

Test report

Test report relating to a building product according to BSI Standard PAS 24:2016, enhanced security performance requirements for door sets and windows in the UK. Concerning the product marked as: trade mark: Veka System 10 and type: Double Doors, manufactured by: Window Warehouse

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Project name	ERCT 0765/1 Ongoing PAS 24: 2016
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1 Introduction

1.1 Purpose

The tests have been performed in order to establish whether or not the building product meets the applicable requirements of BSI Standard PAS24.

For this report, the test results from "89218289-40 ERCT 0765-1 Window Warehouse Veka Ongoing DDoor PAS24 2016" [2], dated 4th February 2021, have been used.

1.2 Description of the samples

General

Name of the manufacturer	Window Warehouse
Address of the manufacturer	Unit 1-8 Dragon Industrial Estate, Fitzherbet Road, Farlington, Portsmouth, PO6 1SQ, UK
Production plant of the samples	As above
Line ID where the samples are made	Not indicated
Production date	01/12/2020
The product was marked as	Veka System 10 Double Doors
Dimensions of the sample(s)	1800mm x 2200mm

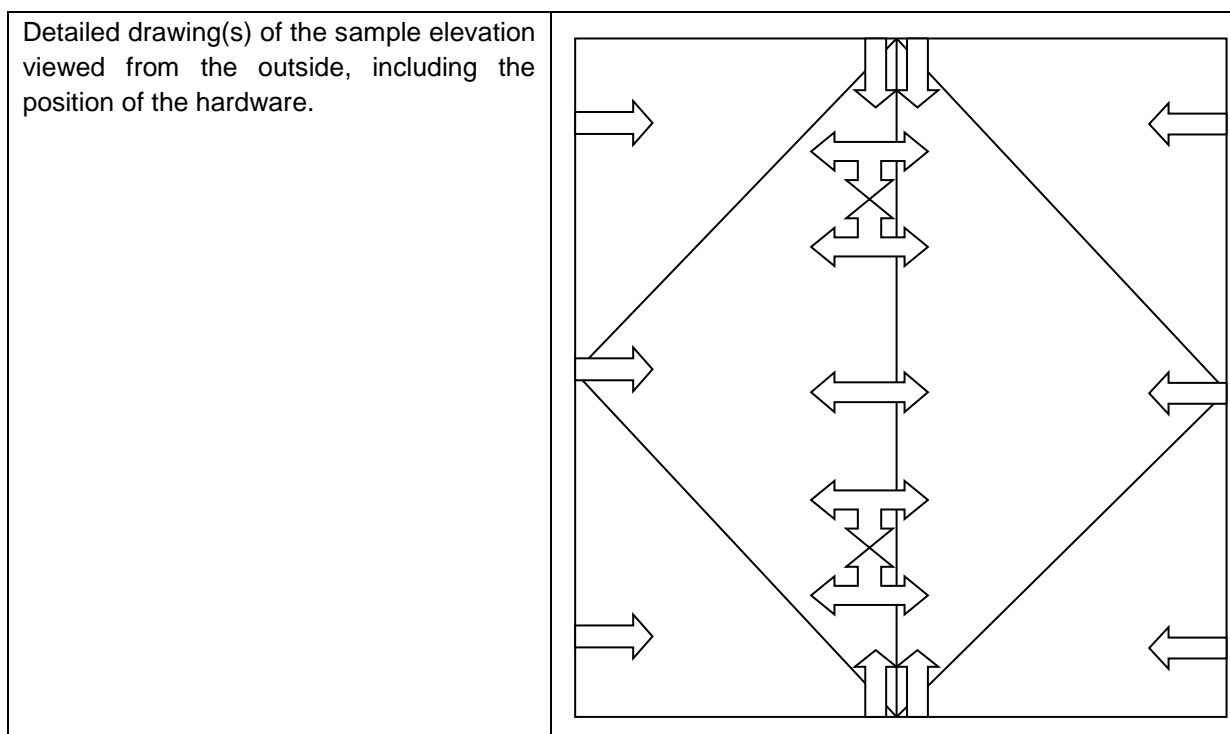
Specific

Product description	Veka System 10 Double Doors
Type(s) of construction	Welded
Profile references	P10502 72mm Outer A00345 44mm Low Threshold P10510 110mm Open In Sash P10612 Floating Mullion P10431 28mm Bead
Origin of materials/type(s) of material	PVCu
Surface treatment of materials	White

Types of doors	Family Leader name (representative test specimen - most unfavorable)	Maximum sold size (width x height)
Double door hung on opposite jamb. Open In	Veka System 10 Double Doors	Not Indicated

Construction and hardware

Method of frame jointing	Welded
Framing, profile and reinforcement detail	P10502 72mm Outer – S00191 A00345 44mm Low Threshold – n/a P10510 110mm Open In Sash – S00162 P10612 Floating Mullion
Types of beading, gaskets, glazing method or any other security feature present	P10431 28mm Bead PCE Seals 1* Cylinder and Cylinder Guard Hinge Guards Glass Locks 8 No. Run up Blocks
Type and (overall) thickness of glazing (or infill medium)	4/20/4
Types and details of hardware	Avantis Locks and Keeps 3 No. Mila Evolution Hinges per Sash 3 No. GT Guardian Hinge Guards per Sash Avantis 1* Cylinder Avantis Cylinder Guard Lever / Lever Handles GT Glass Locks Snap Fit Shoot bolts to both sashes
Types and details of hardware fixings	Master and Slave Locks – 4.3 x 32 NP Master Keeps into Profile – 4.3 x 32 NP Master Keeps into Reinforcing – 4 x 25 DP Slave Keeps into Reinforcing – 4.8 x 45 DP Hinges – 4.2 x 55 bugle Hinge Guards into Profile – 4.3 x 32 NP Hinge Guards into Reinforcing – 4 x 38 DP Cylinder, Cylinder Guard and Handles as supplied Floating Mullion - 4.8 x 70 Wafer Head Shootbolts – 4.3 x 32 NP



For pictures of the tested samples refer to Appendix A of this report.

For pictures of the test apparatus refer to Appendix B of this report.

1.3 Sampling procedure

The test house, acting as notified test body, has had no influence on the selection of the samples.

1.4 Application

The request for testing was submitted by Avantis Hardware on behalf of the manufacturer on 24/11/2020, order or reference number or name: 159218. Assignment Form number: ERCT 0765/1.

Submitted information:

- Application form relating to BSI standard PAS24;
- Technical description including drawings and specifications;
- Installation instructions; None supplied
- Detailed information on hardware and locking mechanism(s)

1.5 Method of testing

All applicable tests have been performed according to the BSI standard PAS24 [1].

1.6 Put out to contract

Tests were performed on manufacturer's equipment and executed by personell of ERC Testing Ltd, Unit A8(3), Pennington Court, Walter Leigh Way, Moss Industrial Estate, Leigh WN7 3PT, United Kingdom under responsability of the Notified Body TÜV Rheinland Nederland B.V.

1.7 Privacy statement

Due to privacy reasons, the names of involved personnel that executed the tests, are not disclosed in the report. However, this information is available on internal work sheets, test forms etc. in the project file.

1.8 Notifications, accreditations and designation

TÜV Rheinland Nederland B.V. has been notified by the Dutch Ministry of Infrastructure and the Environment as Notified Test Laboratory and Notified Product Certification Body (number 0336) for the European Construction Products Regulation EU No 305/2011.

TÜV Rheinland Nederland B.V. has been accredited by the Dutch Accreditation Council (RvA) as ISO 17025 Test Laboratory (accreditation number L 484) and ISO 17065 Certification Body (accreditation number C078).

The reported tests were performed under ISO 17025 accreditation.

Period of measurement

The measurements took place on 28-01-2021.

2 Test results

Test results after performing all applicable tests according to BSI standard PAS24 [1].

The ambient temperature at the time of the test was 18.5°C.

To claim conformity to this PAS, doorsets and windows shall be classified according to their intended use for all relevant characteristics in accordance with BS 6375 (all parts) and shall meet the relevant requirements of the relevant material specific standard such as BS 7412, BS 4873, BS 6510, BS 8529 and BS 644.

To claim conformity to this PAS, doorsets shall meet the requirements of **4.2, 4.3, 4.4** and Annex A of this PAS and either Annex B or BS EN 1627, RC3. (For further notes, see clause **4.1.2** of this PAS)

2.1 Summary doorsets

Requirement/test	Annex/paragraph	Result
Security hardware and cylinder test	Annex A	pass
Letter plate test	4.3	not applicable
Manual check test	Annex B.4.6.	not applicable
Additional mechanical loading test	Annex B.4.7.	not applicable
Mechanical test on infill	Annex B.4.4.3	pass
Manipulation test a	Annex B.4.3.a	not applicable
Manual cutting test	Annex B.4.4.4	not tested
Mechanical loading test	Annex B.4.5	pass
Manipulation test b)	Annex B.4.3.b	not tested
Manual test on infill	Annex B.4.4.2	pass
Soft body impact test	Annex B.4.8	not applicable
Hard body impact test – door leaf	Annex B.4.9.2.2	not applicable
Hard body impact test – Infill medium	Annex B.4.9.2.3	not applicable

2.2 Detailed test results

Requirement/test	Detailed requirement	Inspected/measured	Result
Security hardware and cylinder test	Attempt to gain entry through the lock, cylinder and associated security hardware with the manual tools described in the standard. 3-minute attack.	Removed handle and partially snapped cylinder. Cylinder guard held the cylinder, no entry gained	pass
Mechanical test on infill	Apply a specified sequence of loads on infill medium	2kN loads applied to corners of glass infill. No entry gained	pass
Manual cutting test	Attempt to gain entry	Not tested as full height glass and reinforced sections.	not tested
Mechanical loading test	Apply a specified sequence of loads. 4.5kN perpendicular load and 1.5kN parallel to plane load.	Load point 8, centre latch went more than 50mm deflection but then held the 4.5kN. No further issues or any entry gained.	pass
Manipulation test b)	Attempt to gain access to fixings after mechanical loading has been conducted	Not tested as no fixings exposed under loading	not tested
Manual test on infill	Attempt to gain entry via the infill retention system. Using manual tools as described in the standard.	Cut through face to expose bead leg, 1st bead out 29s, 2nd bead out 1m 10s, 3rd bead out 2m 21s. Glass Locks held IGU, no entry gained.	pass

2.3 Classification

Requirement	Classification
Doorsets meeting the requirements of Annex B using the entry definition in 3.9	D

NOTE 1: For doorsets and windows conforming to BS EN 1627 similar classifications apply. See reference clause 4.4.3 of this PAS.

NOTE 2: It should be noted that the annexes within this PAS and BS EN 1627 only form part of the route to conformity and the classifications specified in 4.4 of this PAS is only based on part of the route.

Test data

Date of test	28 th January 2021
Test equipment	T 27 Security test rig ref PAS 24 testing
Test results	ERCT 0765-1 Window Warehouse DDoor PAS24 28 01 21.xlsx

3 Conclusion

The tested product Veka System 10 Double Doors as described under 1.2, Description of the samples, by Window Warehouse meets the applicable requirements of BSI standard PAS24 [1].

The test results exclusively relate to the specific range of tested objects and the conditions under which the tests were conducted.

4 References

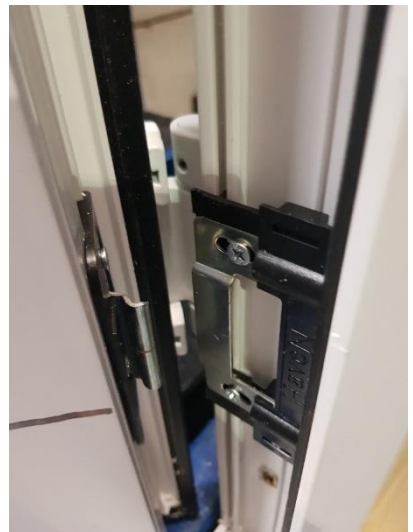
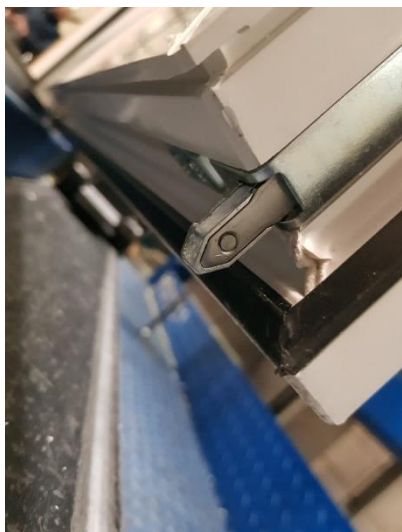
- 1 BSI standard PAS24,
Enhanced security performance requirements for door sets and windows in the UK, door sets and windows intended for a level of security suitable for dwellings and other buildings exposed to comparable risk.

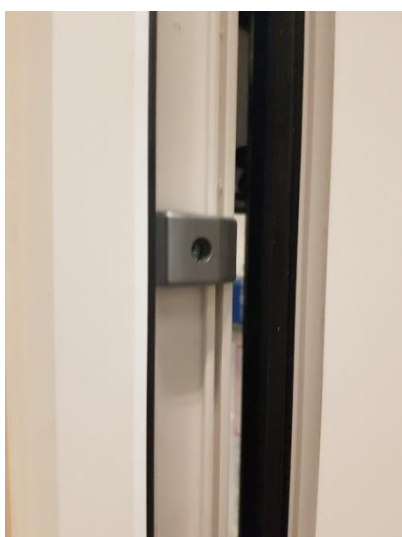
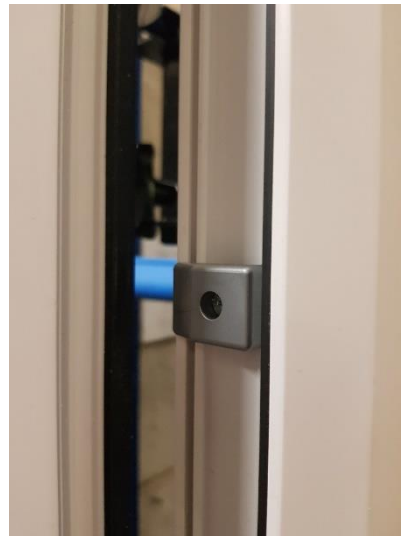
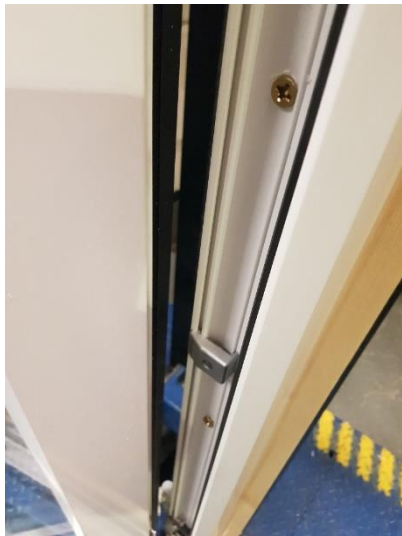
The British Standards Institution
First edition November 2007,
Second edition August 2012,
Third (present) edition February 2016
- 2 Test results “89218289-40 ERCT 0765-1 Window Warehouse Veka Ongoing DDoor PAS24 2016” by
ERC Testing Ltd, Unit A8 (3), Pennington Court, Walter Leigh Way, Moss Industrial Estate, Leigh WN7
3PT, United Kingdom.

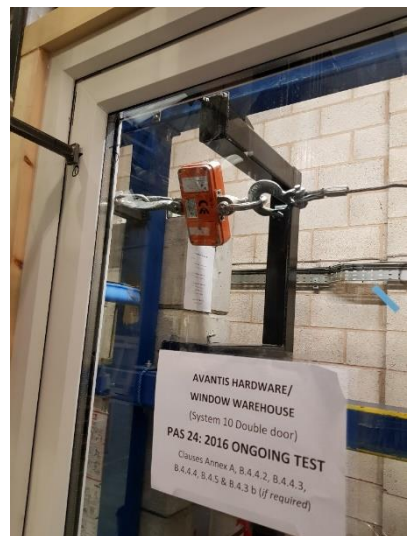
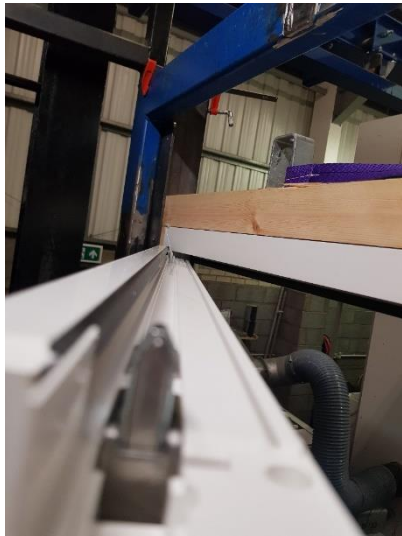
5 Signatures

Author	Signature
Mr. M. Hackett	
ERC Testing Ltd	
Approved by	Signature
Mr. R. Brandhorst	
Senior Expert	

Appendix A, Pictures and drawings of the tested object(s)









Appendix B, Pictures of test rig



(This is the end of this report).