PAS24:2022 - Enhanced Security Performance Requirements for Doorsets and Windows in the UK

BAKO BARTNIK KOWALCZUK GENERAL

Test Report No. R4791680249-3

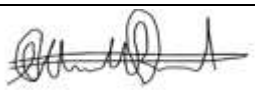
23 June 2025

UL Solutions

UKAS TESTING 5772

Table of contents

1. Introduction

Test Details		
Customer:	BAKO BARTNIK KOWALCZUK GENERAL Ulica 4 Sierpnia 4c Szypliszki, 16-411 PL	
Test witnessed by:	M Cichanowicz A Kowalczuk	*BAKO BARTNIK KOWALCZUK GENERAL* *BAKO BARTNIK KOWALCZUK GENERAL*
Product tested:	Spiral Balanced Window	
Date(s) sample(s) received:	1st April 2025 & 28th May 2025	
Date of test:	8th April 2025 & 4th June 2025	
Test conducted at:	UL International (UK) Limited Halesfield 2 Telford Shropshire TF7 4QH	
Test conducted by:	D Whittall S Ward C Holden	*Laboratory Assistant* *Engineering Technician* *Senior Laboratory Technician*
Report Authorisation		
Report compiled by:	J Ratcliffe *Laboratory Engineer*	
Authorised by:	E Round *Laboratory Engineer*	

UL International (UK) Limited, Unit 1-3 Horizon, Kingsland Business Park, Wade Road, Basingstoke, Hampshire RG24 8AH, is accredited by the United Kingdom Accreditation Service as UKAS Testing Laboratory No. 5772.

This report and the results shown within are based upon the information, drawings, samples and tests referred to in the report. The results obtained only apply to the sample tested and do not necessarily relate to samples from the production line of the above-named company and in no way constitute any form of representation or warranty as to the performance or quality of any products supplied or to be supplied by them. UL International (UK) Limited or its employees accept no liability for any damages, charges, cost or expenses in respect of or in relation to any damage to any property or other loss whatsoever arising either directly or indirectly from the use of the report.

UL International (UK) Telford Laboratory is authorised to act as a UK Approved/Notified Laboratory n. 0843 under the UKCA system and Norther Ireland provisions for the activities covered by this Report according to BS EN 14351-1:2006+A2:2016. The Approved/Notified Body number shall be used only when and, in the manner, authorized by the Approved/Notified Body. The Customer agrees that the Approved/Notified Body shall retain the right to control the use of the Report and Approved/Notified Laboratory number. If copies of Report documentation are provided to others it shall be reproduced in their entirety. Customer agrees that the promotion of its product utilizing the name, Report, or Approved/Notified Laboratory number of UL would mislead the public if such product is not covered by a Report issued by the Notified Laboratory; does not comply with the Applicable Requirements and applicable laws, regulations, and standards; or is used in any way not authorised by UL.

2. Summary of Results

The following table summarises the results of tests, conducted in accordance with PAS24:2022, achieved by the test specimen(s) supplied:

Test Description	*Sample Tested (ID No.)*	*Test Sheet reference*	*Result*	*Test Date*
C.4.3 – Manipulation test (a)	*1*	*TS 001*	***Pass***	*8th May 2025*
C.4.4.2 – Infill manual test	*1*	*TS 001*	***Pass***	*8th May 2025*
C.4.6 – Manual check test	*1*	*TS 001*	***Entry gained***	*8th May 2025*
C.4.4.3 – Infill mechanical test	*2*	*TS 001*	***Pass***	*8th May 2025*
C.4.5 – Mechanical loading test	*1*	*TS 002*	***Pass***	*4th June 2025*
C.4.7 – Additional mechanical loading test	*1*	*TS 002*	***Pass***	*4th June 2025*
Overall classification in accordance with PAS24:2022			***W***	

More comprehensive details are reported in section 6.

Note: *These results are valid only for the conditions under which the test was conducted.*

All measurement devices, instruments and other relevant equipment were calibrated and traceable to National Standards.

2.1 Decision rule

Classifications reported in section 6 indicate that the product conforms with the relevant accuracy requirements of section B.3 and C.3 of PAS24:2022.

2.2 Measurement uncertainty

The results as reported in this test report are not accounting measurement of uncertainty as no numerical values were recorded during the test.

3. Description of Test Sample

The details shown in section 3 and drawings shown in section 7 have been supplied by and confirmed as typical of normal production by BAKO Bartnik Kowalczuk Sp J. and have not been verified by UL International (UK) Limited.

See section 7 for test sample drawings as provided by the customer.

General Information	
Project number:	4791680249
Product range name:	Sliding Sash Spiral Balance
Project name to appear on front page of the test report:	Sliding Sash Spiral Balance
Configuration:	2 opening sashes
Opening direction:	Slide up/down
Product manufacturer:	BAKO Bartnik Kowalczuk Sp J.
The sample is typical of normal production:	Yes
Please define the closing condition of the sample: I.e. Closed, fastened, latched, locked and secured etc.	Sliding Sash Spiral Balance with hugh security sash locks
Weight of Sample including subframe (kg):	152 kg
Weight of sash (kg) - applicable for sample tested with accordance with BS 6375-2:2009	45 kg

Outer Frame			
Height:	2600	**Outer frame gasket**	
Width:	1700	Gasket type:	Brushed
Outer frame material:	Softwood	Manufacturer:	Mighton
Surface finish	Teknos Paints	Product name:	Brush300-5.5
Outer frame Part Numbers		Product code:	Brush300-5.5
Top:	1	**Threshold**	wooden
Bottom:	2	Manufacturer:	BAKO Bartnik Kowalczuk
Lock side:	3	Product name:	
Hinge side:	4	Product code:	
Outer frame section size		Material:	hardwood
Width:	1,3,4 – 60 mm 2 – 65 mm	**Outer frame joint method**	
Depth:	150	Head:	Counter-profile glued with dowels
Reinforcing:		Foot:	Counter-profile glued with dowels
Manufacturer:			
Product name:			
Product code:			
Material:			

Leaf, Sash, or Casement - 1			
Width:	1608	**Leaf / casement gasket**	
Height:	1271	Gasket type:	Foam Seals
Material:	Softwood	Manufacturer:	Schlegel
Surface finish:	Teknos Paint	Product name:	Schlegel Q-Lon
Leaf / casement part numbers		Product code:	QL 3025, QL 3078
Top:	1	**Leaf midrail**	
Bottom:	2	Manufacturer:	BAKO Bartnik Kowalczuk
left side:	3	Product name:	midrail
right side:	4	Product code:	midrail
Leaf / casement section size		Material:	softwood
Width:	1,3,4 – 60 2 – 50	**Leaf / casement joint method**	
Depth:	50	Head:	Counter-profile glued with dowels
Reinforcing		Foot:	Counter-profile glued with dowels
Manufacturer:			
Product name:			
Product code:			
Material:			

Leaf, Sash, or Casement - 2			
Width:	1608	**Leaf / casement gasket**	
Height:	1283	Gasket type:	Foam Seals
Material:	Softwood	Manufacturer:	Schlegel
Surface finish:	Teknos Paint	Product name:	Schlegel Q-Lon
Leaf / casement part numbers		Product code:	QL 3025, QL 3078
Top:	1	**Leaf midrail**	
Bottom:	2	Manufacturer:	BAKO Bartnik Kowalczuk
left side:	3	Product name:	midrail
right side:	4	Product code:	midrail
Leaf / casement section size		Material:	softwood
Width:	1 – 50 mm 2 – 82 mm 3,4 – 60 mm	**Leaf / casement joint method**	
Depth:	50	Head:	Counter-profile glued with dowels
Reinforcing		Foot:	Counter-profile glued with dowels
Manufacturer:			
Product name:			
Product code:			
Material:			

Glazing			
Glass unit	Laminated glass 33.2/12Ar/4	**Glazing gasket**	
Manufacturer:	Glassolutions Saint-Gobain	Gasket type:	Silicone
Inner thickness:	4 mm	Manufacturer:	Lakma
Spacer material:	Swisspacer advance 12 mm, Plastic with stainless steel foil	Product name:	Modesil
Outer thickness:	6,8 mm	Product code:	NO11
Unit sizes:	1510x1173	**Glazing clip**	Yes
Bead	Wooden bead 12x18	Manufacturer:	GT
Manufacturer:	BAKO Bartnik Kowalczuk Sp J	Product name:	Securi-clip SC147
Product name:	Wooden bead 12x18	Product code:	SC147
Product code:	Wooden bead 12x18	**Glazing tape details**	
Bead size:	12x18	Manufacturer:	Dafa
Bead material:	softwood	Product name:	PESS67
		Product code:	2TTE0403

Hardware				
	Manufacturer:	**Product description:**	**Product code:**	**Quantity:**
Locking hardware:	Yale	Yale VS Sash Lock Assembly Chrome PAS24	Yale VS Sash Lock Assembly Chrome PAS24	2
Locking hardware fixing:	Stainless steel 4x40 screws			14
Any additional hardware:	ERA	Extreme Bolt and Keep	Extreme Bolt and Keep	4
	Mighton	MIGHTON ventlock locking	MIGHTON ventlock locking	2
	Mighton	MIGHTON face fix angel ventlock	MIGHTON face fix angel ventlock	2
	Stainless steel pins in frame	Stainless steel pins in frame	Stainless steel pins in frame	all around frame spacing 125 mm between pins

Confirmation

Customer is to confirm that the samples provided for testing are representative of standard production. Please note: the details given above, as well as the drawings supplied by the customer as confirmed as typical of normal production are not verified by UL International (UK) Limited.	
Company:	BAKO Bartnik Kowalczuk Spółka Jawna
Name:	Mariusz Cichanowicz
Position:	Główny Technolog / Chief Technology Officer
Date:	28th March 2025