

Foshan YT Aluminium Co., Ltd

TEST REPORT

SCOPE OF WORK

WINDOWS AND DOORS

REPORT NUMBER

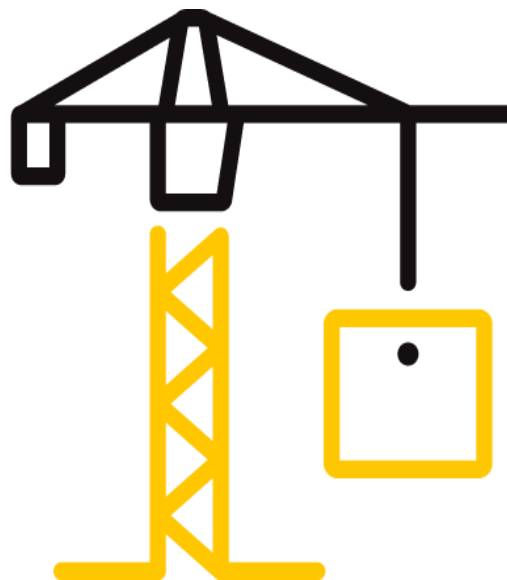
241119110GZC-001

ISSUE DATE

2025/6/9

PAGES

15



Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

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Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Applicant:	Foshan YT Aluminium Co., Ltd
Address:	No.3 PanAo factory Shi Bei Minxi Village Foshan Guangdong 528225
Attn:	sales01@dtpalumn.com

Manufacturer:	Foshan YT Aluminium Co., Ltd
Address:	No.3 PanAo factory Shi Bei Minxi Village Foshan Guangdong 528225
Attn:	sales01@dtpalumn.com

Primary designator:	Class CW - PG80: Size Tested 1500mm × 1500mm (59.06in. × 59.06in.) - Type FW
Secondary designator:	Positive Design Pressure = +3840 Pa (+80.20 psf) Negative Design Pressure = -3840 Pa (-80.20 psf) Water penetration resistance test pressure = 720 Pa (15.04 psf)

SUBJECT: Performance testing
< Fixed Window >

Dear Sir,

This test report for represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS
AAMA/WDMA/CSA 101/I.S.2/A440-17 (NAFS 2017 - North American Fenestration Standard / Specification for Windows, Doors and Skylights)

SAMPLE ID	MODEL	SPECIFICATION
S241119110GZU.001	95 Series	1500 mm (Width) × 1500 mm (Height) × 95 mm (Thickness)

SAMPLE RECEIVED: 2025/5/10

TESTED FROM: 2025/5/10

TO 2025/5/29

TEST LOCATION: C2-1. Heping Xu, Yongning Street, Zengcheng District, Guangzhou, China

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Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Test Items, Method and Results:

1 Test Sample

Sample was submitted to Intertek directly from the client. Sample was not independently selected for testing. Sample was received at the Evaluation Center on May 10, 2025.

A full scale sample of Fixed Window (Model: 95 Series) was provided by the manufacturer that was not weathered nor conditioned.

The description of the sample given below has been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

Table 1 Product Information

Product Name	Fixed Window
Model	95 Series
Dimension of Window Frame	1500 mm (Width) x 1500 mm (Height) x 95 mm (Thickness)
Dimension of Window Sash	Not applicable
Aluminum Profile	Model: 95 series Manufacturer: Foshan Chenjie Aluminum Industry Co., Ltd
Frame Corner Construction Details	Mitre-cut, assembly with corners keys
Reinforcement	Not applicable
Glazing	Size: 1424 mm (Width) × 1424 mm (Height) Structure: 12 mm + 2.28 SGP + 12 mm + 12 mm Argon + 12 mm Low-E Tempered Insulating Glass Supplier: Guangdong Honghua Glass Technology Co., Ltd
Hardware	Not applicable
Weather-strip	Not applicable
Thermal Break	Model: CG54 Material: PA66GF25 Nylon insulation strip Supplier: Foshan Forest Wind Plastic Technology Co., Ltd
Drainage	None
Gasket	Not applicable
Sealant of Glass	Model: 563 Material: Neutral silicone sealant Supplier: Chengdu Guibao Science and Technology Co., Ltd
Installation	The rough opening allowed for a 1/4" shim space. The exterior perimeter of the test specimen was sealed with silicone sealant.

The sample ID number was S241119110GZU.001. The drawings of the representative sample were referenced in Appendix A, the test data was referenced in Appendix B and the photo of the representative sample was referenced in Appendix C.

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Test Items, Method and Results:

2 Test Result

Table 2 Test Result

Test Description	Requirements (Class CW-PG80)		Results		Verdict
Air Leakage Resistance Test	Maximum air leakage at +75 Pa	0.5 L/s·m ²	Air leakage at +75 Pa	<0.1 L/s·m ²	Pass
	Maximum air leakage at -75 Pa	0.5 L/s·m ²	Air leakage at -75 Pa	<0.1 L/s·m ²	
Water Penetration Resistance Test	Minimum water pressure	580 Pa	Test Pressure	720 Pa	Pass
			No water penetration occurred after testing at 720Pa by the method of cyclic static air pressure difference.		
Uniform Load Deflection Test at Design Pressure	Design Pressure (DP)	3840 Pa	Test Pressure	3840 Pa	Pass
			Maximum deflection at jamb	0.4 mm	
			Maximum deflection at glazing (for reference)	11.8 mm	
Uniform Load Structural Test	Structural Test Pressure (STP)	5760 Pa	Test Pressure	5760 Pa	Pass
			After the test loads were released, there was no failure or permanent deformation of any part of the window system that would cause the test specimen to be inoperable. There was no permanent deformation in excess of 0.3% of its span.		
			Maximum permanent deflection at jamb	0.4 mm	
			Maximum permanent deformation at glazing (for reference)	0.4 mm	
Forced-entry Resistance Test	Minimum Grade 10		Test Class	Grade 10	Pass
			After test, there was no opening which allows for entrance through the tested specimen.		

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix A: Sample Drawings

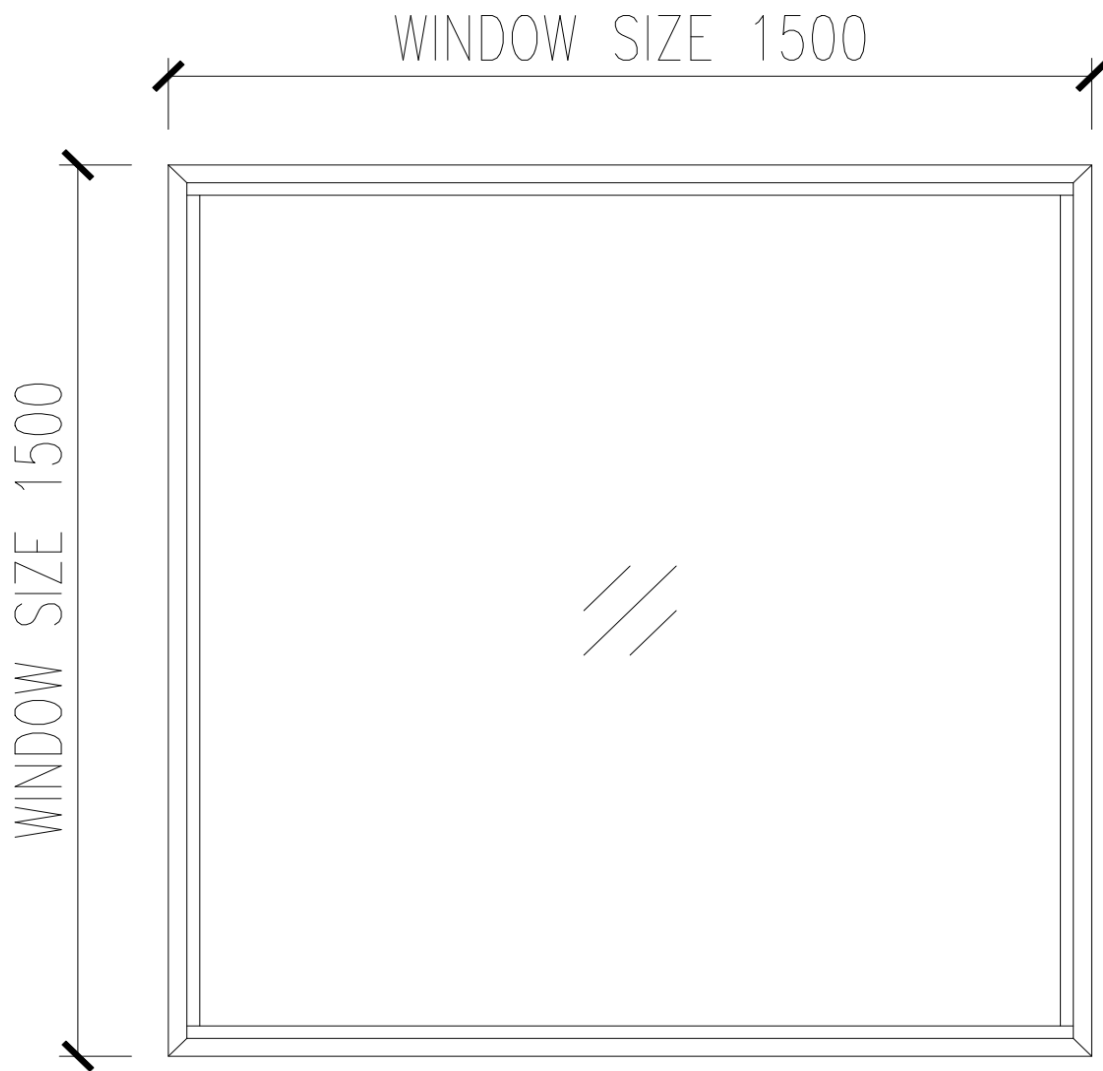


Fig.1 Drawing of Representative Sample

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Technical drawing of a typical plan detail of a window or door assembly. The drawing shows a cross-section of the assembly with dimensions in millimeters. The total width is 1500 mm, and the total height is 95 mm. The assembly consists of a central frame with multiple panes, surrounded by a sealant and urethane foam. Dimensions include 30 mm, 20.8 mm, 50.8 mm, 12 mm, 22.8 mm, and 12 mm. Labels include 'Sealant' and 'Urethane foam'.

Fig.2 Drawing of Representative Sample

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix A: Sample Drawings (Cont.)

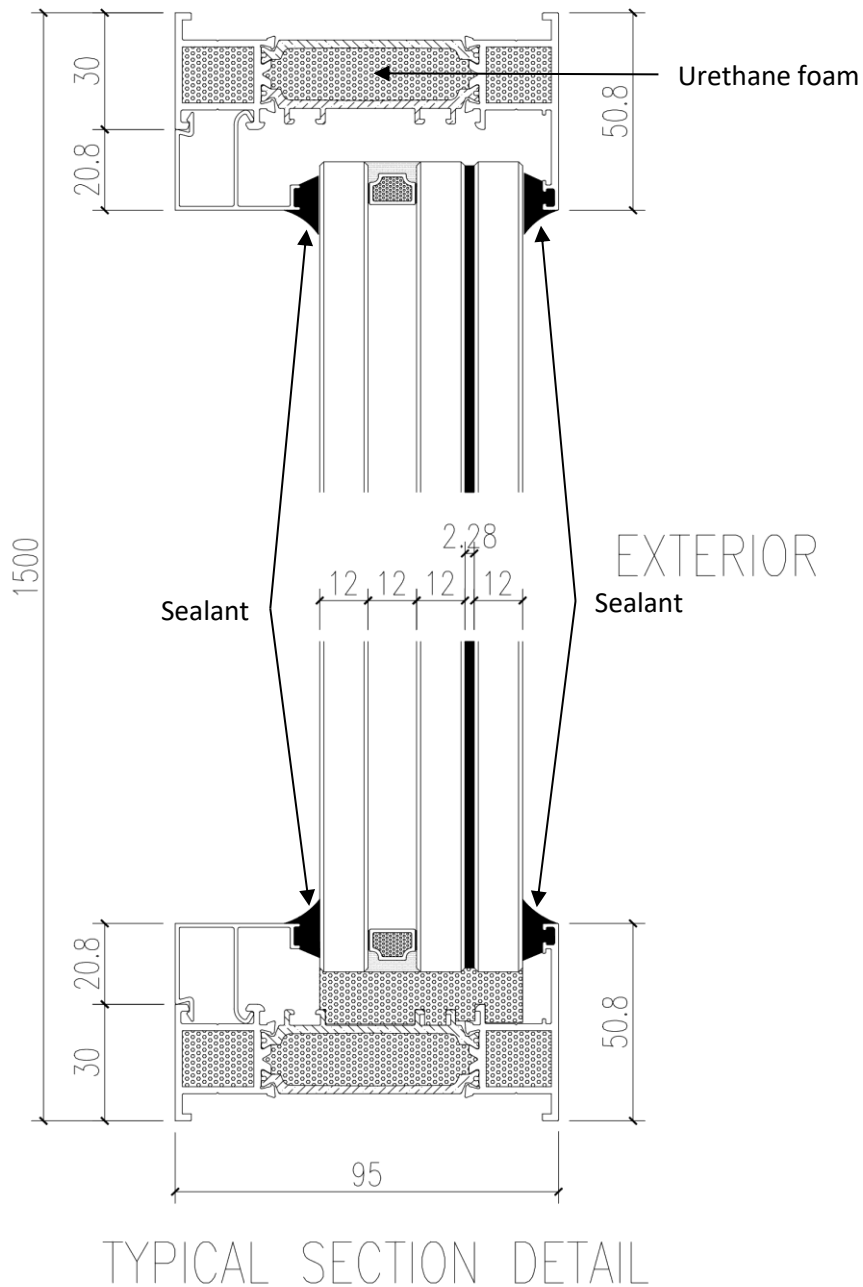


Fig.3 Drawing of Representative Sample

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix A: Sample Drawings (Cont.)

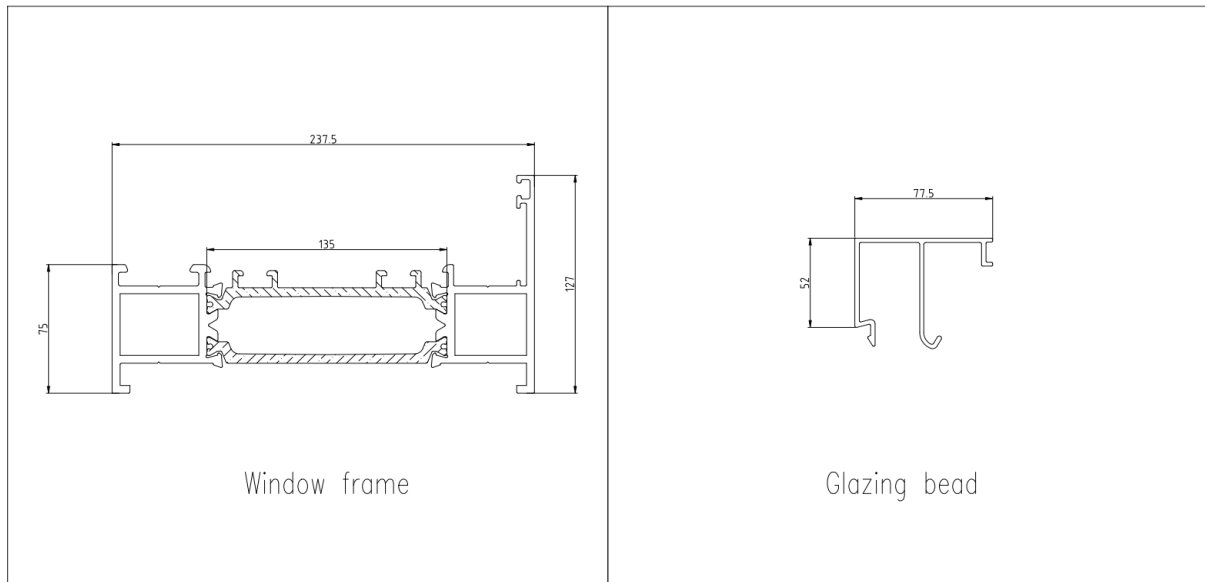


Fig.4 Drawing of profile section

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix A: Sample Drawings (Cont.)

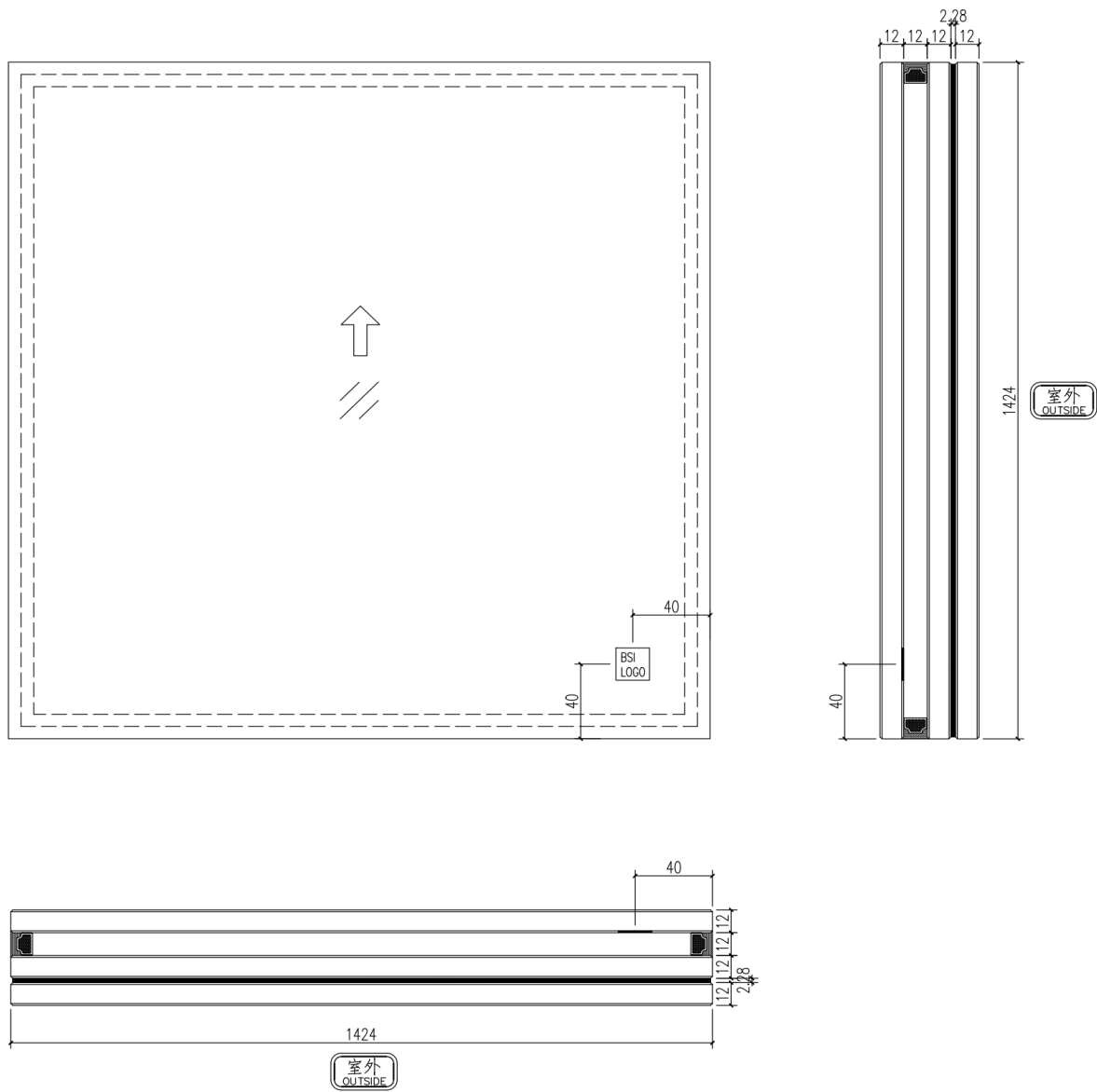


Fig.5 Drawing of glazing

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix B: Test Data

B.1 Air Leakage Resistance Test – Test method: ASTM E283/E283M-2019

Total area: 2.25 m² (24.22 ft²)

Table B.1 Test Data of Air Leakage Resistance Test

	Air Leakage in cfm/ft ²	Air Leakage in L/s·m ²
Infiltration rate (75 Pa)	<0.020	<0.1
Exfiltration rate (75 Pa)	<0.020	<0.1
Average air leakage rate (75 Pa)	<0.020	<0.1

The tested specimen met the requirements of Air Leakage Resistance Test as per AAMA/WDMA/CSA 101/I.S.2/A440-17.

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix B: Test Data

B.2 Water resistance test – Test method ASTM E547-2000(R2016)

No water penetration occurred at 720Pa by the method of cyclic static air pressure difference during and after test according to ASTM E547-2000(R2016).

The tested specimen met the requirements of Class CW-PG80 for Water Penetration Resistance Test as per AAMA/WDMA/CSA 101/I.S.2/A440-17.

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix B: Test Data

B.3 Uniform Load Deflection Test – Test method ASTM E330/E330M-2014, Procedure A

Span length, L1 = 1460 mm (Point: #1-3 for Jamb)
Span length, L2 = 1360 mm (Point: #4-6 for Glazing)

Test Pressure (DP), P = 3840 Pa

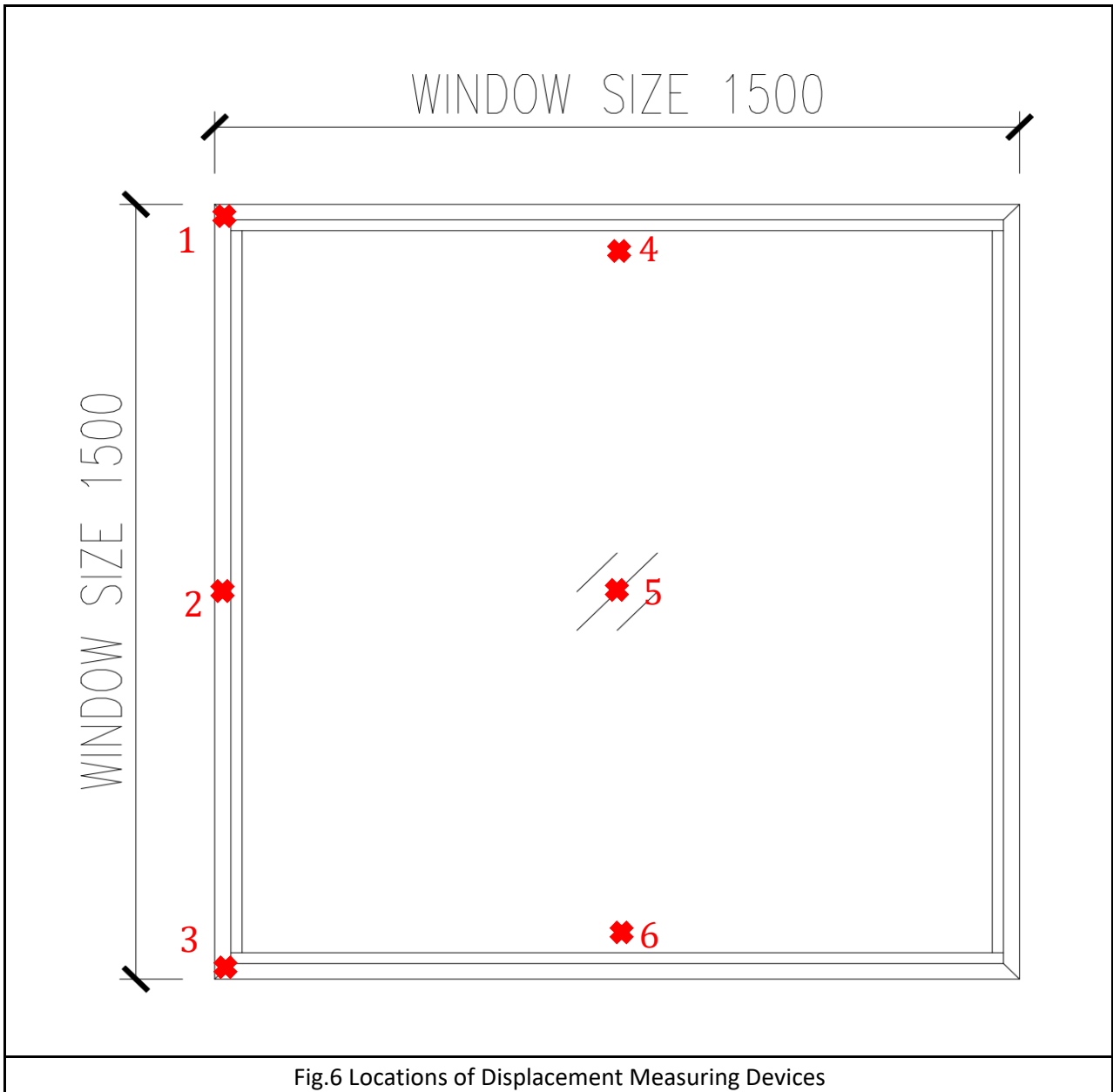


Fig.6 Locations of Displacement Measuring Devices

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

B.3 Uniform Load Deflection Test – Test method ASTM E330/E330M-2014, Procedure A (Cont.)

Table B.2 Test Data of Uniform Load Deflection Test

Member (mm)		Test Pressure (Pa)	Displacement (mm)			Deflection
Item	Span Length		1	2	3	
Jamb	1460	+P = +3840	0.2	1.0	1.5	0.2
		0	0.1	0.3	0.5	<0.1
		-P = -3840	0.4	1.5	1.9	0.4
		0	0.1	0.2	0.3	<0.1
Member (mm)		Test Pressure (Pa)	Displacement (mm)			Deflection
Item	Span Length		4	5	6	
Glazing (For reference)	1360	+P = +3840	4.7	14.7	7.8	8.5
		0	0.3	0.4	0.6	<0.1
		-P = -3840	4.9	18.8	9.1	11.8
		0	0.3	0.5	0.5	0.1

Table B.3 Test Data of Uniform Load Deflection Test for Jamb

Test Pressure	Positive		Negative	
	Deflection	Perm. Set	Deflection	Perm. Set
Measurements, mm	0.2	<0.1	0.4	<0.1
Deflection limit at design pressure, $L/175=8.34$ mm				

Table B.4 Test Data of Uniform Load Deflection Test for Glazing (For reference)

Test Pressure	Positive		Negative	
	Deflection	Perm. Set	Deflection	Perm. Set
Measurements, mm	8.5	<0.1	11.8	0.1
Deflection is for reference.				

During each load, no main frame or sash member deflected more than $L/175$, where L is the length of the unsupported span. And no damage was found after testing.

The tested specimen met the requirements for Class CW-PG80 for Uniform Load Deflection Test as per AAMA/WDMA/CSA 101/I.S.2/A440-17.

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix B: Test Data

B.4 Uniform Load Structural Test – Test method ASTM E330/E330M-2014, Procedure A

Design Pressure, P = 3840 Pa ; Structural Pressure, P = 5760 Pa

Table B.5 Test Data of Uniform Load Structural Test

Member (mm)		Test Pressure (Pa)	Permanent deformation(mm)			Max. Permanent deformation (mm)
Item	Span Length		1	2	3	
Jamb	1460	+P = +5760	—	—	—	—
		0	0.4	0.4	0.3	0.4
		-P = -5760	—	—	—	—
		0	0.1	0.1	0.1	0.1
Member (mm)		Test Pressure (Pa)	Permanent deformation(mm)			Max. Permanent deformation (mm)
Item	Span Length		4	5	6	
Glazing (For reference)	1360	+P = +5760	—	—	—	—
		0	0.4	0.4	0.3	0.4
		-P = -5760	—	—	—	—
		0	0.2	0.2	0.2	0.2

Table B.6 Test Data of Uniform Load Structural Test for Jamb

Test Pressure	Perm. Set	
	Positive	Negative
Measurements, mm	0.4	0.1
Permanent deformation limit: L1*0.3%=4.38 mm		

Table B.7 Test Data of Uniform Load Structural Test for Glazing (For reference)

Test Pressure	Perm. Set	
	Positive	Negative
Measurements, mm	0.4	0.2
Permanent deformation is for reference.		

After the test loads were released, there was no failure or permanent deformation of any part of the window system that would cause the test specimen to be inoperable. There was no permanent deformation in excess of 0.3% of its span.

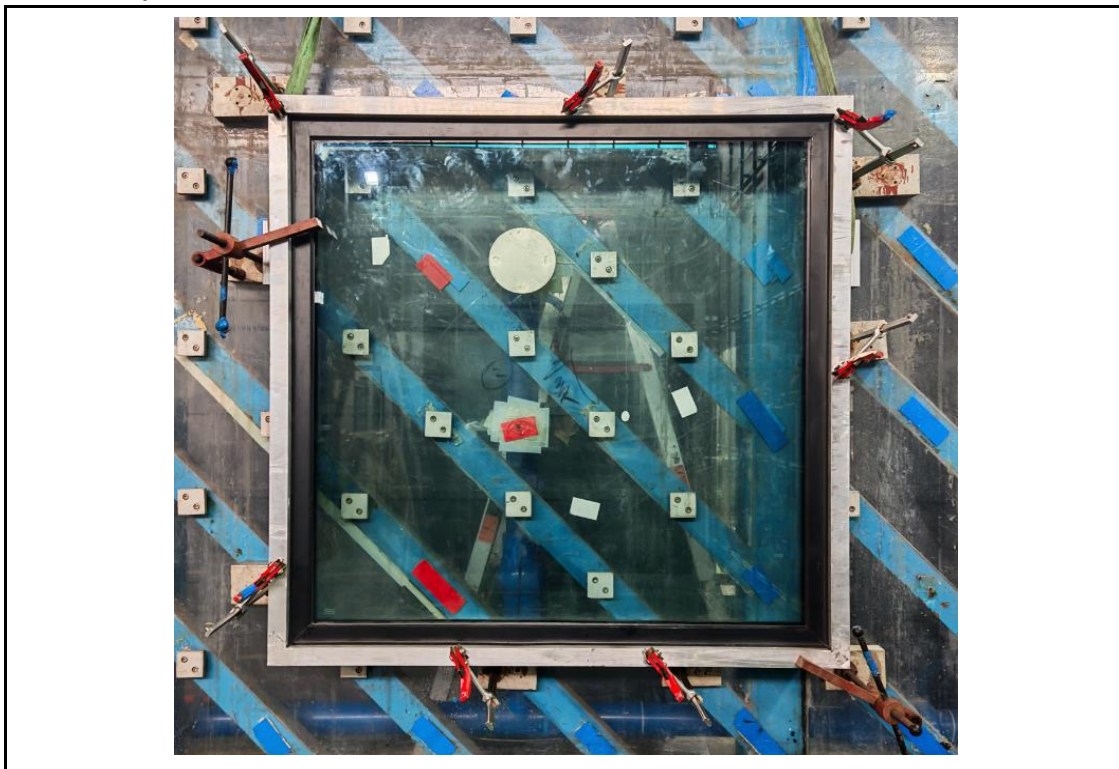
The tested specimen met the requirements for Class CW-PG80 for Uniform Load Structural Test as per AAMA/WDMA/CSA 101/I.S.2/A440-17.

Test Report

Issue Date: 2025/6/9

Intertek Report No. : 241119110GZC-001

Appendix C: Sample Received Photo



REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.

Approved by:

Prepared by:

Oliver zhu

Jim Li

Name: Oliver Zhu
Title: Reviewer

Name: Jim Li
Title: Project Engineer

Revision:

Revision No.	Date	Revision Summary	Author	Reviewer
R0	/	Original Report Issue	/	/

End of Test Report