

FUZHOU ROPO BUILDING MATERIALS CO., LTD.

TEST REPORT

SCOPE OF WORK

Aluminum Sliding Window

REPORT NUMBER

200330010SHF-003

TEST DATE(S)

2020-05-14 - 2020-05-14

ISSUE DATE

2020-06-01

PAGES

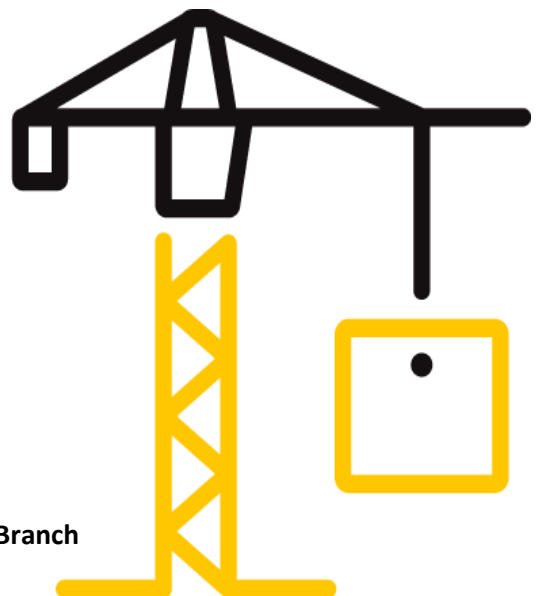
14

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Test Report

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Test Report

Issue Date: 2020-06-01 Intertek Report No. 200330010SHF-003
 Applicant: FUZHOU ROPO BUILDING MATERIALS CO., LTD.
 Address: Tieling Industrial Zone, Minhou, Fuzhou, Fujian, China
 Attn: Benson Deng
 Manufacturer: FUZHOU ROPO BUILDING MATERIALS CO., LTD.
 Address: Tieling Industrial Zone, Minhou, Fuzhou, Fujian, China
 Test Type : Performance test, samples provided by the applicant.

Product Information

Product Name	Aluminum Sliding Window	Brand	ROPO
Sample Description	Good Condition	Sample Amount	1 set
		Received Date	2020-03-30
Sample ID	Model	Specification	
S200330010HF.003	ROPO115 SW	1800mm(Width) x 1600mm(Height)	

Test Methods And Standards

Test Standard	AS/NZS 4420.1-2016 Windows, external glazed, timber and composite doors - Methods of test Part 1: Test sequence, sampling and test methods
Specification Standard	AS 2047-2014 Windows and external glazed doors in buildings (Amdt 2-2017)
Test Conclusion	The results are compliance with the applicable requirements of AS 2047-2014 (Amdt 2-2017), and the results are shown in the following page.

Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

Report Authorized

 *Zac Zhang* *Amber Chen*
 Name: Zac Zhang Name: Amber Chen
 Title: Reviewer Title: Project Engineer

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Test Items, Method and Results:

1 Test Samples

A full scale of sample was provided by the manufacturer that was not weathered nor conditioned.

The description of the samples 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

1	Product Name	Aluminum Sliding Window
2	Model	ROPO115 SW
3	Dimension of Window Frame	1800mm(Width) x 1600mm(Height) x 100mm(Thickness)
4	Dimension of Window Sash	Operable Sash: 898mm(Width) x 1516mm(Height) x 41mm(Thickness) Fixed Sash: 898mm(Width) x 1516mm(Height) x 41mm(Thickness)
5	Profile	Model: ROPO115 SW Manufacturer: Guangdong Jianmei Aluminium Profiles Factory (GROUP) Co., Ltd.
6	Frame Corner Construction Details: Joinery Type	Mitre-Cut, Assembly with Corner Bracket
7	Reinforcement	None
8	Glazing	Dimension: Operable Sash: 786 mm (Width) x 1404 mm (Height) Fixed Sash: 786 mm (Width) x 1404 mm (Height) Structure: 26 mm Thick 5 mm + 16 mm Argon Gas + 5 mm Toughened Insulated Glass Supplier: Jiangsu Jiacheng Special Manufacturing Glass Co., Ltd
9	Hardware	Lock: Sliding Door Lock Model: DS3130 Supplier: Doric Products Pty Ltd Pulley: Stainless Steel Door Pulley Model: 15*24*180 Supplier: Fuzhou Libai Hardware Co., Ltd
10	Weather-strip	Not Applicable
11	Thermal Break	20mm / 14.8mm Supplier: Guangdong Jianmei Aluminium Profiles Factory (GROUP) Co., Ltd.
12	Drainage	Sizes: 30 mm x 5 mm (Width x Height) quantity: 2

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Table 1 Product Information(Continued)

13	Gasket (between sash and frame)	Not Applicable
14	Sealant of Glass	Model: DOWSIL SJ168 Material: Silicone Weatherproofing Sealant Supplier: Dow China
15	Installation	The rough opening allowed for a 1/4" shim space. The exterior perimeter of the test specimen was sealed with silicon sealant.



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Test Items, Method and Results:

2 Test Result

Table 2 Test Results

Test Description	Test Result	
Serviceability Design Wind Pressure AS/NZS 4420.1-2016 section 3	±	1600 Pa
Deflection / Span Ratio Framing member 1	Stile at handle side	1/772
Deflection / Span Ratio Framing member 2	Mullion	1/438
Operating Force AS/NZS 4420.1-2016 section 4	Initial Movement	Required ≤ 110 N
		Open 102 N
		Close 102 N
	Maintain Movement	Required ≤ 90 N
		Open 30 N
Close 31 N		
Air Infiltration at ±75 Pa AS/NZS 4420.1-2016 section 5	at +75Pa	0.04 L/s·m ²
	at -75Pa	0.05 L/s·m ²
Overall area: 2.88 m ²		
Water Penetration AS/NZS 4420.1-2016 section 6	No water penetration at	600 Pa or less
	Description: After water sprayed for 15 minutes at 600 Pa, there was no water penetration.	
Ultimate Strength Test Pressure AS/NZS 4420.1-2016 section 7	+	3000 Pa with no collapse
	-	3000 Pa with no collapse
	Description:	
	No significant breakage, permanent deformation or operational malfunction after ultimate strength was released.	

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Appendix A: Test Data and Sample Drawings:

A.1 Deflection Test – Test method AS/NZS 4420.1-2016

Test Pressure (Serviceability design wind pressure), P = 1600 Pa,

Note: No structural members in a completely assembled and glazed window shall deflect by an amount greater than the following, when tested at the serviceability design wind pressure:

- (a) Span/250 for windows and sliding doors.
- (b) Span/100 for doors other than sliding.

Table 3 Test Data of Deflection Test

Member (mm)		Test Pressure (Pa)	Deflection (mm)			Actual Deflection	Deflection /Span Ratio
Item	Span Length		1	2	3		
Stile at handle side	1390	+P/4 = 400	0.1	0.5	0.1	0.4	1:3475
		+2P/4 = 800	0.4	1.0	0.2	0.7	1:1986
		+3P/4 = 1200	0.6	1.5	0.4	1.0	1:1390
		+4P/4 = 1600	0.8	2.0	0.6	1.3	1:1069
		0	0.1	0.1	0.1	<0.1	<1:13900
Stile at handle side	1390	-P/4 = -400	0.2	0.7	0.1	0.6	1:2317
		-2P/4 = -800	0.6	1.6	0.4	1.1	1:1264
		-3P/4 = -1200	0.9	2.2	0.7	1.4	1:993
		-4P/4 = -1600	1.2	2.9	1.0	1.8	1:772
		0	0.1	0.1	0.1	<0.1	<1:13900

Table 4 Test Data of Deflection Test

Member (mm)		Test Pressure (Pa)	Deflection (mm)			Actual Deflection	Deflection /Span Ratio
Item	Span Length		4	5	6		
Mullion	1400	+P/4 = 400	0.4	1.2	0.4	0.8	1:1750
		+2P/4 = 800	0.9	2.5	0.9	1.6	1:875
		+3P/4 = 1200	1.3	3.7	1.4	2.4	1:583
		+4P/4 = 1600	1.9	5.1	1.9	3.2	1:438
		0	0.0	0.0	0.1	<0.1	<1:14000
Mullion	1400	-P/4 = -400	0.5	1.6	0.6	1.0	1:1400
		-2P/4 = -800	1.1	3.1	1.4	1.8	1:778
		-3P/4 = -1200	1.7	4.7	2.2	2.8	1:500
		-4P/4 = -1600	2.3	5.9	3.1	3.2	1:438
		0	0.1	0.1	0.2	<0.1	<1:14000

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Appendix A: Test Data and Sample Drawings:

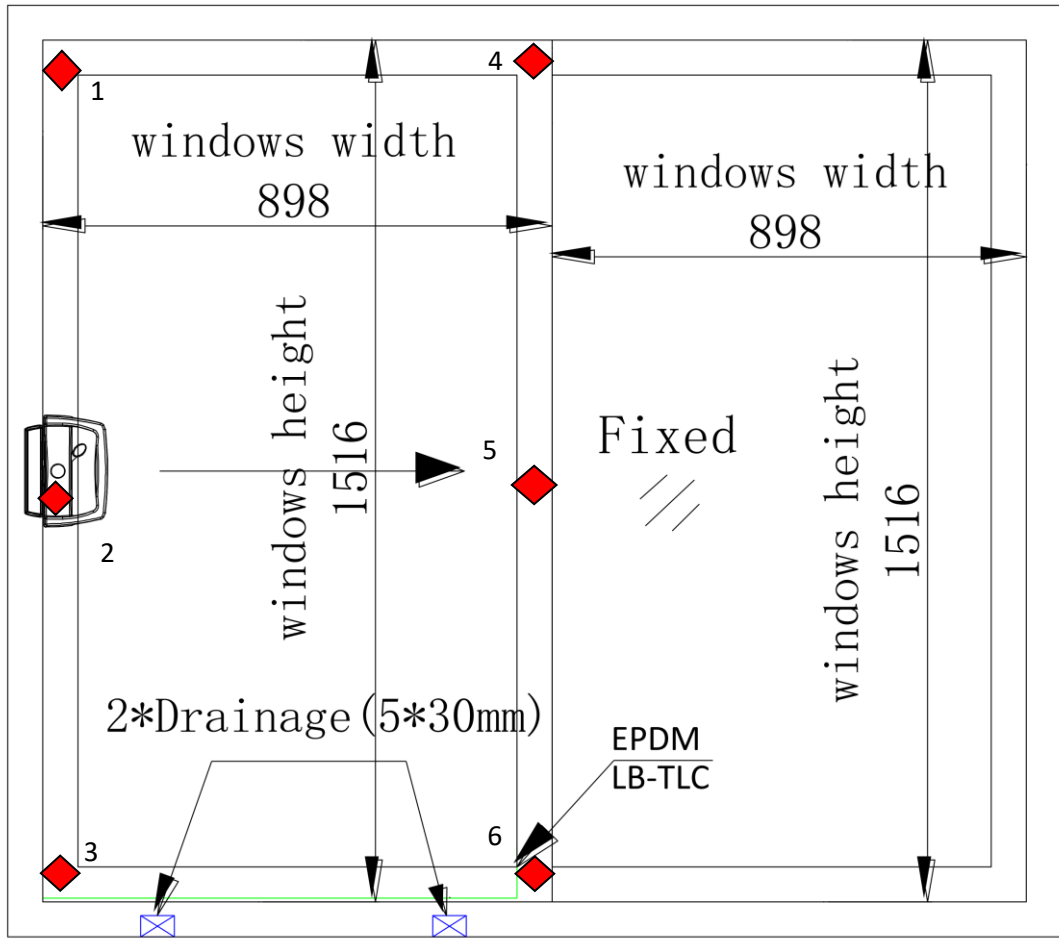


Fig.1 Locations of Displacement Measuring Devices

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Appendix A: Test Data and Sample Drawings:

A.2 Sample Drawings

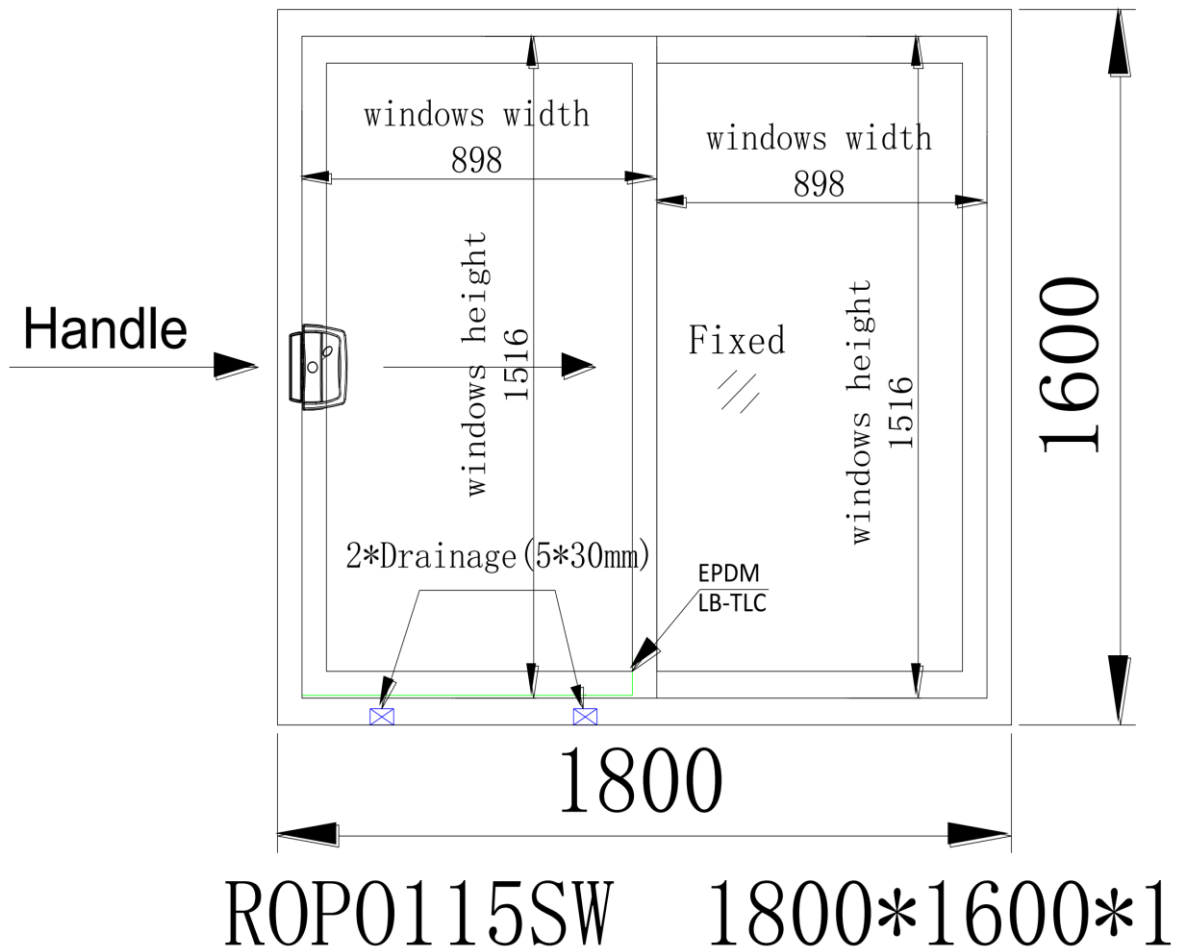


Fig.2 Drawing of Representative Sample

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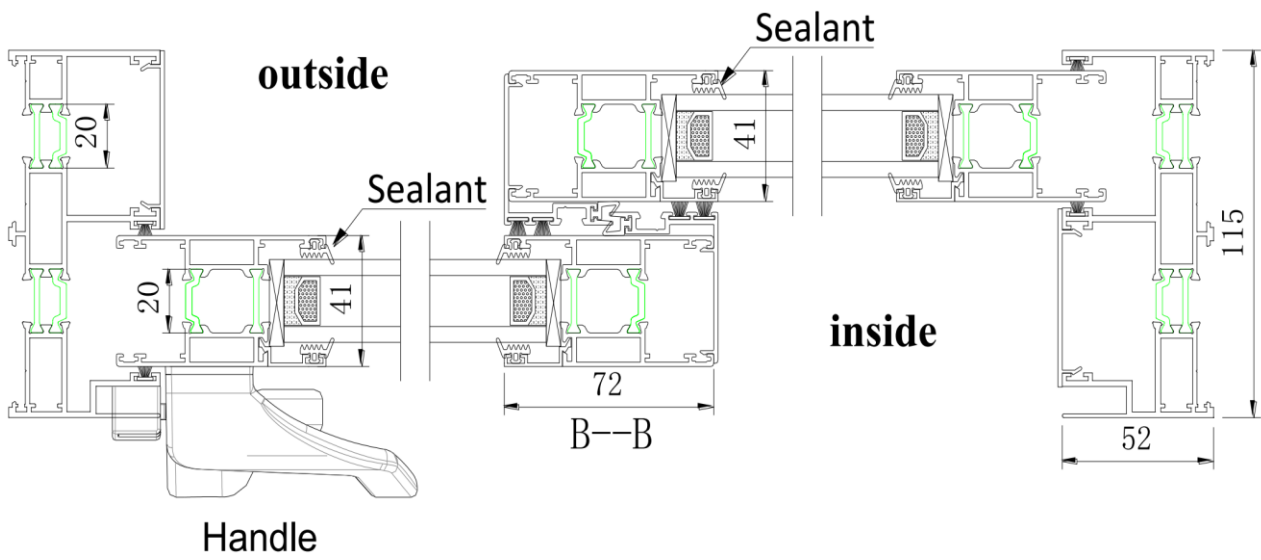


Fig.3 Drawing of Representative Sample

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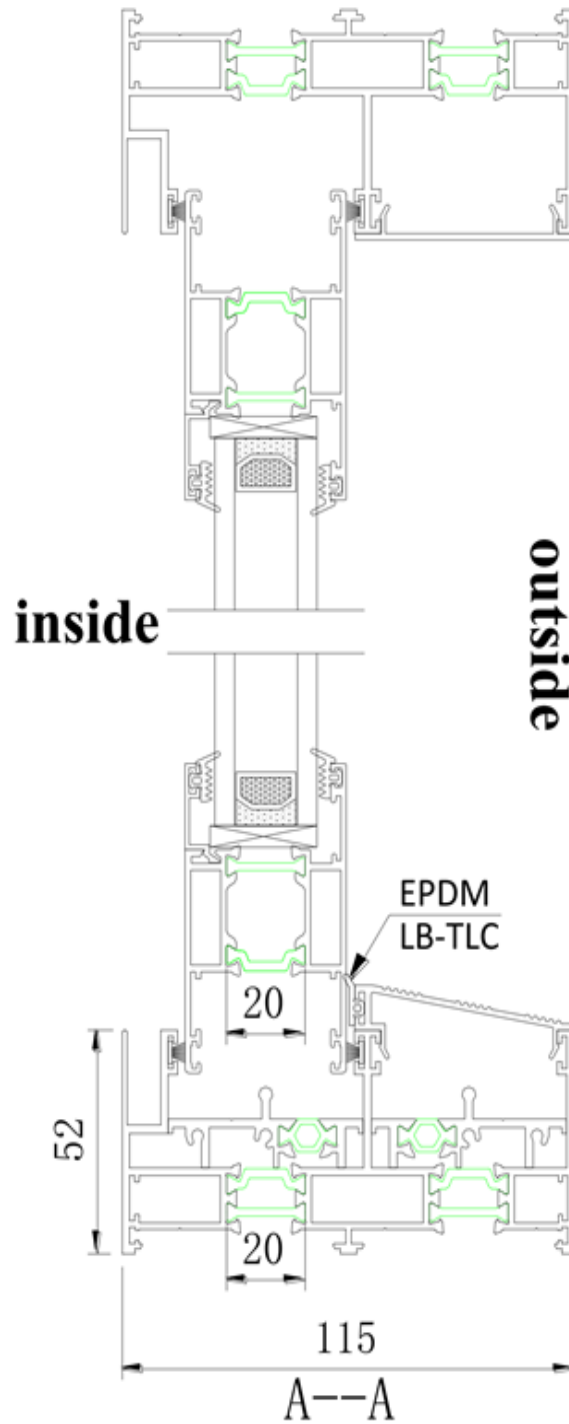


Fig.4 Drawing of Representative Sample

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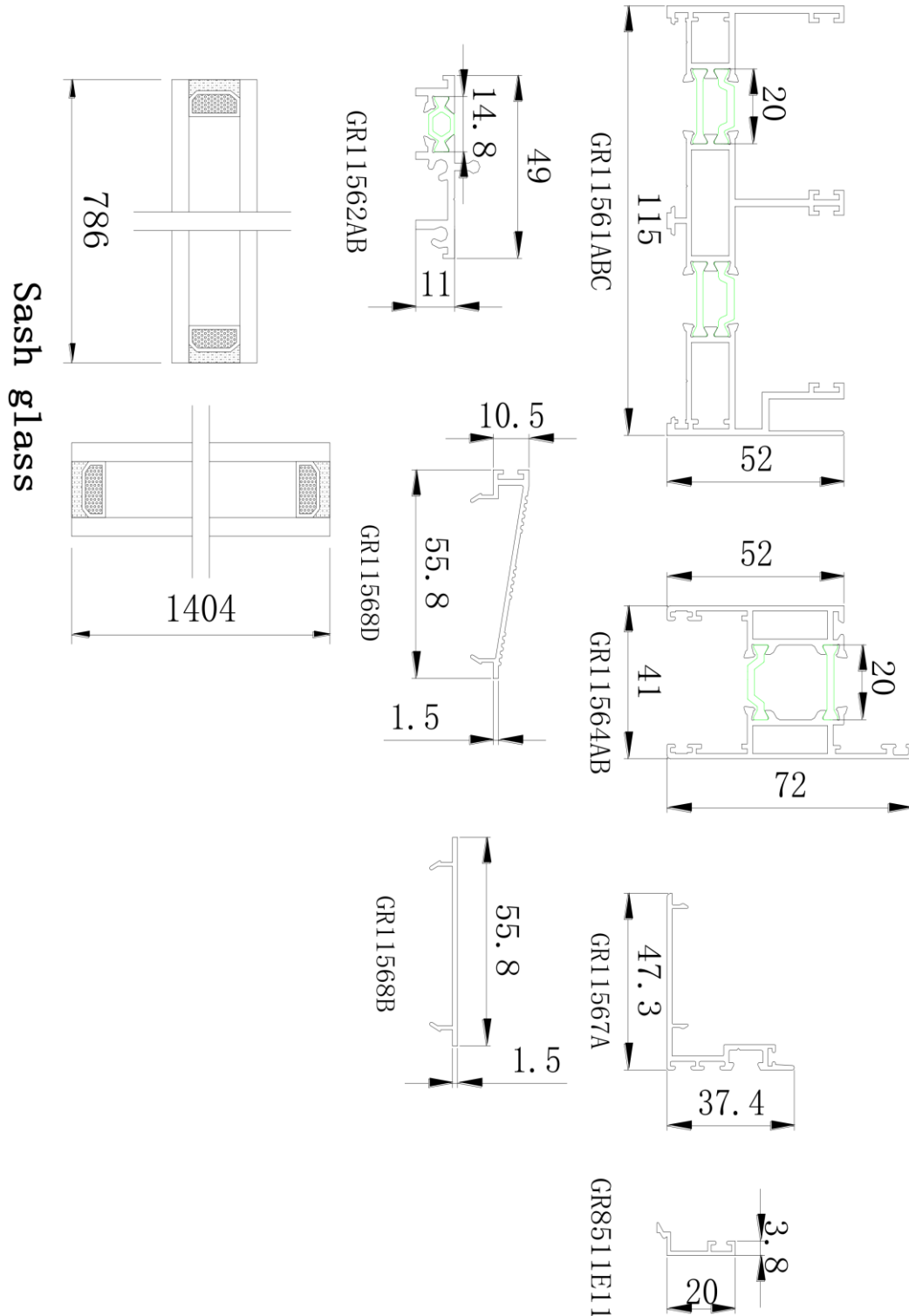


Fig.5 Drawing of Representative Sample

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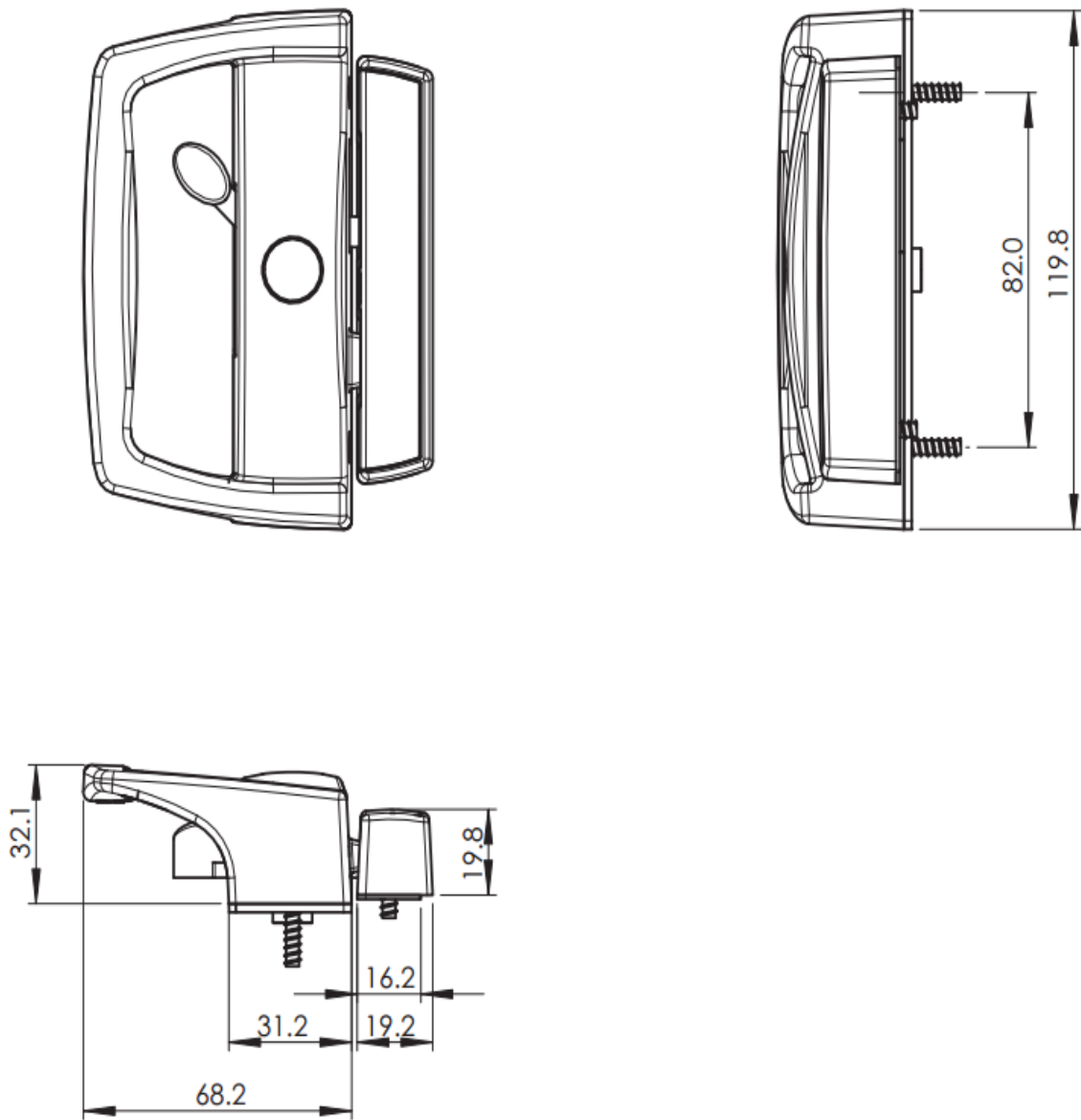


Fig.6 Drawing of Representative Sample

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Appendix B: Sample Received Photo



Revision:

NO.	Date	Changes	Author	Reviewer
200330010SHF-003	2020-06-01	First issue	Amber Chen	Zac Zhang