

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: Casement Window, manufactured by: Window Warehouse

Report number	89218289-20
Date	4th February 2021
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Project number	89218289-20
Project name	ERCT 0766/1 Ongoing PAS 24: 2016
Number of pages	15



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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 “89218289-20 ERCT 0766-1 Window Warehouse Veka Casement Ongoing 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 Casement Window
Dimensions of the sample(s)	1950mm x 1270mm

Specific

Product description	Veka System 10 Casement Window
Type(s) of construction	Welded
Profile references	P10501 56mm Outer P10506 70mm Z Section P10503 70mm T Section P10508 75mm Sash P10431 28mm Bead
Origin of materials/type(s) of material	PVCu
Surface treatment of materials	White

Types of windows	Family Leader name (representative test specimen - most unfavorable)	Maximum sold size (width x height)
with max. number of side & top hung casements, all openings outwards	Veka System 10 Casement	Not Declared

Construction and hardware

Method of frame jointing	Welded
Framing, profile and reinforcement detail	P10501 56mm Outer – S00185 P10506 70mm Z Section – S00187 P10503 70mm T Section – n/a P10508 75mm Sash – S00182
Types of beading, gaskets, glazing method or any other security feature present	P10431 28mm Bead PCE seals 2 No. Hinge Guards per sash 2 No. Glass locks per long bead and 1 No. per short bead. 1 No. Compression wedge per sash 4 No. Run up Blocks on Side Hung Sash 7 No. Run up Blocks on Top Hung Sash
Type and (overall) thickness of glazing (or infill medium)	4/20/4
Types and details of hardware	Avantis Lock and Keeps Mila Friction Stay Hinges GT Stay Guard Hinge Guards Inline Locking Handle GT Glass Locks Snap Fit
Types and details of hardware fixings	Lock – 4.3 x 32 NP Keeps – 4 x 19 DP Hinges into Outer Profile – 4.3 x 32 Pan Head Hinges into Outer Reinforcing – 4 x 19 Pan Head Hinges into Sash – 4 x 32 Pan Head Hinge Guard into Outer – 4 x 19 Pan Head Hinge Guard into Sash – 4.3 x 32 Pan Head Handles as supplied
Detailed drawing(s) of the sample elevation viewed from the outside, including the position of the hardware.	

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 0766/1.

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 responsibility 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 17.8°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, windows shall meet the requirements of **4.2**, **4.3** and **4.4** AND either Annex C or BS EN 1627, RC2N.

2.1 Summary windows

Requirement/test	Annex/paragraph	Result
Manipulation test a)	Annex C.4.3	not applicable
Infill manual test	Annex C.4.4.2	pass
Manual check test	Annex C.4.6	not applicable
Manipulation test b)	Annex C.4.3	pass
Infill Mechanical test	Annex C.4.4.3	pass
Mechanical loading test	Annex C.4.5	pass
Additional mechanical loading test	Annex C.4.7	not applicable

2.2 Detailed test results

Requirement/test	Detailed requirement	Inspected/measured	Result
Infill manual test	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 52s, 2nd bead out 2m 21s. No entry gained.	pass
Manipulation test b)	Attempt to gain access to fixings after mechanical loading has been conducted	2 screws removed from hinge. No entry gained	pass
Infill Mechanical test	Apply a specified sequence of loads on infill medium	2kN loads applied to corners of glass infill. No entry gained	pass
Mechanical loading test	Apply a specified sequence of loads. 3kN perpendicular load and 1kN parallel to plane load.	No component failures on either opener and no entry gained.	pass

2.3 Classification

Requirement	Classification
Windows meeting the requirements of Annex C using the entry definition in 3.9	W

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 0766-1 Window Warehouse Casement PAS24 28 01 21.xlsx

3 Conclusion

The tested product Veka System 10 Casement Window 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

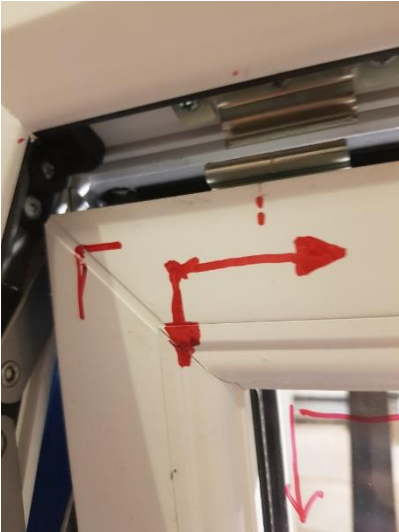
- 2 Test results “89218289-20 ERCT 0766-1 Window Warehouse Veka Casement Ongoing PAS24 2016”
by ERC Testing Ltd, Unit A8 (3), Pennington Court, Walter Leigh Way, Moss Industrial Estate, Leigh
WN7 3PT, United Kingdom.

5 Signatures

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