

# FOSHAN CIVRO WINDOWS, DOORS & CURTAIN WALL SYSTEM CO. LTD

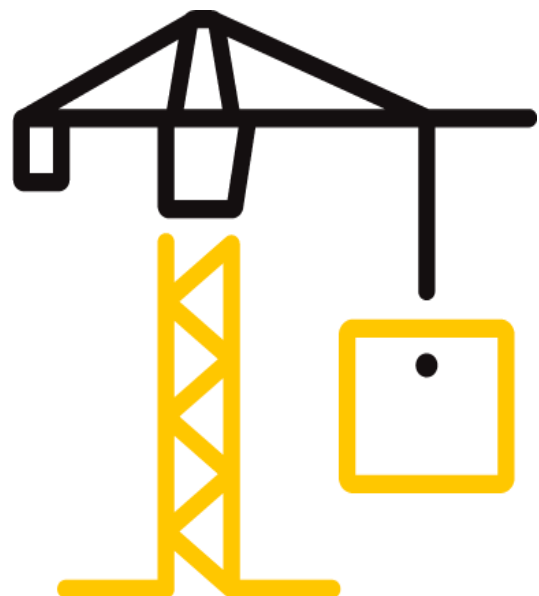
## TEST REPORT

**REPORT NUMBER**  
180418002SHF-BP-2

**ISSUE DATE**  
2018/7/20

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## Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

Applicant: FOSHAN CIVRO WINDOWS, DOORS &amp; CURTAIN WALL SYSTEM CO. LTD

Applicant Address: Shishan Science &amp; Technology Park, N. Xingye Road, Nanhai District, Foshan, China

Attn: Evan Yuan

Manufacturer: FOSHAN CIVRO WINDOWS, DOORS &amp; CURTAIN WALL SYSTEM CO. LTD

Manufacturer Address: Shishan Science &amp; Technology Park, N. Xingye Road, Nanhai District, Foshan, China

Attn: Evan Yuan

**SUBJECT:** Performance testing  
CTT 140 lift-sliding door

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
AS 2047-2014 Windows and external glazed doors in buildings (Amdt 2-2017)

SAMPLE ID	MODEL	SPECIFICATION
S180418002SHF.002	CTT 140	4600 mm (W) x 2600 mm (H)

SAMPLE RECEIEVED: 2018/6/28

TESTED FROM: 2018/7/16 TO 2018/7/16

The test data of this report is copied from report 180418002SHF-BP-4.

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# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

## 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	CTT140 lift-sliding door
2	Model	CTT140
3	Dimension of Door Frame	4600mm(width) x 2600mm(height) x 140 mm (thickness)
4	Dimension of Door Leaf	Operable sash: 2288mm (width) x 2532.5mm(height) x 55.6mm (thickness)
5	Profile (Aluminum or other)	Model: (1)CR18001,(2)CR18002,(3)CR18003,(4)CR18004. Manufacturer: Foshan CIVRO Windows, Doors & Curtain Wall System Co. Ltd
6	Frame Corner Construction Details: Joinery type	Frame: Manually assemble with screw Panel: Mechanically assembled: Glued & screwed
7	Reinforcement	None
8	Glazing	Dimension: Operable sash:2175mm(width) x 2378.5mm (height) Structure: 28mm thick 8mm + 12mm air + 8mm tempered insulating glass Supplier: Foshan CIVRO Windows, Doors & Curtain Wall System Co. Ltd
9	Hardware	Handle Model: 74012CL C1 Finger pull Model: 36820 C1 Roller Model: 215136,215137 Supplier: Foshan CIVRO Windows, Doors & Curtain Wall System Co. Ltd
10	Weather-strip	Not applicable
11	Thermal Break	Model: (1)229900, (2) 978700 Supplier: Foshan CIVRO Windows, Doors & Curtain Wall System Co. Ltd
12	Drainage	Sizes: diameter 8mm quantity: 27
13	Gasket (between leaf and frame)	Model: (1) C38005, (2)C35053, (3)35008, (4)38003, (5)38002 Material: EPDM Supplier: Foshan CIVRO Windows, Doors & Curtain Wall System Co. Ltd
14	Sealant of Glass	Not applicable
15	Installation	The exterior perimeter of the test specimen was sealed with silicon sealant.

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

## 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	±	400	Pa
Deflection / Span Ratio Framing member 1	Mullion	1/1171	
Deflection / Span Ratio Framing member 2	Stile at handle side	1/706	
Operating Force-open AS/NZS 4420.1-2016 section 4	Initial Movement	87	N
	Maintain Movement	56	N
Operating Force-close AS/NZS 4420.1-2016 section 4	Initial Movement	86	N
	Maintain Movement	74	N
Air Infiltration at ±75 Pa AS/NZS 4420.1-2016 section 5	at +75Pa	1.34	L/s·m <sup>2</sup>
Overall area: 11.96 m <sup>2</sup>	at -75Pa	1.43	L/s·m <sup>2</sup>
Water Penetration AS/NZS 4420.1-2016 section 6	No water penetration at	200	Pa or less
	Description: After sprayed for 7 minutes at 300 Pa, the water penetration started at the bottom rail of door leaf from drain hole.		
Ultimate Strength Test Pressure AS/NZS 4420.1-2016 section 7	+	1400	Pa with no collapse
	-	1400	Pa with no collapse
	Description: No significant breakage, permanent deformation or operational malfunction after ultimate strength was released.		

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

## Appendix A: Test Data and Sample Drawings:

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

Test Pressure (Serviceability design wind pressure),  $P = 400 \text{ Pa}$

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		
Mullion	2460	+P/4 = 100	0.0	0.7	0.1	0.6	1:4100
		+2P/4 = 200	0.3	1.4	0.1	1.2	1:2050
		+3P/4 = 300	0.7	2.0	0.2	1.5	1:1640
		+4P/4 = 400	1.3	2.8	0.5	1.9	1:1295
		0	0.2	0.2	0.1	<0.1	<1:24600
Mullion	2460	-P/4 = -100	0.2	0.8	0.1	0.6	1:4100
		-2P/4 = -200	0.3	1.8	0.6	1.4	1:1757
		-3P/4 = -300	0.4	2.4	0.7	1.9	1:1295
		-4P/4 = -400	0.5	2.8	0.9	2.1	1:1171
		0	0.3	0.3	0.4	0.1	1:24600

**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		
Stile at handle side	2400	+P/4 = 100	0.1	0.8	0.1	0.8	1:3000
		+2P/4 = 200	0.4	1.8	0.2	1.5	1:1600
		+3P/4 = 300	0.6	2.9	0.4	2.4	1:1000
		+4P/4 = 400	1.1	4.4	0.9	3.4	1:706
		0	1.0	0.3	0.1	0.4	1:6000
Stile at handle side	2400	-P/4 = -100	0.2	0.6	0.2	0.4	1:6000
		-2P/4 = -200	0.9	2.1	0.4	1.4	1:1714
		-3P/4 = -300	1.3	3.1	0.8	2.0	1:1200
		-4P/4 = -400	1.6	4.1	1.2	2.7	1:889
		0	0.8	0.7	0.6	0.1	1:24000

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

## A.2 Sample Drawings

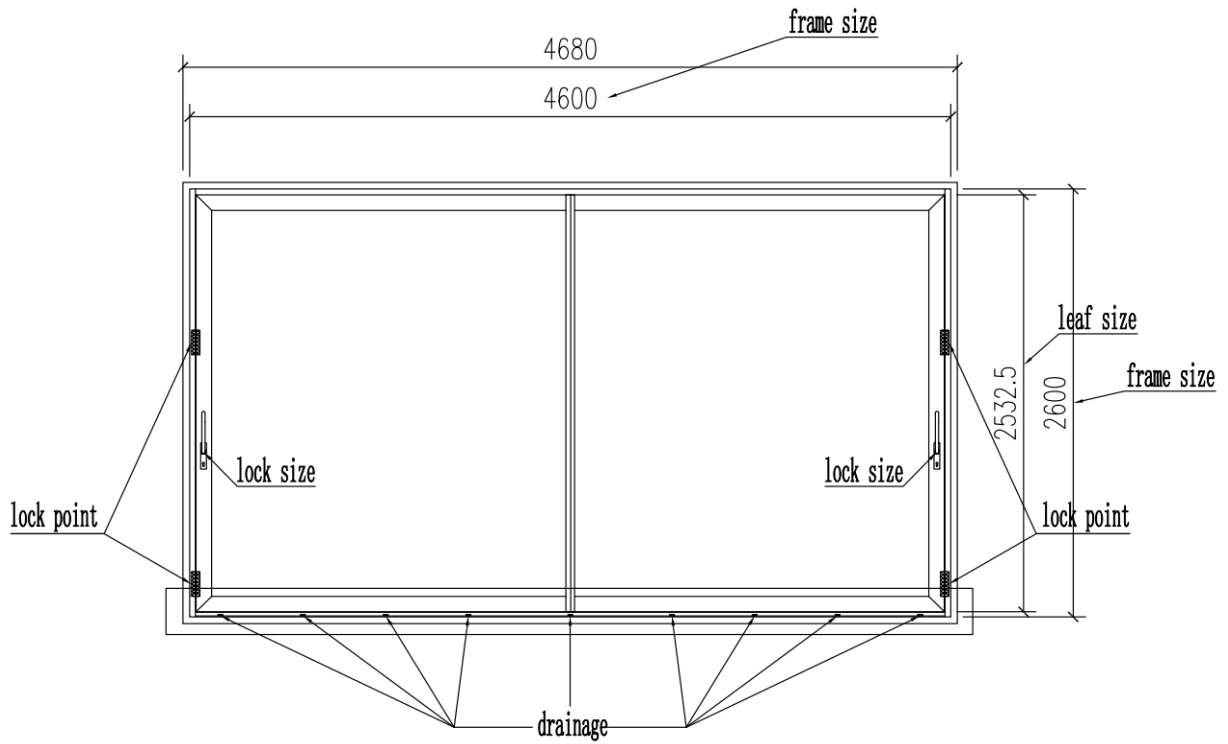


Fig.1 Drawing of Representative Sample

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

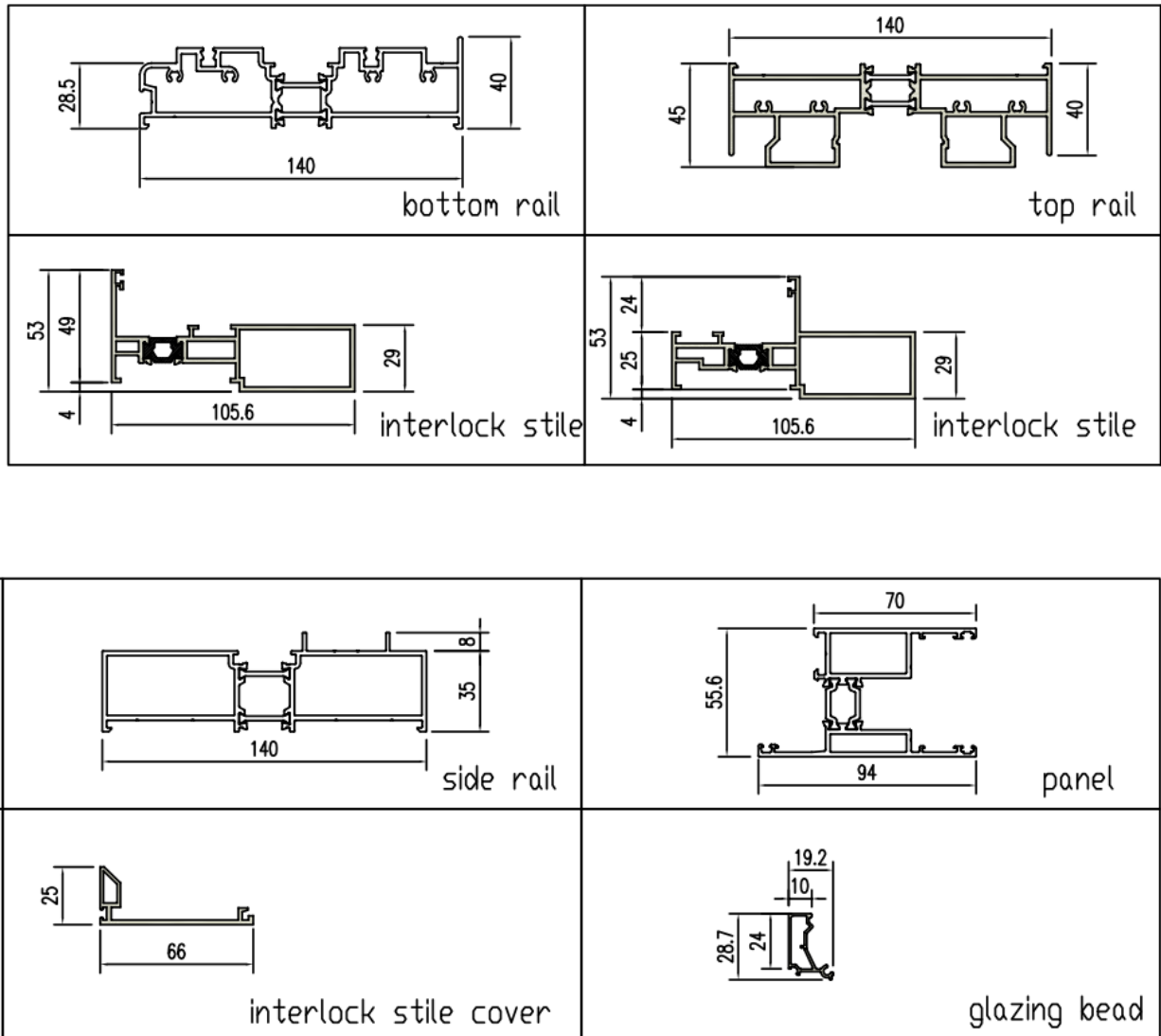


Fig.2 Drawing of Representative Sample

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

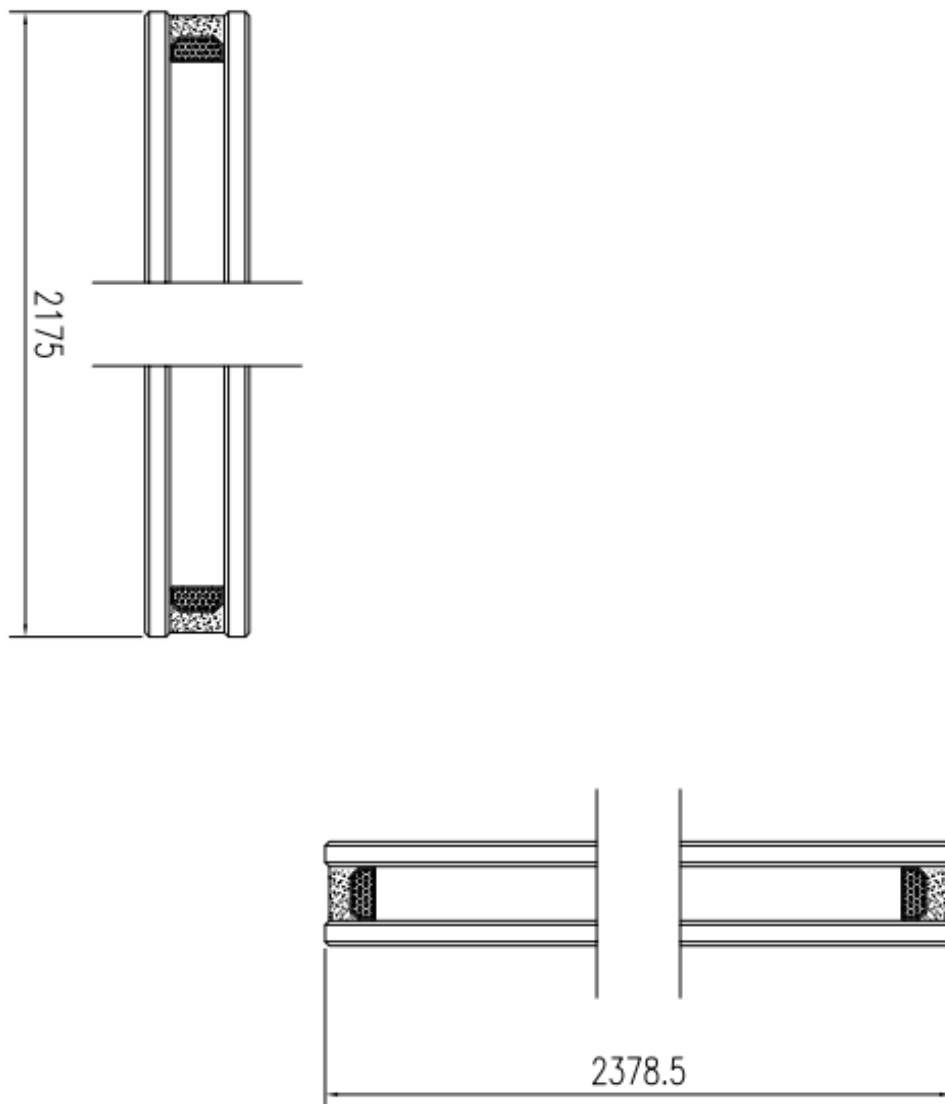


Fig.3 Drawing of Representative Sample

## Test Report

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Intertek Report No. 180418002SHF-BP-2

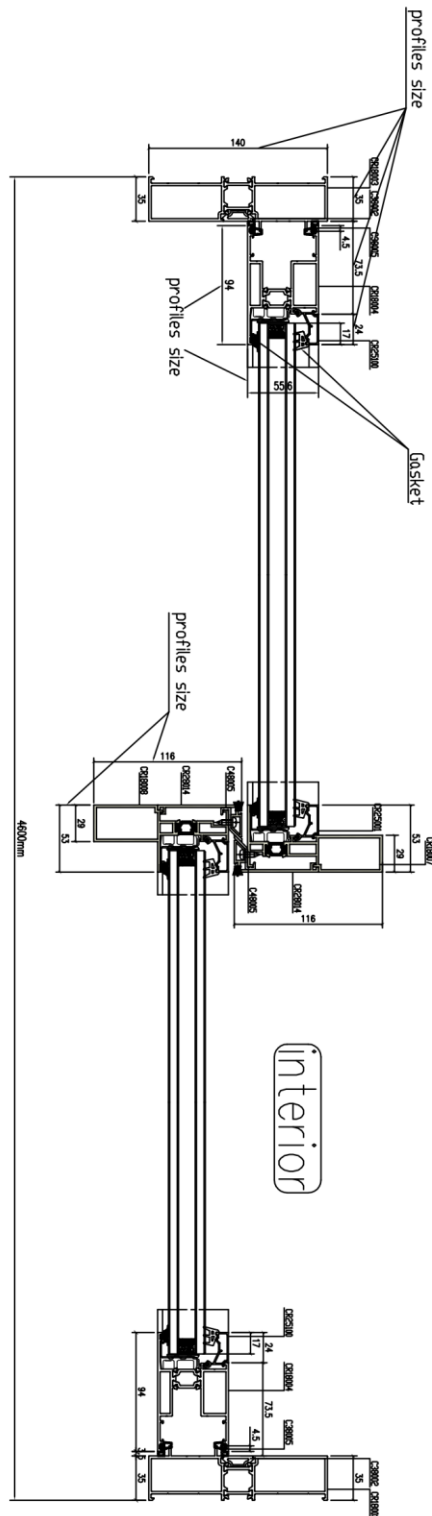


Fig.4 Drawing of Representative Sample

## Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

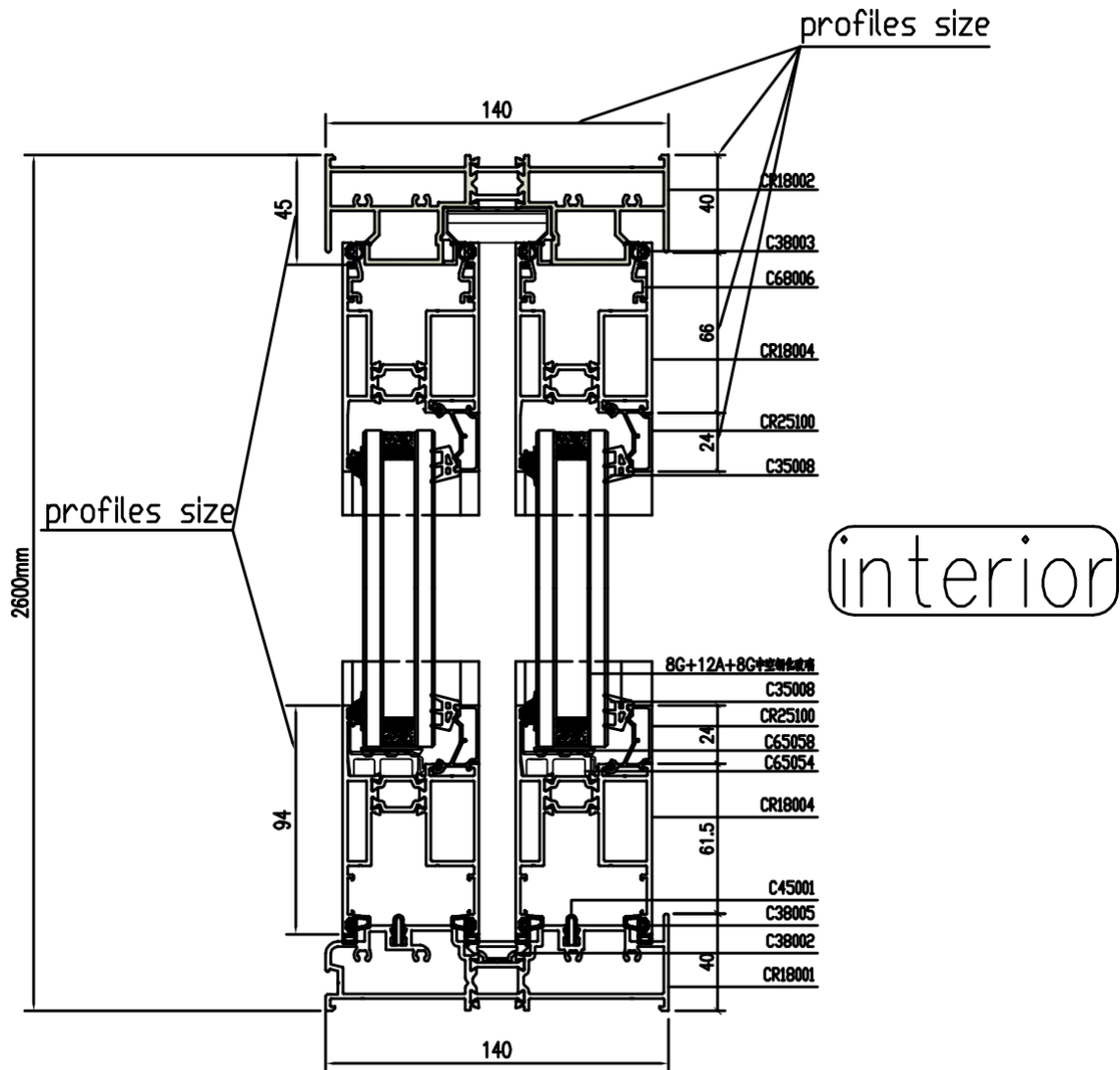


Fig.5 Drawing of Representative Sample

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

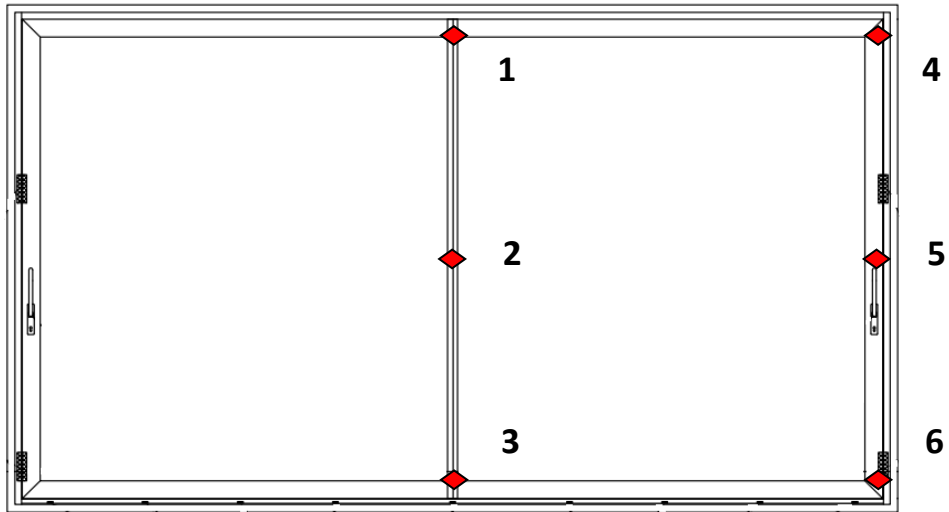
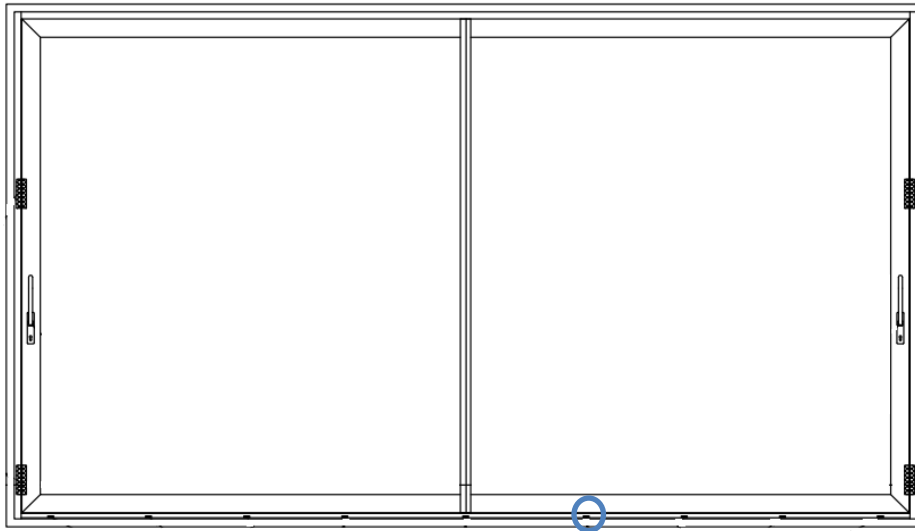


Fig.6 Locations of Displacement Measuring Devices

# Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2



○ : Water penetration position

Fig.7 Location of Water Penetration

## Test Report

Issue Date: 2018/7/20

Intertek Report No. 180418002SHF-BP-2

### APPENDIX: SAMPLE RECEIVED PHOTO

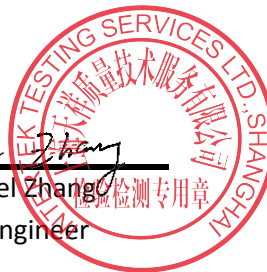


### REPORT AUTHORIZED

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.

Weber Wang  
Name: Weber Wang  
Title: Reviewer

Daniel Zhang  
Name: Daniel Zhang  
Title: Project Engineer



### Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180418002SHF-BP-2	2018/7/20	First issue	Daniel Zhang	Weber Wang