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Suzhou TRYBA Building Materials Technology Co., Ltd.

TEST REPORT

SCOPE OF WORK
Fixed Window

REPORT NUMBER
250529005SHF-004

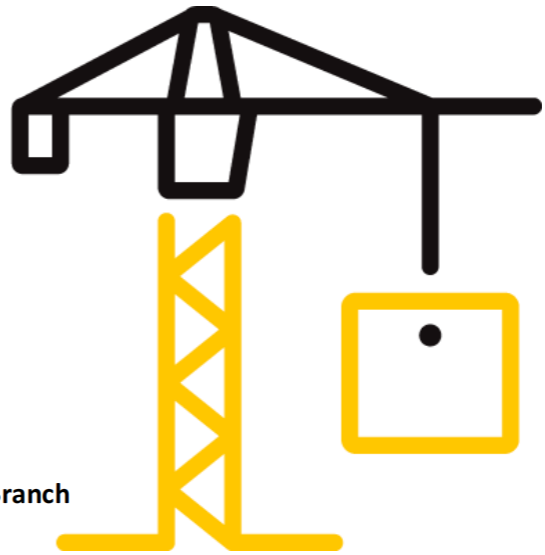
TEST DATE(S)
2025-07-24

ORIGINAL ISSUE DATE
2025-08-06

PAGES
17

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch
Plant 5 & 11(4F), No. 6958 Daye Road, Fengxian District, Shanghai, China
Tel: +86 21-61136116 Fax: 021-61189921
Website: www.intertek.com

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Test Report

Original Issue Date: 2025-08-06 Intertek Report No. 250529005SHF-004

Applicant: Suzhou TRYBA Building Materials Technology Co., Ltd.
Applicant Address: 36th floor, Jinhe International Building, 35 Shishan Road, Huqiu District, Suzhou City
Attn: Alisa
Manufacturer: TRYBA (Shanghai) Windows Co., Ltd.
Manufacturer Address: No.38, Mingye Road, Sheshan Industrial Park, Songjiang District, Shanghai
Product Type: Fixed Window
Product Model: 80
Primary product designator: Class CW - PG40 - Size Tested 1900 × 2200 mm (74.80 × 86.61 in.) - Type FW
Optional secondary designator: Positive Design Pressure = +1920 Pa (40.10 psf)
Negative Design Pressure = -1920 Pa (40.10 psf)
Water penetration resistance test pressure = 720 Pa (15.04 psf)
SUBJECT: Performance testing

Product Information

Product Name	Model	Specification
Fixed Window	80	1900mm(Width) x 2200mm(Height)
Sample ID	**Sample Amount**	**Sample Received Date**
S250529005SHF.004	1 Set	2025-07-20
Brand	**Sample Description**	
TRYBA	The sample was a completely assembled, glazed, fitted in the test apparatus in accordance with documented instructions.	

Test Methods And Standards

Test Standard	ASTM E283/E283M-2019; ASTM E547-00(R2016); ASTM E330/E330M-2014(R2021); ASTM F588-17
Specification Standard	AAMA/WDMA/CSA 101/I.S.2/A440-22 (NAFS 2022 - North American Fenestration Standard / Specification for Windows, Doors and Skylights) Clause 8.3.2, Clause 8.3.3, Clause 8.3.4, Clause 8.3.5; CSA A440S1-25 Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440-22 Clause 5.3 and Clause 5.4
Test Conclusion	The results met AAMA/WDMA/CSA 101/I.S.2/A440-22 and CSA A440S1-25 requirements specified on Fixed Window, and the results were shown in the following page.

Note:
1.This report does not involve sampling. The report only reflects conformity of the tested items of the samples provided by the testing applicant. Representativeness and authenticity of the submitted samples are responsibilities of the testing applicant.
2. This test item was conducted in one of our multi-sites address of Plant 3-5, No. 6978 Daye Road, Fengxian District, Shanghai (No. 4-South Plant, No. 161 Litai Road).

Report Authorized

Name: Gio Liu
Title: Reviewer

Name: John Zhang
Title: Project Engineer

Test Report

Original Issue Date: 2025-08-06 Intertek Report No. 250529005SHF-004

Test Items, Method and Results：

2 Test Result

Table 2 Test Result

Test Description	*Requirements (Class CW-PG40)*		*Results*		*Verdict*
2025/7/24					
Air Leakage Resistance Test AAMA/WDMA/CSA 101/I.S.2/A440-22, Clause 8.3.2 ASTM E283/E283M-2019	Maximum air leakage at+75 Pa	1.0 L/s·m^2	Air leakage at +75 Pa	0.01 L/s·m^2	Pass
	Maximum air leakage at-75 Pa	1.0 L/s·m^2	Air leakage at -75 Pa	0.02 L/s·m^2	
Water Penetration Resistance Test AAMA/WDMA/CSA 101/I.S.2/A440-22, Clause 8.3.3 ASTM E547-00 (R2016)	Minimum water pressure	290 Pa	Test Pressure	720 Pa	Pass
			After water sprayed for four cycles in 24 minutes at 720 Pa, no water penetration was observed.		
Uniform Load Deflection Test AAMA/WDMA/CSA 101/I.S.2/A440-22, Clause 8.3.4.2 ASTM E330/E330M-2014 (R2021)	Minimum Design Pressure (DP)	1920 Pa	Design Pressure (DP)	+1920 Pa	Pass
			Maximum deflection at Jamb	1.1 mm	
			Maximum deflection at Glazing	15.6 mm	Reported[1]
			Design Pressure (DP)	-1920 Pa	Pass
			Maximum deflection at Jamb	0.8 mm	
			Maximum deflection at Glazing	10.9 mm	Reported[1]

Note: 1. The deflection of the glazing is recorded for reference only.

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Table 2 Test Result (Continued)

Test Description	*Requirements (Class CW-PG40)*		*Results*		*Verdict*
2025/7/24					
Uniform Load Structural Test AAMA/WDMA/CSA 101/I.S.2/A440-22, Clause 8.3.4.3 ASTM E330/E330M-2014(R2021)	Minimum Structural Pressure (STP)	2880 Pa	Structural Pressure (STP)	+2880 Pa	Pass
			No significant breakage or damage after ultimate strength was released.		
			Maximum permanent deformation at Jamb	0.2 mm	
			Maximum permanent deformation at Glazing	0.3 mm	
			Structural Pressure (STP)	-2880 Pa	
			No significant breakage or damage after ultimate strength was released.		
			Maximum permanent deformation at Jamb	0.2 mm	
			Maximum permanent deformation at Glazing	0.4 mm	
Forced-entry Resistance Test AAMA/WDMA/CSA 101/I.S.2/A440-22, Clause 8.3.5 ASTM F588-17	Minimum Grade 10		Test Class	Grade 10	Pass
			During the test and upon removal of loads, all locking devices were remained engaged and could not entry.		

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Appendix B: Test Data

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

Overall area: 4.18 m^2

Table B.1 Test Data of Air Leakage Resistance Test

Infiltration rate (75 Pa)	0.01 $L/s \cdot m^2$	0.01 cfm/ft^2
Exfiltration rate (75 Pa)	0.02 $L/s \cdot m^2$	0.01 cfm/ft^2
Requirements (75 Pa): Maximum allowable leakage for Class CW Windows	1.0 $L/s \cdot m^2$	0.2 cfm/ft^2

The tested specimen met the requirements for Class CW Windows for Air Leakage Resistance Test as per AAMA/WDMA/CSA 101/I.S.2/A440-22.

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Appendix B: Test Data

B.2 Water resistance test – Test method ASTM E547-00(R2016)

No water penetration occurred when the pressure was 720 Pa (15.04 psf).
After water sprayed for four cycles in 24 minutes at 720 Pa, no water penetration was observed.

Test result: P_{max} = 720 Pa (15.04 psf).

The tested specimen met the requirements for Class CW-PG40 for Water Penetration Resistance Test as per AAMA/WDMA/CSA 101/I.S.2/A440-22.

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Table B.2 Test Data of Uniform Load Deflection Test

Member (mm)		Test Pressure (Pa)	Deflection (mm)			Maximum Deflection(mm)
Item	Span Length		1	2	3	
Jamb	2080	+P = 1920	0.2	1.2	0.1	1.1
		0	<0.1	0.1	<0.1	0.1
		-P = -1920	0.2	0.9	0.1	0.8
		0	<0.1	0.1	<0.1	0.1
Member (mm)		Test Pressure (Pa)	Deflection (mm)			Maximum Deflection(mm)
Item	Span Length		4	5	6	
Glazing	1720	+P = 1920	2.7	18.9	3.9	15.6
		0	0.1	0.3	0.1	0.2
		-P = -1920	2.2	13.5	3.1	10.9
		0	0.2	0.6	0.2	0.4

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

Test Pressure	Deflection Measurements, mm (in.)			
	Positive		Negative	
	Maximum Deflection		Maximum Deflection	
1920 Pa (40.10 psf)	1.1	(0.04)	0.8	(0.03)
Span length, L = 2080 mm (81.89 in.)			Deflection Limit L/175 = 11.9 mm (0.47 in.)	

Table B.4 Test Data of Uniform Load Deflection Test for Glazing

Test Pressure	Deflection Measurements, mm (in.)			
	Positive		Negative	
	Maximum Deflection		Maximum Deflection	
1920 Pa (40.10 psf)	15.6	(0.61)	10.9	(0.43)
Span length, L = 1720 mm (67.72 in.)			No Deflection Limit.	

The tested specimen met the requirements for Class CW-PG40 for Uniform Load deflection Test at Design Pressure as per AAMA/WDMA/CSA 101/I.S.2/A440-22.

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Appendix B: Test Data

B.4 Uniform Load Structrual Test – Test method ASTM E330/E330M-2014(R2021), Procedure A

Design Pressure, P = 1920 Pa (40.10 psf)

Structural Pressure, P = 2880 Pa (60.15 psf)

Table B.5 Test Data of Uniform Load Structural Test

Member (mm)		Test Pressure (Pa)	Permanent deformation(mm)			Maximum permanent deformation(mm)
Item	Span Length		1	2	3	
Jamb	2080	+P = 2880	–	–	–	–
		0	<0.1	0.2	0.1	0.2
		-P = -2880	–	–	–	–
		0	<0.1	0.2	<0.1	0.2
Permanent Deformation limit, L x 0.3% = 6.2 mm						
Member (mm)		Test Pressure (Pa)	Permanent deformation(mm)			Maximum permanent deformation(mm)
Item	Span Length		4	5	6	
Glazing	1720	+P = 2880	–	–	–	–
		0	0.2	0.6	0.4	0.3
		-P = -2880	–	–	–	–
		0	0.3	0.7	0.3	0.4
No Permanent Deformation limit.						

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

Test Pressure	Deflection Measurements, mm (in.)			
	Positive		Negative	
	Perm. Set		Perm. Set	
2880 Pa (60.15 psf)	0.2	(0.01)	0.2	(0.01)

Table B.7 Test Data of Uniform Load Structural Test For Glazing

Test Pressure	Deflection Measurements, mm (in.)			
	Positive		Negative	
	Perm. Set		Perm. Set	
2880 Pa (60.15 psf)	0.3	(0.01)	0.4	(0.02)

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 which was in excess of 0.3% of its span.

The tested specimen met the requirements for Class CW-PG40 for Uniform Load Structure Test at Structural Pressure as per AAMA/WDMA/CSA 101/I.S.2/A440-22.

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Appendix C: Sample Received Photo



Revision:

NO.	Date	Changes
250529005SHF-004	2025-08-06	First issue