



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



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SASH WINDOW SHOP LTD



1. Introduction

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



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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	8 th May 2025
C.4.4.2 – Infill manual test	1	TS 001	Pass	8 th May 2025
C.4.6 – Manual check test	1	TS 001	Entry gained	8 th May 2025
C.4.4.3 – Infill mechanical test	2	TS 001	Pass	8 th May 2025
C.4.5 – Mechanical loading test	1	TS 002	Pass	4 th June 2025
C.4.7 – Additional mechanical loading test	1	TS 002	Pass	4 th 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 Kowalczyk 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 Kowalczyk 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 high 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 Kowalczyk
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:			

SASH WINDOW SHOP LTD



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 Kowalczyk
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:			

SASH WINDOW SHOP LTD

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 Kowalczyk
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:			
SASH WINDOW SHOP LTD			
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 Kowalczyk 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 Kowalczyk Spółka Jawna
Name:	Mariusz Cichanowicz
Position:	Główny Technolog / Chief Technology Officer
Date:	28 th March 2025