Test Report No:	WTH2519#2-3
Date:	05/01/2026
Testing of:	Single top hung casement window
Tested to:	BS 6375-2:2009
Prepared for:	Nico Manufacturing Ltd

CONTENTS

	Page No.
Authorisation	3
Test requested by	4
Details of test	5
Details of samples	6
Conclusion of tests	7
Test window drawing	8
Operating forces, results (test 1)	9
Resistance to static torsion, results (test 2)	9
Racking, results (test 3)	9
Resistance to repeated opening and closing, results	10
Picture of test window	11

AUTHORISATION

Test completed by: J.Woodward
Assissted by: D.Kury
Test witnessed by:

Report produced by: J.Woodward Position: Test Engineer

Signature: JW

Date: 23/01/2026

For and on behalf of Nico Manufacturing Ltd Test Laboratory

Report authorised by: D.Kury Position: Senior Test Engineer

Signature:

Date: 23/01/2026

For and on behalf of Nico Manufacturing Ltd Test Laboratory

Date of issue of report 23/01/2026

Nico Manufacturing Ltd. Test Laboratory

Oxford Road

Clacton-on-Sea

ESSEX

CO15 3TJ

Telephone +44 (0) 1255 422333

Fax +44 (0) 1255 432909

UKAS TESTING
9458

TEST REQUESTED BY

Origin of test request

Company Name	Nico Manufacturing Ltd
Company Address	Oxford Road Clacton on Sea Essex CO15 3TJ
Contact	Ian Harrison
Contact position	Sales & Marketing Director

Quotation Details

Quotation No.	WTH2519
Dated:	20/08/2025

DETAILS OF TEST

Description	Projecting casement window
Model / type	Single top hung
Make / Brand	Eurocell logic
Any special requirements	

Test Specification	BS 6375-2:2009 Performance of windows & doors. Classification for operation and strength characteristics
Date sample received	22/08/2025
Date testing started	08/12/2025
Date testing finished	23/12/2025
Job No.	WTH2519
Any special requirements	

BS 6375-2: 2009 Table A.1 Summary of classification for windows

Characteristics	Test method	Classification Standard	Class for all windows
Operating forces for windows	BS EN 12046-1:2020	BS EN 13115:2020	Class 1
Resistance to static torsion	BS EN 14609:2004	BS EN 13115:2020	Class 3
Racking	BS EN 14608:2004	BS EN 13115:2020	Class 3
Load-bearing capacity of safety devices	BS EN 14609:2004	BS EN 14351-1:2006 +A2:2016	350 N
Resistance to repeated opening and closing	BS EN 1191:2012 Annex G	BS EN 12400:2002	Class 2 or 3

The samples were mounted in timber sub frames (nominal 100mm x 50mm in section).
The samples were mounted in the test rig without any twists or bends that might influence the test result.

DETAILS OF SAMPLE

Sample number	WTH2519A
Sample details	Eurocell Logic
Fabricator	Allen Installations
Material:	PVC-U Frame - EWS7020 55mm Frame Sash - EWS7005W 75mm T Section Sash Reinforcing - EWS 7604S Steel
Finish	White
Lock & keeps	Nico Wrap around gearing comprising Mk 1 gearbox, part no 94225 with Size 5 wrap around extensions, part no 939W545 keeps - Nico cast zinc, part no 9205L & R
Hinges & protectors	Nico 24" HD Top hung friction hinge, part no 8260HD Nico Xtra bolt hinge protectors, part no 8100
Handle	Total Hardware Quantum Mk3 Inline Window handle
Fixings	Lock - 4.3 x 25mm c'sk head pierce point Keeps - 4.3 x 25mm c'sk head pierce point Hinges - 4.3 x 25mm pan head pierce point to sash & frame Hinge protectors - 4.8 x 25mm pan head pierce point to sash & frame Weather wedges - 4.3 x 25mm c'sk head pierce point to sash & frame
Weather sealing	Weather wedges - GT Sash seal, part nos GTS10017
Glass (or infill)	4-20-4 Clear Tuff Low E : 20mm Silver Spacer
Glazing system	EWS7301WBG 28mm Glazing bead
Sample dimensions	1500 x 1500
Sash weight	47.96Kg
Additional information	Face Drainage EWS 7202 Leading Ramp

CONCLUSIONS OF TEST

Clause No.	Test Description	Test result
C.5.1 (Test 1)	**Operating forces** (BS 6375-2 Max force to operate lever handle 100N or 10Nm) (BS 6375-2 Max force to move casement of sash 100N)	Pass
C.5.2.1 (Test 2)	**Mechanical strength - Resistance to static torsion** (BS EN 14609 Force 300N for 5 minutes - deflection and operating forces measured and recorded)	Pass
C.5.2.2 (Test 3)	**Mechanical strength - racking** (BS EN 14608 Force 600N for 5 minutes - deflection and operating forces measured and recorded)	Pass
C.5.3 (Test 4)	**Load-bearing capacity of safety devices** (BS EN 14351 & Documented in house test method WTH-LBCSD-SOP Resist force of 350N for 60 seconds)	Not tested
C.5.5 (Test 5)	**Resistance to repeated opening and closing** (BS EN 1191 Window opened and closed minimum of 10,000 cycles for Class 2 or 20,000 for Class 3 (BS EN 12400) with operating forces measured at start and finish of test)	Class 3

Please Note: No impact resistance test was completed as currently the requirement in the UK is Class 0 with zero drop height of the impactor.

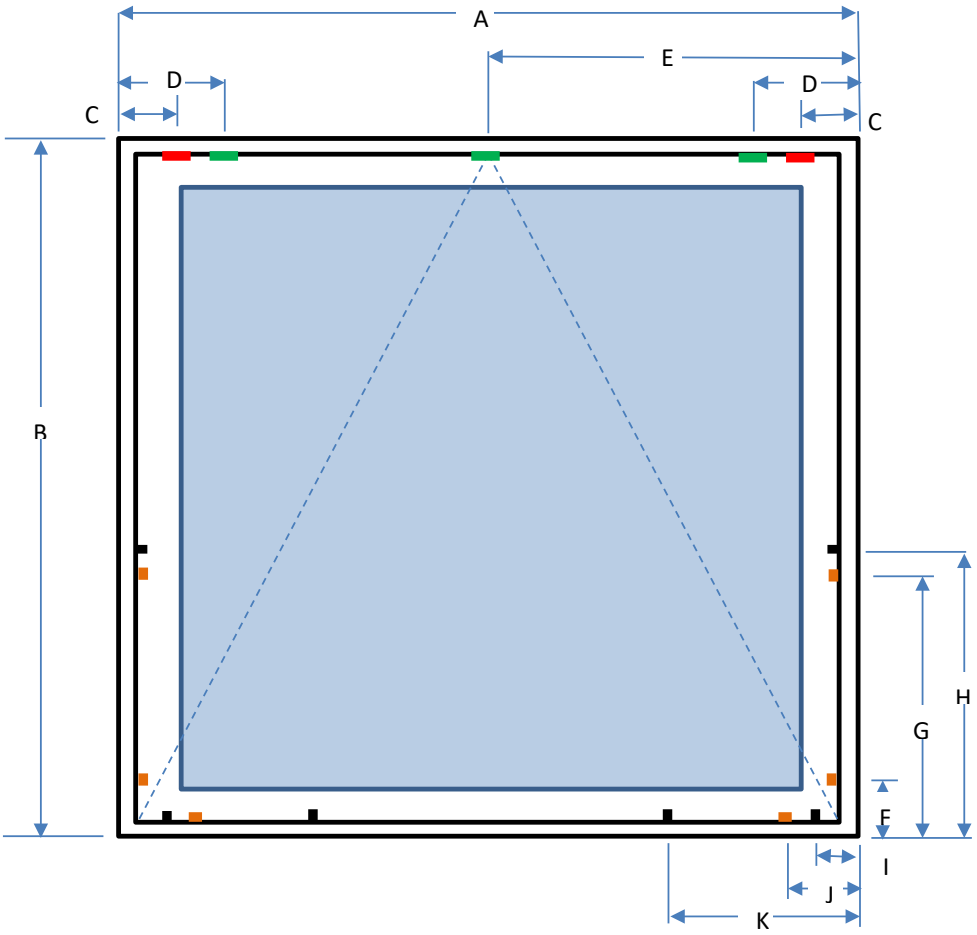
The results contained in this report apply only to the samples tested as received and to the specific tests carried out within this report.

Test specimen details

Details of the samples construction and hardware components is based on information supplied by the test client, while these details have been checked and verified where possible WTH accepts no responsibility for the accuracy of details supplied.

Note : The test specimens were kept in the test laboratory at the required temperature and humidity for a minimum of 12 hours before testing was undertaken as specified in BS EN 14608:2004, BS EN 14609:2004 & BS EN 1191:2012.

TEST WINDOW DRAWING



- Hinge protector
- Weather wedge
- Leading ramp
- Locking point

A	=	1500	mm
B	=	1500	mm
C	=	125	mm
D	=	220	mm
E	=	750	mm
F	=	120	mm
G	=	560	mm
H	=	625	mm
I	=	90	mm
J	=	150	mm
K	=	390	mm

RESULTS TEST 1-3

Sample No	Temperature		Measured Humidity		Adjusted humidity		Date
WTH2519A	20.4	°C	54.7	%RH	52.8	%RH	22/12/2025

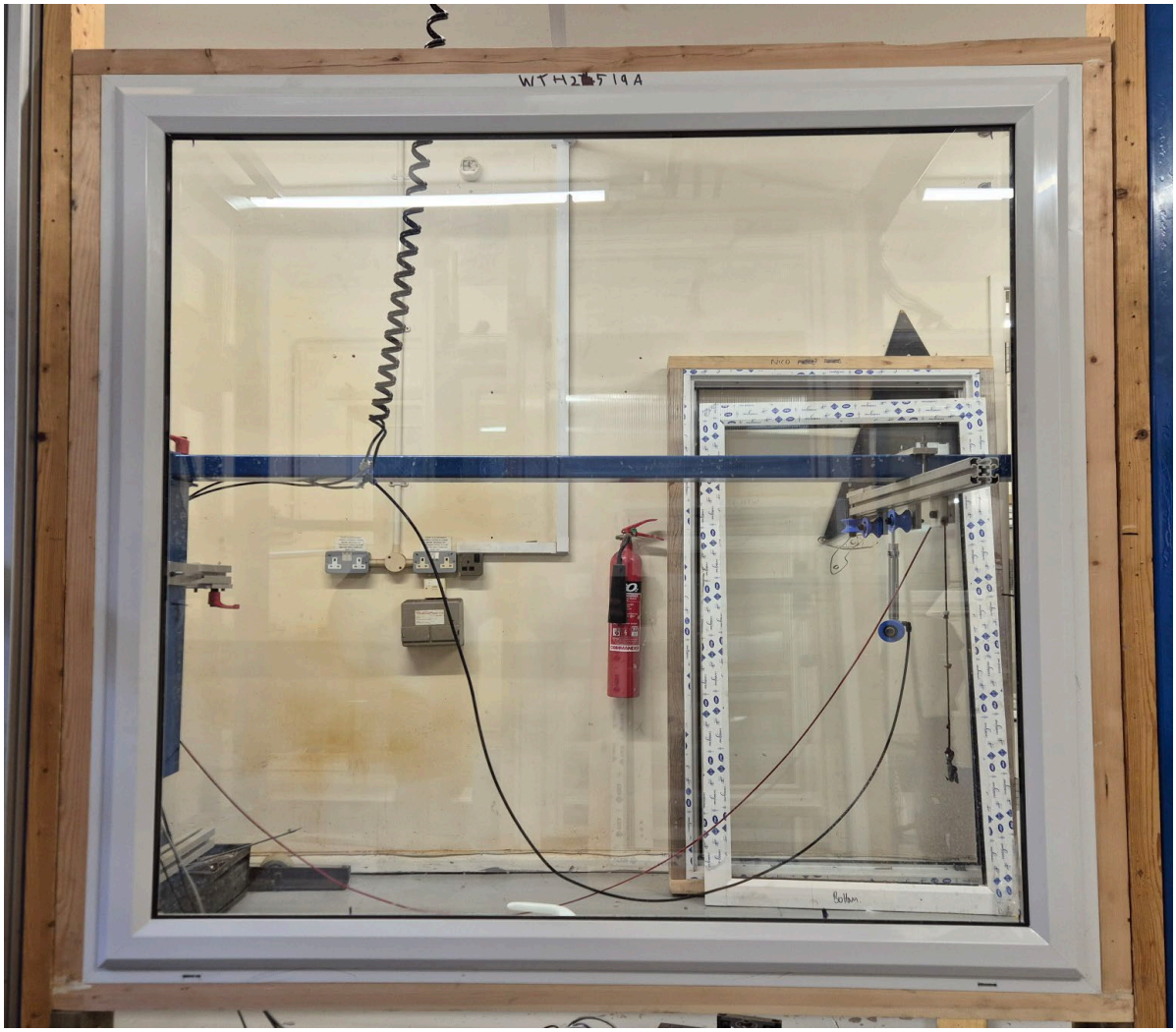
BS 6375-2 test	Requirement	Test results
Operating forces (Test 1)	BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash Movement of casement or sash Lever handle operation, max 10Nm	Disengage = 4 Nm Open = 10 N Close = 23 N Engage = 5 Nm
Resistance to static torsion (Test 2)	Class 3. No damage or permanent deformation and remain operational BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash Movement of casement or sash Lever handle operation, max 10Nm	Load applied and removed, operational forces still within allowable limits Disengage = 3 Nm Open = 9 N Close = 16 N Engage = 5 Nm
Resistance to racking (Test 3)	Class 3. No damage or permanent deformation and remain operational BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash Movement of casement or sash Lever handle operation, max 10Nm	Load applied and removed, operational forces still within allowable limits Disengage = 3 Nm Open = 16 N Close = 19 N Engage = 5 Nm

TEST RESULTS 4-5

Sample No	Temperature		Measured Humidity		Adjusted humidity		Date
WTH2519A	21.8	°C	49.3	%RH	47.3	%RH	22/12/2025

BS 6375-2 test	**Requirement**	**Test results**
Resistance to repeated opening and closing (Test 5)	Class 3 Heavy duty as classified by BS EN 12400:2002 The window is to remain operation and functional within accepted forces	Window remained fully functional on completion of test and was considered to be fit for purpose
	Operating forces before test BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash, max 100N	Disengage = 4 Nm Open = 10 N Close = 23 N Engage = 5 Nm
	Operating forces after 5000 cycles BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash, max 100N	Disengage = 2 Nm Open = 10 N Close = 19 N Engage = 6 Nm
	Operating forces after 10000 cycles BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash, max 100N	Disengage = 2 Nm Open = 9 N Close = 15 N Engage = 5 Nm
	Operating forces after 15000 cycles BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash, max 100N	Disengage = 2 Nm Open = 12 N Close = 17 N Engage = 5 Nm
	Operating forces after 20000 cycles BS EN 13115: 2001 Class 1 Lever handle operation, max 10Nm Movement of casement or sash, max 100N	Disengage = 2 Nm Open = 10 N Close = 16 N Engage = 4 Nm

PICTURE OF TEST WINDOW



END OF REPORT