

# TEST REPORT



ATA  
170-30 Hwangnyongjae-ro,  
Yeonsan-myun, Nonsan-city,  
Chungcheongnam-do, Korea  
TEL : 041) 733 - 4734 ~ 5  
FAX : 041) 733 - 4736  
WEB : www.mockuptest.com

Certificate No. : 190402-061  
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## 1. Client

- Name of Client : FOLZEN KOREA CO.LTD  
GRANDVIEW EA BUILDING SYSTEMS CORP.
- Address of Client : 27, 180 BEON-GIL SEOHAEDAERO, JUNG-GU, INCHEON, KOREA  
570-999 WEST. BROADWAY, VANCOUVER, BC, V5Z 1K5
- Request Date : Apr 2nd, 2019

## 2. Project Name : FZ-SF70

## 3. Date of Test : Apr 22th, 2019

## 4. Test Method used

- ASTM E283-04 : Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E331-00 : Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference
- ASTM E330 / E330M-14 : Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

## 5. Testing Environment

- Temperature : Minimum 20.2 °C, Maximum 23.1 °C
- Humidity : Minimum 50.3 % R.H., Maximum 57.8 % R.H.
- Atmospheric Pressure : Minimum 1 003.7 hPa, Maximum 1 004.4 hPa

## 6. Test Results : Refer to Supplement

## 7. Note

- The results shown in this test report only to the sample(s) tested unless otherwise stated.
- This laboratory is not accredited for the test results marked. \*

Affirmation	Tested by	Technical Manager
	Name : JangJeon-Han  (Signature)	Name : Jingu-Yu  (Signature)

2019. 05. 08

ATA CO.LTD President 



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : vIwyDnlcnhY=



# TEST RESULT



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## 1. Test Results

Test Item	Pressure	Result		Note
ASTM E283-04	+75 Pa	0.178 L/(s·m <sup>2</sup> )		-
* ASTM E331-00	+220 Pa	Pass		-
ASTM E330/E330M-14	+1 440 Pa	Gauge No. 1	15.09 mm	Structural Test (100 %)
		Gauge No. 2	17.62 mm	
		Gauge No. 3	7.90 mm	
	-1 440 Pa	Gauge No. 1	18.44 mm	
		Gauge No. 2	21.42 mm	
		Gauge No. 3	10.47 mm	
	+2 160 Pa	Gauge No. 1	1.10 mm	Structural Test (150 %)
		Gauge No. 2	1.28 mm	
		Gauge No. 3	0.35 mm	
	+2 160 Pa	Gauge No. 1	6.20 mm	
		Gauge No. 2	5.20 mm	
		Gauge No. 3	2.24 mm	

- ※ 비고 : 1) Refer to 3 Page for gauge location.  
2) Net Deflection : Gauge No. 2 - {(Gauge No.1 + Gauge No. 3) / 2}  
3) + Symbol means static pressure, - Symbol means Negative pressure

## 2. Specimen Description

- Manufacturer : FOLZEN KOREA CO.LTD
- Type of specimen : Folding Door
- Material : Aluminum
- Size : 2 200 mm(Width) 2 100 mm(Height)
- Glass : 24 mm Pair Glass ; 6 mm Tempered Glass + 12 mm Ar + 6 mm Low-E Tempered Glass
- Sealant : Weather Sealant

3. Visual inspection result after test completion : Pass



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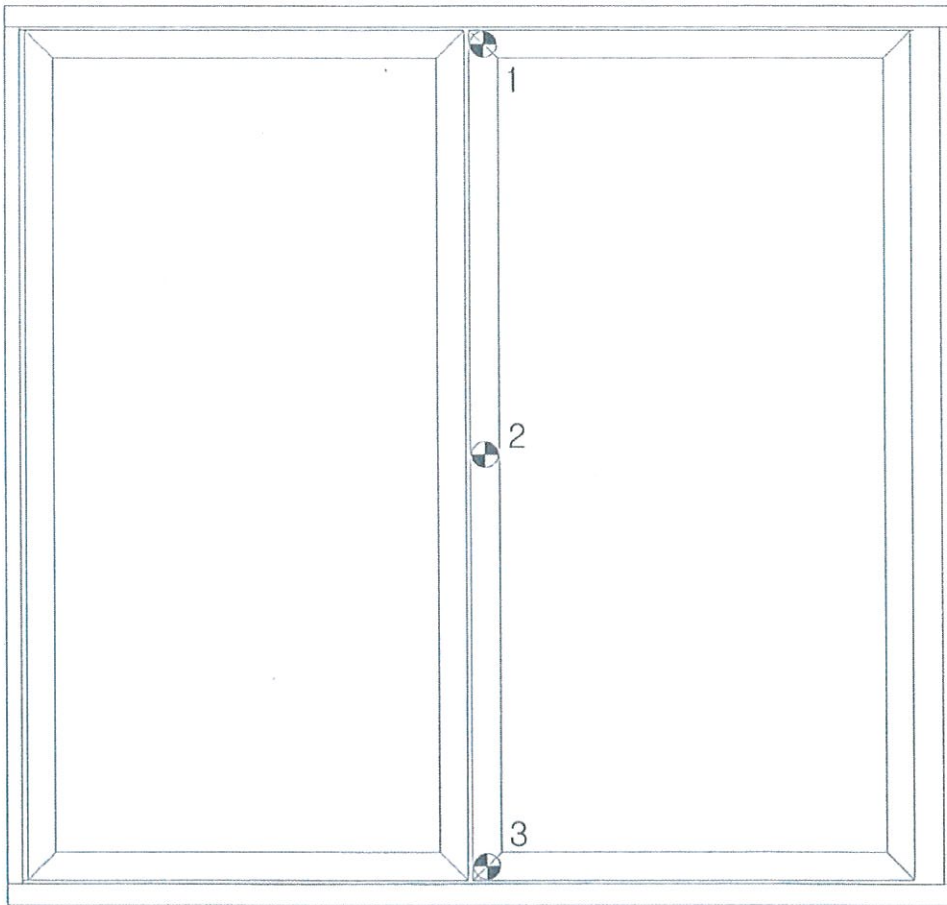
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## 4. Gauge Location



Gauge Location ;

No. 1 : Top of Frame

No. 2 : Mid of Frame

No. 3 : Bottom of Frame



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# TEST RESULT

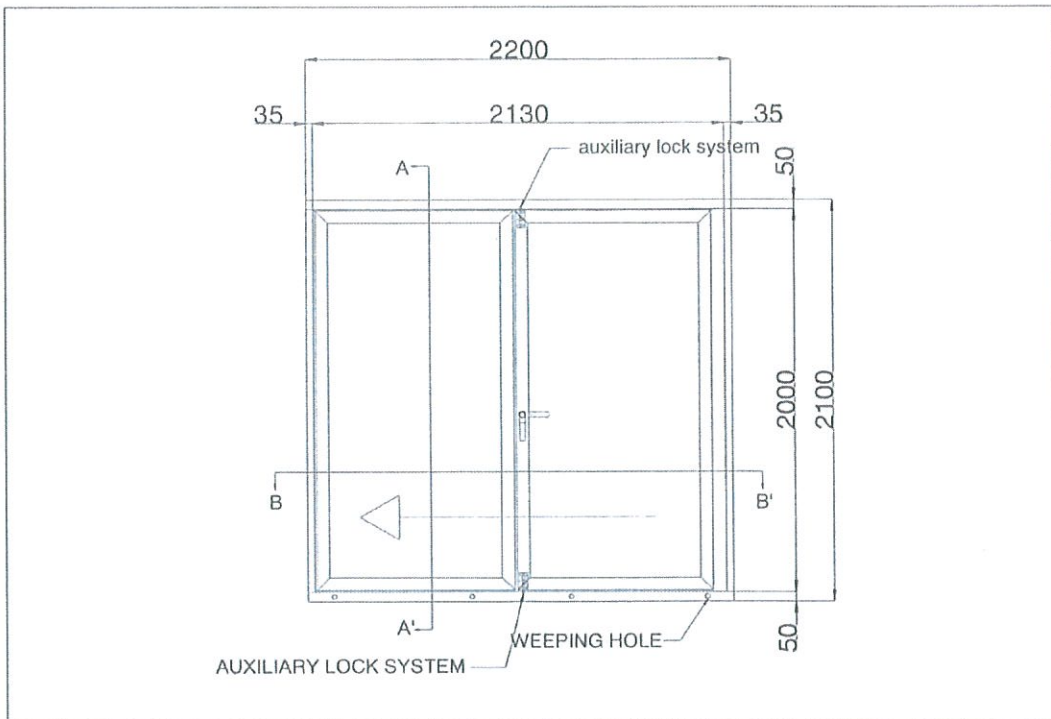


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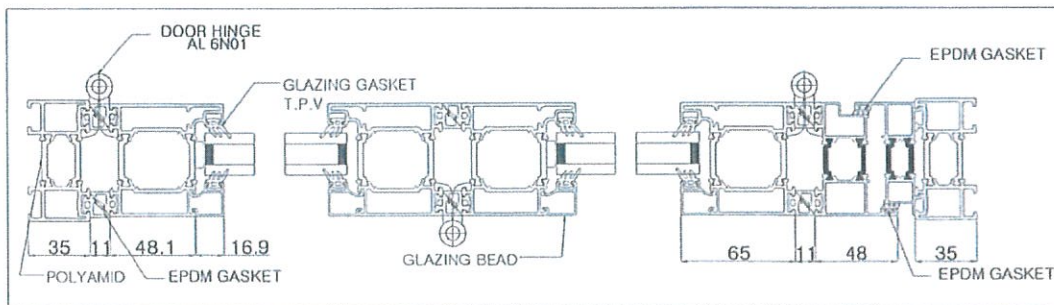
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## 5. Drawing



< Elevation >



< Horizontal Section Detail >



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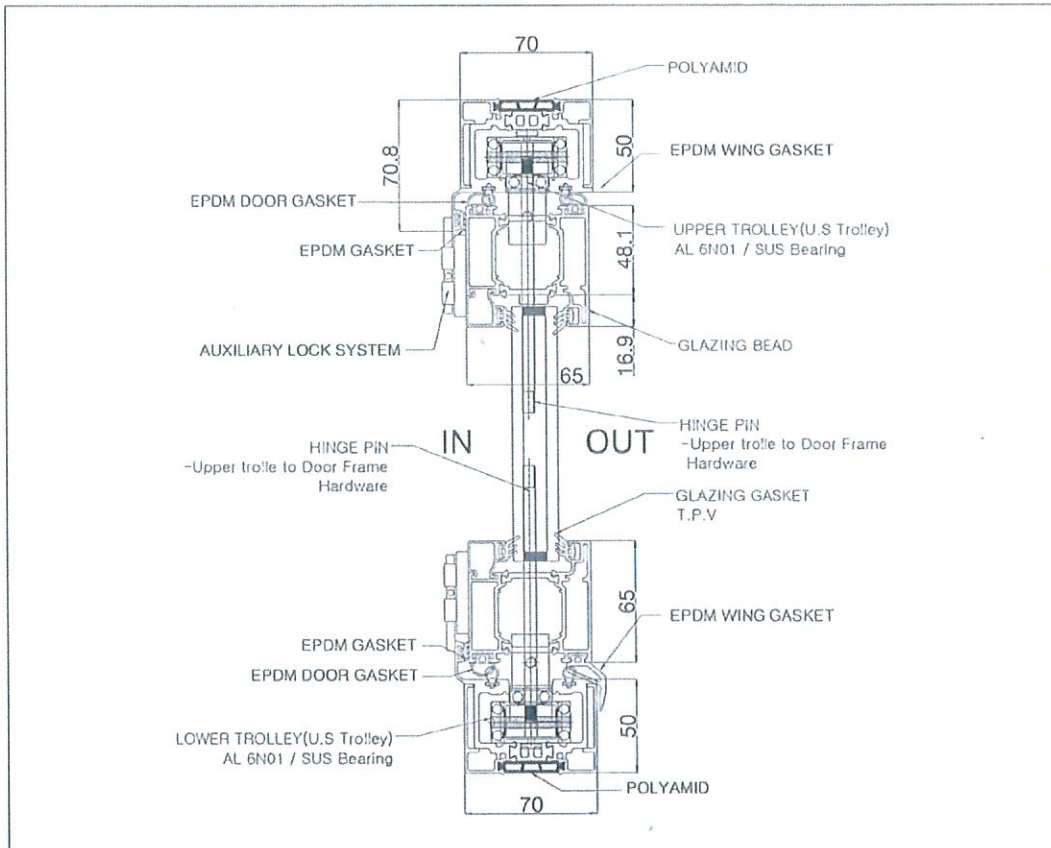


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< Vertical Section Detail >





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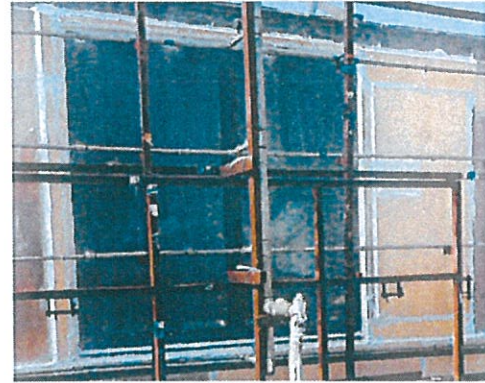
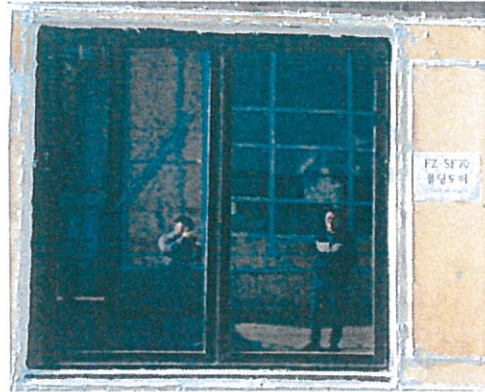
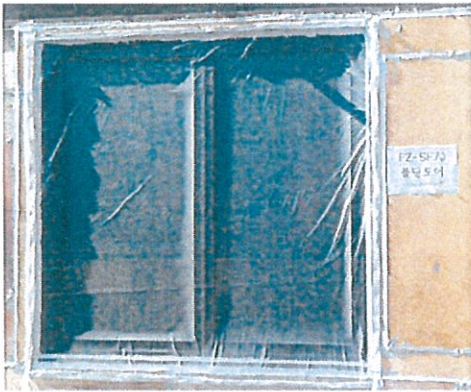
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## 6. Picture



End.

