td>1.70m</td>
<td>None</td>
</tr>
<tr>
<td>11</td>
<td>1.70m</td>
<td>None</td>
</tr>
<tr>
<td>12</td>
<td>1.70m</td>
<td>None</td>
</tr>
</tbody>
</table>

No entry effected  
Pass
PERFORMANCE REQUIREMENTS

B.4.9 Hard body impact test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out in accordance with the requirements, objectives and procedures detailed in B.4.9.1, B.4.9.2.1, B.4.9.2.2, B.4.9.2.3 using procedure B.4.9.3, using the test apparatus detailed in B.11 using the impact sequence in figure B.14.

Diagram of points of application of loads
### PERFORMANCE REQUIREMENTS

**B.4.9 Hard body impact test (continued)**

<table>
<thead>
<tr>
<th>Impact point</th>
<th>Position</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Corner/Hinge</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Hinge</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>Hinge</td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>Corner Hinge</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>Corner/ Hinge / Roller</td>
<td>None</td>
</tr>
<tr>
<td>6</td>
<td>Cam</td>
<td>None</td>
</tr>
<tr>
<td>7</td>
<td>Hook</td>
<td>None</td>
</tr>
<tr>
<td>8</td>
<td>Cylinder</td>
<td>None</td>
</tr>
<tr>
<td>9</td>
<td>Dead Bolt/ Hinge</td>
<td>None</td>
</tr>
<tr>
<td>10</td>
<td>Hook Bolt/Hinge</td>
<td>None</td>
</tr>
<tr>
<td>11</td>
<td>Cam</td>
<td>None</td>
</tr>
<tr>
<td>12</td>
<td>Corner/ Roller/ Hinge</td>
<td>None</td>
</tr>
<tr>
<td>13</td>
<td>Shoot Bolt</td>
<td>None</td>
</tr>
<tr>
<td>14</td>
<td>Shoot bolt</td>
<td>None</td>
</tr>
</tbody>
</table>

No entry effected

**ASSESSMENT**

Pass
Test Results (Continued).

PERFORMANCE REQUIREMENTS

B.4.6 Manual Check Test

The sample was mounted, vertically and square, in the test rig as described in B.3.1.

The test was carried out in accordance with the given objective of this Clause using the procedure detailed in B.4.6.3 and the tools described in B.4.6.2.

No one technique was used for more than 3 minutes.

No alternative method of entry could be effected within 3 minutes  Pass

B.4.7 Additional Loading Test

Not applicable as an alternative method of entry was not identified
PERFORMANCE REQUIREMENTS

**Hardware** - ACDV258 cylinder with key locking Mila Pro Secure handle

**Annex A Security Hardware and Cylinder Test and Assessment**

**Annex A.3.2 (Part 1)**

The sample was mounted, vertically and square, in the test rig as described in Clause 3.1.

The test was carried out in accordance with the given objective of this Annex using the procedure detailed in Annex A.3.1 and the tools described in A.2.

The sample was closed and locked and the key removed.

Mole grips were used to snap the cylinder

The total attack time was 3 minutes and the total rest time was 7 minutes

No entry could be effected within 3 minutes  

**Pass**

**Annex A.3.2 (Part 2)**

The sample was mounted, vertically and square, in the test rig as described in Clause 3.1.

The test was carried out in accordance with the given objective of this Annex using the procedure detailed in Annex A.3.1 and the tools described in A.2.

The sample was closed and locked and the key removed.

The total attack time was 3 minutes and the total rest time was 7 minutes

No entry could be effected within 3 minutes  

**Pass**
PERFORMANCE REQUIREMENTS

Hardware – Yale ACCY50/503S 3* cylinder with key locking standard handle

Annex A Security Hardware and Cylinder Test and Assessment

Annex A.3.2 (Part 1)

The sample was mounted, vertically and square, in the test rig as described in Clause 3.1.

The test was carried out in accordance with the given objective of this Annex using the procedure detailed in Annex A.3.1 and the tools described in A.2.

The sample was closed and locked and the key removed.

Mole grips were used to snap the cylinder

The total attack time was 3 minutes and the total rest time was 7 minutes

No entry could be effected within 3 minutes

Pass

Annex A.3.2 (Part 2)

The sample was mounted, vertically and square, in the test rig as described in Clause 3.1.

The test was carried out in accordance with the given objective of this Annex using the procedure detailed in Annex A.3.1 and the tools described in A.2.

The sample was closed and locked and the key removed.

The total attack time was 3 minutes and the total rest time was 7 minutes

No entry could be effected within 3 minutes

Pass

B.4.3 Letter Plates

None fitted
Photograph of Sample.
BS4873:2009 Type Test.

Product Description (Weather Test)

1 off three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold (Sample 2)

1 off three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold (Sample 3)

1 off three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold (Sample 4)

1 off three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold (Sample 5)

(Sample ID No 10156882)

Date samples received: 31 August 2016

Test Results.

1. Air permeability
   Test samples 2, 3, 4 and 5 met the requirements of the Specification, in respect of Clause 13, for Test Pressure Class 1.

2. Watertightness
   Test sample 2 met the requirements of the Specification, in respect of Clause 13, for Test Pressure Class 2A.
   Test sample 3 met the requirements of the Specification, in respect of Clause 13, for Test Pressure Class 3A.
   Test sample 4 met the requirements of the Specification, in respect of Clause 13, for Test Pressure Class 4A.
   Test sample 5 met the requirements of the Specification, in respect of Clause 13, for Test Pressure Class 8A.

3. Wind resistance
   Test samples 2, 3 and 4 met the requirements of the Specification, in respect of Clause 8, for Exposure Category Class A2.

Classification for Wind Resistance.

<table>
<thead>
<tr>
<th>Test sample 3</th>
<th>Exposure Category 800Pa</th>
</tr>
</thead>
</table>

4. Operational Strength
   Test sample 3 met the requirements of the Specification in respect of BS 6375-2
Classification for Operational strength.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating forces</td>
<td>Class 1</td>
</tr>
<tr>
<td>Vertical load</td>
<td>Class 2</td>
</tr>
<tr>
<td>Resistance to Static torsion</td>
<td>Class 2</td>
</tr>
<tr>
<td>Soft and Heavy body Impact Load bearing</td>
<td>Class 2</td>
</tr>
<tr>
<td>Hard body impact</td>
<td>Class 2</td>
</tr>
<tr>
<td>Load bearing capacity of safety devices</td>
<td>N/A</td>
</tr>
<tr>
<td>Closure against obstruction</td>
<td>Pass</td>
</tr>
</tbody>
</table>

5. Basic security

Test sample 3 met the requirements of BS6375-3

Sample Selection.

The sample submitted for tests were selected using the PCP Scheme Document Specification. The sample was submitted for test mounted in a 75mm x 100mm timber subframe in accordance with the manufacturer’s installation requirements. Sample manufactured by the client.

Clause 5 Sequence of Tests.

The sequence of testing the sample followed that detailed in Clause 5 of BS 6375-1:2015.

Clause 5 Performance Requirements.

The performance of the sample was assessed against the requirements detailed in Table 1 Exposure categories and classifications.
Methods Of Test.

1. **Operating Forces**
   The operating forces acting on the sample were determined by the methods given in standard BS EN 12046 – 2.

2. **Air Permeability**
   The air permeability of the sample was determined by the method given in BS 6375-1:2015.

3. **Watertightness**
   The watertightness of the sample was determined by the method given in BS 6375-1:2015.

4. **Wind Resistance**
   The wind resistance of the samples was determined by the methods (P1 and P2) given in BS 6375-1:2015.

5. **Repeat Tests**
   After testing for resistance to wind loading (P1 and P2) the air permeability test was repeated.

6. **Wind Resistance**
   The wind resistance of the samples was determined by the method (P3) given in BS 6375-1:2015.

7. **Resistance to Vertical Loads**
   The resistance to vertical loads test was carried out using the method given in standard BS EN 947.

8. **Resistance to Static Torsion**
   The resistance to static torsion test was carried out using the method given in standard BS EN 948.

9. **Soft and heavy body impact**
   The resistance to soft and heavy body impact was carried out using the method given in standard BS EN 949.

10. **Hard body impact**
    The resistance to hard body impact was carried out using the method given in standard BS EN 950.

11. **Closure against obstruction**
    The Closure against obstruction was carried out using the method given in BS 6375-3.
12. **Basic security**

The basic security test was carried out using the method given in standard BS 6375:3.

**Note.**

Basic Security not UKAS accredited to BS6375-3
Description of Sample. (Sample 2)

**Sample type -**
A three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold

**Material -**
Aluminium

**Finish -**
White

**Fittings -**
- **Master door**
  A five point locking (two hook bolts, two cams, 1 dead bolt) Fuhr espagnolette system, ACDV258 cylinder, key locking Mila Pro Secure handle and four pin hinges.
- **Two Sliding leaves**
  A two point locking (two shoot bolts), twelve pin hinges and two rollers

**Weathersealing -**
Doubled sealed plastic weather strips

**Glass -**
Double glazed with 4-20-4 mm toughened glass sealed units

**Glass retention system -**
Internal beads and gaskets

**Sample dimensions -**
- Overall - Length: 3740mm  
  Height: 2570mm
- Master Leaves - Length: 1200mm  
  Height: 2500mm
- Slave Leaves - Length: 1200mm  
  Height: 2500mm

**Date of test -**
06 September 2016

**Laboratory temperature -**
22.4°C

**Laboratory humidity -**
69.7%

**Laboratory Atmospheric Pressure -**
100.1kPa
Elevation Drawing of Door Assembly.

- Handle
- Hinge
- Cylinder
- Cam
- Shoot Bolt
- Dead Bolt
- Hook Bolt

Water Leakage Points

Transducer Placement - ✗
Graph of Air Permeability Before Gusting.


Table of Air Permeability Before Gusting.

AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

Clause 6.3 - Before resistance to wind tests

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>35.1</td>
<td>2.05</td>
<td>3.66</td>
</tr>
<tr>
<td>100</td>
<td>64.4</td>
<td>3.76</td>
<td>6.71</td>
</tr>
<tr>
<td>150</td>
<td>89.7</td>
<td>5.24</td>
<td>9.33</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure.

Total opening perimeter = 17.12m

Overall area = 9.61m²

BS 6375-1:2015 Clause 6.3 - Joint class = 1

BS 6375-1:2015 Clause 6.3 - Area class = 1

BS 6375-1:2015 Clause 6.3 - Overall class = 1
Graph of Average Air Permeability Before Gusting.

- Differential pressure [Pa]
- Air permeability [m³/h.m² of overall area]
- Air permeability [m³/h.m² of opening joints]

Class 1
Class 2
Class 3
Class 4

Average Leakage [m³/h.m²]
Average Leakage [m³/h.m]

Watertightness Test Results.

BS EN 1027:2000 Clause 7 Watertightness before resistance to wind loads

TABLE 2 - Spraying method 1A

<table>
<thead>
<tr>
<th>Pressure (Pascals)</th>
<th>Point and time at which water leakage occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No leakage</td>
</tr>
<tr>
<td>50</td>
<td>No leakage</td>
</tr>
<tr>
<td>100</td>
<td>Water leaked from threshold opening joint onto sill at 1 minutes and 10 seconds</td>
</tr>
<tr>
<td>150</td>
<td>-</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
</tr>
<tr>
<td>750</td>
<td>-</td>
</tr>
<tr>
<td>900</td>
<td>-</td>
</tr>
<tr>
<td>1050</td>
<td>-</td>
</tr>
</tbody>
</table>

WIND LOAD RESISTANCE TEST RESULTS - BS EN 12211:2000

Clause 8 Resistance to wind load

P1 DEFLECTION TEST

Three positive pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a positive air pressure of 800Pa.

Actual deflection – 10.36mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/226 (maximum ratio allowed 1/150)

Three negative pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a negative air pressure of 800Pa.

Actual deflection – 7.23mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/325 (maximum ratio allowed 1/150)
P2 REPEATED PRESSURE TEST

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a positive air pressure of 400Pa.

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a negative air pressure of 400Pa.

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1. (see following Table).
Graph of Air Permeability After Gusting.

![Graph of Air Permeability After Gusting.](image)
# Table Average Air Permeability After Gusting.

## AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

**Clause 6.5 - After resistance to wind tests**

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>35.8</td>
<td>2.09</td>
<td>3.73</td>
</tr>
<tr>
<td>100</td>
<td>65.1</td>
<td>3.80</td>
<td>6.78</td>
</tr>
<tr>
<td>150</td>
<td>91.3</td>
<td>5.33</td>
<td>9.50</td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure.

Total opening perimeter = 17.12m

Overall area = 9.61m²

BS 6375-1:2015 Clause 6.5 - Joint class = 1

BS 6375-1:2015 Clause 6.5 - Area class = 1

BS 6375-1:2015 Clause 6.5 - Overall class = 1

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1.
Graph of Average Air Permeability After Gusting.

- **Class 1**
- **Class 2**
- **Class 3**
- **Class 4**

**Air permeability** [m³/h.m]

**Average leakage** [m³/h.m]

**Average leakage** [m³/h.m²]

**Differential pressure** [Pa]

**Air permeability** [m³/h.m² of overall area]
Graph of Average Air Permeability After Gusting Including +20% Lines for Each Class.
Wind Load Resistance Test Results - BS EN 12211:2000.

P3 SAFETY TEST

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a positive air pressure of 1200Pa.

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a negative air pressure of 1200Pa.
Clause 6
Performance characteristics and requirements for pedestrian doorsets

Clause 6.2 Operating Forces: EN12046-2 and EN12217

The sample was tested three times, closing the leaf, handle, locking the key, unlocking the key, handle opening and maintaining the leaf to stay open, and highest of the three results were then recorded.

Closing leaf force – 38.65N (maximum 75N) 
Handle closing – 60.45N (maximum 100N) 
Key torque to lock – 0.10Nm (maximum 20N) 
Key torque to unlock – 0.10Nm (maximum 20N) 
Handle opening – 63.05 (maximum 100N) 
Force to maintain opening – 42.30N (maximum 75N)

Clause 6.3.1 Vertical Load.

All loads were applied and removed in increments of maximum 100N.

The diagonal measurement of door was measured to the nearest 1mm (hinge bottom to lockside top corner)

A pre-load of 200± 4N using weights vertically to the top of the lock side corner of the door leaf, at 50± 5mm from the opening edge, and maintained for 60± 5s, then removed and left to rest for a further 60± 5s.

The gauge was zeroed then to the same loading point (Class 2) 600N was applied for 300s ± 5s, a maximum deformation measurement was taken

The load was removed and after 180± 5s the residual deflection measurement was taken, along with the diagonal measurement.

Pre diagonal measurement - 2655mm 
Maximum deformation – 0.20mm 
Residual measurement – 0.00mm 
Diagonal measurement – 2655mm

For the door to pass, the residual deformation must not exceed 1.0mm

Pass
Clause 6
Performance characteristics and requirements for pedestrian doorsets

Clause 6.3.2 Resistance to static torsion.

All loads were applied and removed in increments of maximum 100N.

The door leaf was opened to 90° then fixed at the top lockside corner, 50± 5mm from the edge.

A pre-load of 200± 4N was applied horizontally and normally to the plane of the leaf, at the lower lockside corner, at 50± 5mm from the edge, then maintained for 60± 5s.

After 1 minute the gauge was zeroed and loaded to (Class 2) 250N for 300s ± 5s, the maximum deformation was taken, the load was taken off and left to rest for 180s ± 5s, the residual measurement was then taken.

Maximum deformation – 34.30mm
Residual measurement – 0.00mm

For the door to pass the residual deformation must not exceed 2.0mm  Pass

Clause 6.3.3 Soft and Heavy body Impact .

The door was closed to its normal operating mode and the sample was marked at the centre of the door leaf.

The deviation across the width of the door was measured at the impact point.

A 30±0.6Kg leather impactor was raised to the required drop height and impacted to the exterior face, then the deviation was measured again

For the door to achieve the required class it shall not exceed 2mm Residual measurement across face of impacted side.

The sample was impacted in the centre of the active leaf and from the outside

Residual measurement – 0mm  Pass
Clause 6
Performance characteristics and requirements for pedestrian doorsets

Clause 6.3.4 Hard body Impact.

The door leaf was mounted horizontally with rigid supports under the long edges of the leaf and pattern 2 was selected.

Glazed impact points were omitted, and the exterior side was impacted.

If permanent damage is left after impact measurements were taken after 30 minutes.

Mean of the Diameter – 3.00mm
Mean of the depth – 0.10m

The mean to qualify for a class shall not exceed 20mm, and the mean for the depth shall not exceed 1.0mm

Pass

Clause 6.4 Load bearing capacity of safety devices.

Not assessed due to no safety device being fitted

Closure against obstruction.

The objective of this test is to determine the resistance of a doorset to closure of the door leaf against small objects such as small toys, which may be accidentally trapped between the frame and leaf.

A 50 x 50 x 10mm aluminium block was placed in the gap between the leaf and the bottom of the hinge side jamb.

A 200N force was applied to the lock side of the leaf and held for 15 ±5 seconds

The leaf was then opened and closed 5 times and the operating forces were taken

Pass
**Clause 6**

**Performance characteristics and requirements for pedestrian doorsets**

<table>
<thead>
<tr>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
</tr>
</tbody>
</table>

**Clause 6.2 Operating Forces: EN12046-2 and EN12217**

The sample was tested three times, closing the leaf, handle, locking the key, unlocking the key, handle opening and maintaining the leaf to stay open, and highest of the three results were then recorded.

<table>
<thead>
<tr>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing leaf force – 40.50N (maximum 75N)</td>
<td>Pass</td>
</tr>
<tr>
<td>Handle closing – 61.60N (maximum 100N)</td>
<td>Pass</td>
</tr>
<tr>
<td>Key torque to lock – 0.10Nm (maximum 20N)</td>
<td>Pass</td>
</tr>
<tr>
<td>Key torque to unlock – 0.10Nm (maximum 20N)</td>
<td>Pass</td>
</tr>
<tr>
<td>Handle opening – 66.60N (maximum 100N)</td>
<td>Pass</td>
</tr>
<tr>
<td>Force to maintain opening – 41.25N (maximum 75N)</td>
<td>Pass</td>
</tr>
</tbody>
</table>

**Basic security (Annex A)**

**BS 6375: Part 3: 2009 - Performance of Doors**

The objective of this test is to establish from if from the outside entry can be gained by defeating the glazing or locking system.

The force used did not result in permanent set or plastic deformation of any tool.

Damaged tools shall be replaced and the test did not exceed the maximum 3 minute time period.

The screwdriver was used to no effect

No entry could be effected Pass
### Description of Sample. (Sample 3)

<table>
<thead>
<tr>
<th><strong>Sample type</strong></th>
<th>A three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material</strong></td>
<td>Aluminium</td>
</tr>
<tr>
<td><strong>Finish</strong></td>
<td>White</td>
</tr>
</tbody>
</table>
| **Fittings**   | **Master door**
A five point locking (two hook bolts, two cams, 1 dead bolt) Fuhr espagnolette system, ACDV258 cylinder, key locking Mila Pro Secure handle and four pin hinges.  
**Two Sliding leaves**
A two point locking (two shoot bolts), twelve pin hinges and two rollers |
| **Weathersealing** | Doubled sealed plastic weather strips |
| **Glass**      | Double glazed with 4-20-4 mm toughened glass sealed units |
| **Glass retention system** | Internal beads and gaskets |
| **Sample dimensions** | Overall - Length: 3740mm Height: 2570mm  
Master Leaves - Length: 1200mm Height: 2500mm  
Slave Leaves - Length: 1200mm Height: 2500mm |
| **Date of test** | 7 September 2016 |
| **Laboratory temperature** | 22.4°C |
| **Laboratory humidity** | 69.7% |
Elevation Drawing of Door Assembly.

Master Leaf

Bifold Leaf

Bifold Leaf

- Handle
- Hinge
- Cylinder
- Cam
- Shoot Bolt
- Dead Bolt
- Hook Bolt

Water Leakage Point

Transducer Placement - ☒
Graph of Air Permeability Before Gusting.

- Exfiltration [m³/h.m]
- Infiltration [m³/h.m²]

Class 1
Class 2
Class 3
Class 4

Exfiltration [m³/h.m]
Infiltration [m³/h.m²]
Table of Average Air Permeability Before Gusting.

AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

Clause 6.3 - Before resistance to wind tests

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>35.1</td>
<td>7.04</td>
<td>3.66</td>
</tr>
<tr>
<td>100</td>
<td>59.1</td>
<td>11.83</td>
<td>6.14</td>
</tr>
<tr>
<td>150</td>
<td>79.7</td>
<td>15.98</td>
<td>8.30</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure.

Total opening perimeter = 4.99m

Overall area = 9.61m²

BS 6375-1:2015 Clause 6.3 - Joint class = 1

BS 6375-1:2015 Clause 6.3 - Area class = 1

BS 6375-1:2015 Clause 6.3 - Overall class = 1
Graph of Average Air Permeability Before Gusting.

Average Leakage [m³/h.m²]

Class 1

Average Leakage [m³/h.m]

Class 2

Class 3

Class 4

Air permeability [m³/h.m² of overall area]

Air permeability [m³/h.m of opening joints]

Differential pressure [Pa]
Watertightness Test Results.

BS EN 1027:2000 Clause 7 Watertightness before resistance to wind loads

TABLE 2 - Spraying method 1A

<table>
<thead>
<tr>
<th>Pressure (Pascals)</th>
<th>Point and time at which water leakage occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No leakage</td>
</tr>
<tr>
<td>50</td>
<td>No leakage</td>
</tr>
<tr>
<td>100</td>
<td>No Leakage</td>
</tr>
<tr>
<td>150</td>
<td>Water leaked from threshold opening joint onto sill at 2 minutes and 10 seconds</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
</tr>
<tr>
<td>750</td>
<td>-</td>
</tr>
<tr>
<td>900</td>
<td>-</td>
</tr>
<tr>
<td>1050</td>
<td>-</td>
</tr>
</tbody>
</table>

WIND LOAD RESISTANCE TEST RESULTS - BS EN 12211:2000

Clause 8 Resistance to wind load

P1 DEFLECTION TEST

Three positive pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a positive air pressure of 800Pa.

Actual deflection – 7.47mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/314 (maximum ratio allowed 1/150)

Three negative pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a negative air pressure of 800Pa.

Actual deflection – 13.43mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/174 (maximum ratio allowed 1/150)
P2 REPEATED PRESSURE TEST

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a positive air pressure of 400Pa.

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a negative air pressure of 400Pa.

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1. (see following Table).
Graph of Air Permeability After Gusting.
Table of Average Air Permeability After Gusting.

**AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000**

**Clause 6.5 - After resistance to wind tests**

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>35.8</td>
<td>7.18</td>
<td>3.73</td>
</tr>
<tr>
<td>100</td>
<td>59.9</td>
<td>12.01</td>
<td>6.24</td>
</tr>
<tr>
<td>150</td>
<td>81.3</td>
<td>16.29</td>
<td>8.46</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure.

Total opening perimeter = 4.99m

Overall area = 9.61m²

BS 6375-1:2015 Clause 6.5 - Joint class = 1

BS 6375-1:2015 Clause 6.5 - Area class = 1

BS 6375-1:2015 Clause 6.5 - Overall class = 1

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1.
Graph of Average Air Permeability After Gusting.

Air permeability [m³/h.m of opening joints]

Air permeability [m³/h.m² of overall area]

Differential pressure [Pa]

Class 1

Class 2

Class 3

Class 4

Average leakage [m³/h.m]

Average leakage [m³/h.m²]
Graph of Average Air Permeability After Gusting Including +20% Lines for Each Class.
Wind Load Resistance Test Results - BS EN 12211:2000.

P3 SAFETY TEST

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a positive air pressure of 1200Pa.

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a negative air pressure of 1200Pa.
Clause 6

Performance characteristics and requirements for pedestrian doorsets

Clause 6.2 Operating Forces: EN12046-2 and EN12217

The sample was tested three times, closing the leaf, handle, locking the key, unlocking the key, handle opening and maintaining the leaf to stay open, and highest of the three results were then recorded.

- Closing leaf force – 37.18N (maximum 75N) Pass
- Handle closing – 59.96N (maximum 100N) Pass
- Key torque to lock – 0.10Nm (maximum 20N) Pass
- Key torque to unlock – 0.10Nm (maximum 20N) Pass
- Handle opening – 60.93N (maximum 100N) Pass
- Force to maintain opening – 42.73N (maximum 75N) Pass

Basic security (Annex A).

BS 6375: Part 3: 2009 - Performance of Doors

The objective of this test is to establish from if from the outside entry can be gained by defeating the glazing or locking system.

The force used did not result in permanent set or plastic deformation of any tool.

Damaged tools shall be replaced and the test did not exceed the maximum 3 minute time period.

The screwdriver was used to no effect

No entry could be effected Pass
Description of Sample. (Sample 4)

Sample type - A three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold

Material - Aluminium

Finish - White

Fittings -

Master door
A five point locking (two hook bolts, two cams, 1 dead bolt) Fuhr espagnolette system, ACDV258 cylinder, key locking Mila Pro Secure handle and four pin hinges.

Two Sliding leaves
A two point locking (two shoot bolts), twelve pin hinges and two rollers

Weathersealing - Doubled sealed plastic weather strips

Glass - Double glazed with 4-20-4 mm toughened glass sealed units

Glass retention system - Internal beads and gaskets

Sample dimensions -

Overall - Length: 3740mm Height: 2570mm
Master Leaves - Length: 1200mm Height: 2500mm
Slave Leaves - Length: 1200mm Height: 2500mm

Date of test - 7 September 2016

Laboratory temperature - 19.7°C

Laboratory humidity - 35.4%

Laboratory Atmospheric Pressure - 99.7kPa
Elevation Drawing of Door Assembly.

- Master Leaf
- Bifold Leaf
- Bifold Leaf

- Handle
- Hinge
- Cylinder
- Cam
- Transducer Placement
- Shoot Bolt
- Dead Bolt
- Hook Bolt

Water Leakage Point
Graph of Air Permeability Before Gusting.

Air permeability [m³/h.m² of overall area]

Differential pressure [Pa]

Class 1

Class 2

Class 3

Class 4

Exfiltration [m³/h.m]

Infiltration [m³/h.m²]
Table of Average Air Permeability Before Gusting.

AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

Clause 6.3 - Before resistance to wind tests

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>32.8</td>
<td>1.92</td>
<td>3.57</td>
</tr>
<tr>
<td>100</td>
<td>52.3</td>
<td>3.05</td>
<td>5.68</td>
</tr>
<tr>
<td>150</td>
<td>76.3</td>
<td>4.45</td>
<td>8.29</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure.

Total opening perimeter = 17.12m

Overall area = 9.2m²

BS 6375-1:2015 Clause 6.3 - Joint class = 1

BS 6375-1:2015 Clause 6.3 - Area class = 1

BS 6375-1:2015 Clause 6.3 - Overall class = 1
Graph of Average Air Permeability Before Gusting.

- **Class 1**
- **Class 2**
- **Class 3**
- **Class 4**

**Axes:**
- **Differential pressure [Pa]**
- **Air permeability \([\text{m}^3/\text{h}.\text{m}^2]\)**
- **Air permeability \([\text{m}^3/\text{h}.\text{m}^2 \text{ of overall area}]\)**

**Legend:**
- **Average Leakage**

---

...making excellence a habit.
Watertightness Test Results.

BS EN 1027:2000 Clause 7 Watertightness before resistance to wind loads

TABLE 2 - Spraying method 1A

<table>
<thead>
<tr>
<th>Pressure (Pascals)</th>
<th>Point and time at which water leakage occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No leakage</td>
</tr>
<tr>
<td>50</td>
<td>No leakage</td>
</tr>
<tr>
<td>100</td>
<td>No Leakage</td>
</tr>
<tr>
<td>150</td>
<td>No Leakage</td>
</tr>
<tr>
<td>200</td>
<td>Water leaked from threshold opening joint onto sill at 58 seconds.</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
</tr>
<tr>
<td>750</td>
<td>-</td>
</tr>
<tr>
<td>900</td>
<td>-</td>
</tr>
<tr>
<td>1050</td>
<td>-</td>
</tr>
</tbody>
</table>

WIND LOAD RESISTANCE TEST RESULTS - BS EN 12211:2000

Clause 8 Resistance to wind load

P1 DEFLECTION TEST

Three positive pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a positive air pressure of 800Pa.

Actual deflection – 15.57mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/150 (maximum ratio allowed 1/150)

Three negative pressure pulses at 880Pa were applied

No visible failures or functional defects to the test sample were observed after wind loads applied at a negative air pressure of 800Pa.

Actual deflection – 8.31mm (maximum deflection allowed 15.66mm)

Deflection/span ratio 1/282 (maximum ratio allowed 1/150)
P2 REPEATED PRESSURE TEST

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a positive air pressure of 400Pa.

No visible failures or functional defects to the test sample were observed after 50 cycles of repeated wind loads applied at a negative air pressure of 400Pa.

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1. (see following Table).
Graph of Air Permeability After Gusting.

- Air permeability \([\text{m}^3/\text{h.m}]\)
- Air permeability \([\text{m}^3/\text{h.m}^2]\) of overall area
- Differential pressure \([\text{Pa}]\)
- Exfiltration \([\text{m}^3/\text{h.m}]\)
- Exfiltration \([\text{m}^3/\text{h.m}^2]\)
- Infiltration \([\text{m}^3/\text{h.m}]\)
- Infiltration \([\text{m}^3/\text{h.m}^2]\)

Class 1
Class 2
Class 3
Class 4
Table of Average Air Permeability After Gusting.

AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

Clause 6.5 - After resistance to wind tests

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>47.8</td>
<td>2.79</td>
<td>5.20</td>
</tr>
<tr>
<td>100</td>
<td>73.9</td>
<td>4.32</td>
<td>8.03</td>
</tr>
<tr>
<td>150</td>
<td>102.6</td>
<td>5.99</td>
<td>11.15</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure

Total opening perimeter = 17.12m

Overall area = 9.2m²

BS 6375-1:2015 Clause 6.5 - Joint class = 1

BS 6375-1:2015 Clause 6.5 - Area class = 1

BS 6375-1:2015 Clause 6.5 - Overall class = 1

In accordance with BS 6375-1:2015 Clause 6.5, as the classification after the resistance to wind load tests is the same as the classification before the resistance to wind load tests, the resulting classification for the sample is Class 1.
Graph of Average Air Permeability After Gusting.
Graph of Average Air Permeability After Gusting Including +20% Lines for Each Class.
P3 SAFETY TEST

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a positive air pressure of 1200Pa.

No parts of the test sample became detached and the test sample remained closed after a wind load safety test applied at a negative air pressure of 1200Pa.

Clause 6
Performance characteristics and requirements for pedestrian doorsets

Assessment

Clause 6.2 Operating Forces: EN12046-2 and EN12217

The sample was tested three times, closing the leaf, handle, locking the key, unlocking the key, handle opening and maintaining the leaf to stay open, and highest of the three results were then recorded.

Closing leaf force – 35.77N (maximum 75N) Pass
Handle closing – 61.12N (maximum 100N) Pass
Key torque to lock – 0.10Nm (maximum 20Nm) Pass
Key torque to unlock – 0.10Nm (maximum 20N) Pass
Handle opening – 64.08 (maximum 100N) Pass
Force to maintain opening – 42.42N (maximum 75N) Pass

Basic security (Annex A).
BS 6375: Part 3: 2009 - Performance of Doors

The objective of this test is to establish from if from the outside entry can be gained by defeating the glazing or locking system.

The force used did not result in permanent set or plastic deformation of any tool.

Damaged tools shall be replaced and the test did not exceed the maximum 3 minute time period.

The screwdriver was used to no effect

No entry could be effected Pass
## Description of Sample. (Sample 5)

<table>
<thead>
<tr>
<th>Sample type</th>
<th>A three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Aluminium</td>
</tr>
<tr>
<td>Finish</td>
<td>White</td>
</tr>
<tr>
<td>Fittings</td>
<td><strong>Master door</strong>&lt;br&gt;A five point locking (two hook bolts, two cams, 1 dead bolt) Fuhr espagnolette system, ACDV258 cylinder, key locking Mila Pro Secure handle and four pin hinges.&lt;br&gt;&lt;br&gt;<strong>Two Sliding leaves</strong>&lt;br&gt;A two point locking (two shoot bolts), twelve pin hinges and two rollers</td>
</tr>
<tr>
<td>Weathersealing</td>
<td>Doubled sealed plastic weather strips</td>
</tr>
<tr>
<td>Glass</td>
<td>Double glazed with 4-20-4 mm toughened glass sealed units</td>
</tr>
<tr>
<td>Glass retention system</td>
<td>Internal beads and gaskets</td>
</tr>
<tr>
<td>Sample dimensions</td>
<td><strong>Overall</strong> - Length: 3740mm Height: 2570mm&lt;br&gt;<strong>Master Leaves</strong> - Length: 1200mm Height: 2500mm&lt;br&gt;<strong>Slave Leaves</strong> - Length: 1200mm Height: 2500mm</td>
</tr>
<tr>
<td>Date of test</td>
<td>7 September 2016</td>
</tr>
<tr>
<td>Laboratory temperature</td>
<td>20.0°C</td>
</tr>
<tr>
<td>Laboratory humidity</td>
<td>34.8%</td>
</tr>
<tr>
<td>Laboratory Atmospheric Pressure</td>
<td>99.8kPa</td>
</tr>
</tbody>
</table>
Elevation Drawing of Door Assembly.

- Master Leaf
- Bifold Leaf
- Bifold Leaf

- Handle
- Hinge
- Cylinder
- Cam
- Shoot Bolt
- Dead Bolt
- Hook Bolt

Water Leakage Point
Graph of Air Permeability.
Table of Average Air Permeability.

AIR PERMEABILITY TEST RESULTS - BS 6375-1:2015 / BS EN 1026:2000

Clause 6.3 - Before resistance to wind tests

Three positive pressure pulses of 660Pa were applied prior to testing

<table>
<thead>
<tr>
<th>Air Pressure [Pa]</th>
<th>Average rate of air leakage [m³/h]</th>
<th>Average rate of air leakage per meter length of opening joint [m³/h.m]</th>
<th>Average rate of air leakage relative to area of sample [m³/h.m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>47.0</td>
<td>2.75</td>
<td>4.89</td>
</tr>
<tr>
<td>100</td>
<td>65.4</td>
<td>3.82</td>
<td>6.81</td>
</tr>
<tr>
<td>150</td>
<td>81.9</td>
<td>4.79</td>
<td>8.52</td>
</tr>
<tr>
<td>200</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>250</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>450</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The figures in the table above give the leakage as an average of the leakage at positive pressure and the leakage at negative pressure

Total opening perimeter = 17.12m

Overall area = 9.6118m²

BS 6375-1:2015 Clause 6.3 - Joint class = 1

BS 6375-1:2015 Clause 6.3 - Area class = 1

BS 6375-1:2015 Clause 6.3 - Overall class = 1
Graph of Average Air Permeability.

- **Class 1**
- **Class 2**
- **Class 3**
- **Class 4**

**Average Leakage**

- **Class 1**: 2.5
- **Class 2**: 2.0
- **Class 3**: 1.5
- **Class 4**: 1.0

**Differential pressure [Pa]**

- 10
- 50
- 100
- 150
- 200
- 250
- 300
- 350
- 400
- 450
- 500
- 550
- 600

**Air permeability [m³/h.m² of overall area]**

- 0.25
- 0.5
- 0.75
- 1.0
- 1.25
- 1.5
- 1.75
- 2.0
- 2.25
- 2.5

**Air permeability [m³/h.m of opening joints]**

- 2.5
- 5.0
- 7.5
- 10.0
- 12.5
- 15.0
- 17.5
- 20.0
- 22.5
- 25.0
Watertightness Test Results.

BS EN 1027:2000 Clause 7 Watertightness before resistance to wind loads

TABLE 2 - Spraying method 1A

<table>
<thead>
<tr>
<th>Pressure (Pascals)</th>
<th>Point and time at which water leakage occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No leakage</td>
</tr>
<tr>
<td>50</td>
<td>No leakage</td>
</tr>
<tr>
<td>100</td>
<td>No Leakage</td>
</tr>
<tr>
<td>150</td>
<td>No Leakage</td>
</tr>
<tr>
<td>200</td>
<td>No Leakage</td>
</tr>
<tr>
<td>250</td>
<td>No Leakage</td>
</tr>
<tr>
<td>300</td>
<td>No Leakage</td>
</tr>
<tr>
<td>450</td>
<td>No Leakage</td>
</tr>
<tr>
<td>600</td>
<td>Water leaked from threshold opening joint onto sill at 0 minutes and 10 seconds.</td>
</tr>
<tr>
<td>750</td>
<td>-</td>
</tr>
<tr>
<td>900</td>
<td>-</td>
</tr>
<tr>
<td>1050</td>
<td>-</td>
</tr>
</tbody>
</table>


Clause 6
Performance characteristics and requirements for pedestrian doorsets

Clause 6.2 Operating Forces: EN12046-2 and EN12217

The sample was tested three times, closing the leaf, handle, locking the key, unlocking the key, handle opening and maintaining the leaf to stay open, and highest of the three results were then recorded.

Closing leaf force – 41.22N (maximum 75N) Pass
Handle closing – 59.03N (maximum 100N) Pass
Key torque to lock – 0.10Nm (maximum 20Nm) Pass
Key torque to unlock – 0.10Nm (maximum 20Nm) Pass
Handle opening – 63.13N (maximum 100N) Pass
Force to maintain opening – 46.88N (maximum 75N) Pass
The objective of this test is to establish from if from the outside entry can be gained by defeating the glazing or locking system.

The force used did not result in permanent set or plastic deformation of any tool.

Damaged tools shall be replaced and the test did not exceed the maximum 3 minute time period.

The screwdriver was used to no effect

No entry could be effected

Pass
Photograph of Sample.
## Test Samples.

<table>
<thead>
<tr>
<th>Sample Id</th>
<th>ER Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10156882</td>
<td>Aluminium Bi-Fold Doors</td>
</tr>
</tbody>
</table>

## Test Requirements.

**PAS 24/BS4873 Type Test**

<table>
<thead>
<tr>
<th>Clause</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results table</td>
<td>Actual test results</td>
</tr>
</tbody>
</table>

*See Table A - PAS 24/BS4873 Type Test*

## Summary of Test Results (Table A).

<table>
<thead>
<tr>
<th>Sample Id</th>
<th>Description</th>
<th>Air Permeability</th>
<th>Watertightness</th>
<th>Wind Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open out standard (PAS24) Pass</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Open Out Low Threshold</td>
<td>Class 1</td>
<td>2A</td>
<td>A2 (Pass at 800Pa)</td>
</tr>
<tr>
<td>3</td>
<td>Open In Low Threshold</td>
<td>Class 1</td>
<td>3A</td>
<td>A2 (Pass at 800Pa)</td>
</tr>
<tr>
<td>4</td>
<td>Open Out Standard Threshold</td>
<td>Class 1</td>
<td>4A</td>
<td>A2 (Pass at 800Pa)</td>
</tr>
<tr>
<td>5</td>
<td>Open In Standard Threshold</td>
<td>Class 1</td>
<td>8A</td>
<td>Not Assessed</td>
</tr>
</tbody>
</table>

## Description of Test Samples.

1 off three leaf glaze in open out hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold (Sample 2)

1 off three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and low threshold (Sample 3)

2 off three leaf glaze in open out hinged bi-fold door assemblies with one master leaf and two folding sliding leaves, full glass infill and standard threshold (Samples 1 and 4)

1 off three leaf glaze in open in hinged bi-fold door assembly with one master leaf and two folding sliding leaves, full glass infill and standard threshold (Sample 5)
Glossary of Terms.

PASS: Complies. Tested by BSI engineers at BSI laboratories.
PASS1: Complies. Witnessed by BSI engineers in manufacturers laboratory.
PASS2: Complies. Tests carried out by third party lab; results accepted by BSI.
PASS*: Report resulted in uncertainty and states that Compliance is more probable than non-compliance.
FAIL: Non compliance – Product does not meet the requirements of this clause.
FAIL*: Report resulted in uncertainty and states that Non-compliance is more probable than compliance.
N/A: Not applicable to design under consideration.
N/T: Not tested due to similarity to previously tested item; reference earlier test report.

Conditions of Issue.

This Test Report is issued subject to the conditions stated in current issue of 'BSI Terms of Service'. 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 BSI, who reserve the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

Should you wish to speak with BSI in relation to this report, please contact Customer Services on +44 (0)8450 80 9000.

BSI
Kitemark House
Maylands Avenue
Hemel Hempstead
Hertfordshire
HP2 4SQ

Opinions and Interpretations expressed herein are outside the scope of our UKAS accreditation.

Unless otherwise stated, any results not obtained from testing in a BSI laboratory are outside the scope of our UKAS accreditation.