

Foshan Wish Zinc & Steel Guardrail Co., Ltd.

TEST REPORT

SCOPE OF WORK

Aluminum Pergola

REPORT NUMBER

251017049GZU-001

TEST DATE(S)

From 10/28/2025 to 10/28/2025

ISSUE DATE

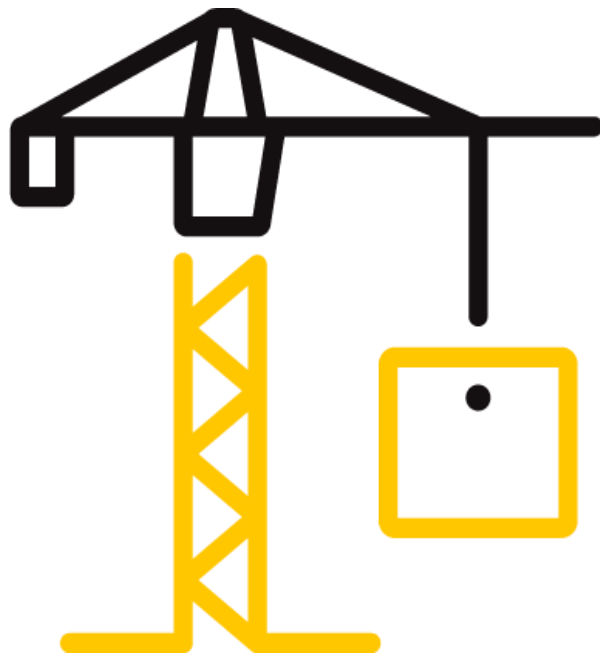
11/17/2025

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Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

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Client Information:

Applicant Name:	Foshan Wish Zinc & Steel Guardrail Co., Ltd.
Address:	No. 6-1, Jincheng North, Donglian Jincheng Industrial Zone, Danzao Town, Nanhai District, Foshan City
Attn:	Guizhao Jiang

Product Information:

Product Name	Aluminum Pergola	Sample Description	Good Condition
Model and/or type reference	Series 225	Received Date	10/28/2025
Sample ID.	S251017049GZU.001~002	Sample Amount	1 set
Specification	2.75 m*4 m*2.80 m	Brand	Wish outdoor
Manufacturer	Foshan Wish Zinc & Steel Guardrail Co., Ltd.		
Address	No. 6-1, Jincheng North, Donglian Jincheng Industrial Zone, Danzao Town, Nanhai District, Foshan City		
Test Type	Performance test, samples provided by the applicant		

Test Methods And Standards:

Test Standard	AS/NZS 1170.2: 2021 Amd 1 :2023, AS/NZS 1170.3: 2003/Amdt 1/2007 and client's requirements
Specification Standard	Client's requirements
Test Conclusion	The product met the client's requirements.

Laboratory information:

Testing Laboratory	Intertek testing services Shenzhen Ltd. Guangzhou Branch
Test location	Room 4103 & 4203, No. 63 Punan Road, Huangpu District, Guangzhou, China

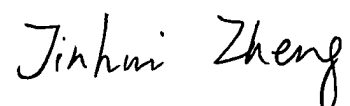
Report Authorized :

Approved By:



Jeff Deng
Manager

Drafted By:



Jinhui Zheng
Project Engineer

Note: If you have any questions for the report, please contact: lillian.lf.he@intertek.com

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Product information:

The information of product components is provided by client and the specific details are noted in table 1.

Table 1- component information

No.	Component	Material	Specification, mm	Note
1	Post	Aluminum Alloy 6063-T5	170*170*2.8	/
2	Beam&Gutter	Aluminum Alloy 6063-T5	181*145*2.2	/
3	Louver	Aluminum Alloy 6063-T5	225*50*2.0	/
4	Control Rod	Aluminum Alloy 6063-T5	23*19.5*3.0	/
5	Built-in Base	Stainless Steel Grade 201	170*170*4.5	/

Note:

1. Intertek had verified the dimensions of the components but not verified the material composition and tempers.
2. The product was electrical and Intertek did not evaluate the electrical part of this product and no evaluation for the electrical safety.

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Test item: Wind resistance test

Test method: according to AS/NZS 1170.2: 2021 Amd 1: 2023 and client's requirement

Test Procedure

- I. Once the pergola has been installed in accordance with the applicant's instruction, switch on the blower fan.
- II. Increase the wind speed gradually from 0 to 37.0 m/s.
- III. The center of the blower aimed at the center of the smaller lateral face of pergola, test it for 15 minutes.
- IV. Rise the height of the blower and aimed at the mid-span of the top beam of smaller face, test it for 15 minutes.
- V. The center of the blower aimed at the half height of the post of the smaller lateral face of pergola at 45°, test it for 15 minutes.
- VI. Rise the height of the blower and aimed at the top of the post of smaller face at 45°, test it for 15 minutes.
- VII. Take photos and videos of the entire testing process with the testing setup. Include it with the test results. The total blowing time is 1 hour.

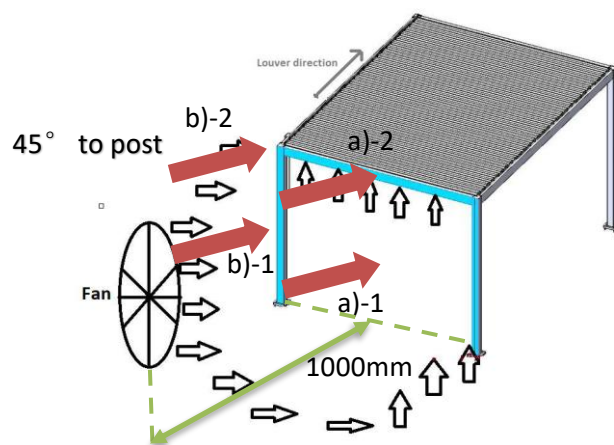


Fig. 1a: Wind Resistance Testing Setup

Acceptance Level

Upon completion of the test -

- 1, No damage and failure in functionality of louver.
- 2, No damage and failure in functionality of pergola.
- 3, No damage to the pergola security with ground.
- 4, There shall be no loss of serviceability.
- 5, No permanent deformation.

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Test result and Observations

Test step	Wind Speed		Wind-Applied Duration (minutes)	Wind scale	Blower distance from pergola (mm)	Blower height (mm)	Louvers closed (Yes/No)	Wind impacts the pergola's shorter face (Yes/No)	Blower fan perpendicular to the pergola's shorter face (Yes/No)
	m/s	mph							
a)-1	37	83	15	12	1000	1400	Yes	Yes	Yes
a)-2	37	83	15	12	1000	2800	Yes	Yes	Yes
b)-1	37	83	15	12	1000	1400	Yes	Yes	Yes
b)-2	37	83	15	12	1000	2800	Yes	Yes	Yes

Test step	Fracture of any component or joint (Yes / No)	Loosening of any joint or components (Yes / No)	Deformation or wear of any part or component (Yes / No)	Any impaired function (Yes / No)	(PASS/FAIL)	Notes
a)-1	No	No	No	No	Pass	/
a)-2	No	No	No	No	Pass	/
b)-1	No	No	No	No	Pass	/
b)-2	No	No	No	No	Pass	/

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Test item: Resistance to snow load

Test method: according to AS/NZS 1170.3: 2003/Amdt 1/2007 and client's requirement

Test Procedure:

Determination of performance

1. The determination of performance shall be in accordance with the test method specified in AS/NZS 1170.3: 2003/Amdt 1/2007.
2. Distribute the pressure evenly on the product's roof and increase the pressure gradually and stably until reach the snow pressure.
3. Maintain the test load for 10 min and record the deflection under the load.
4. Withdraw the test load and record the permanent deformation after 2 minutes.

In accordance to AS/NZS 1170.3: 2003/Amdt 1/2007:

The snow loads on a roof(s): $S = \mu_i \cdot C_e \cdot S_g$

μ_i is the snow load shape coefficient. μ_i is 0,7.

S_g is the characteristic value of snow on the ground.

C_e is exposure reduction coefficient and it is 1,0.

In accordance to the drawing provided by client, the angel of roof was 0°. Therefore, μ_i for 0° is 0.7 and C_e is 1.0.

Classes of snow resistance:

1. The snow resistance was defined by client and the nominal snow pressure S_N , required by client, was 155 kg/m². Safety factor is 1.5 and the factored snow load, S_s , is 233 kg/m².
2. When the snow load, S_N , is 155 kg/m², $S_g = S_N / \mu_i / C_e = 221$ kg/m².
3. When the safety snow load, S_s , is 233 kg/m², $S_g = S_N / \mu_i / C_e = 332$ kg/m².

Test results:

$S_N = 155$ kg/m², $S_s = 233$ kg/m²

H=2800 mm, L=4000 mm, W=2750 mm

The mode of product's operation was electric and it did not need to conduct the test of operation effort.

After having applied the nominal pressure S_N :

Max. deformation under the test: 26 mm; permanent deformation: 0 mm

The operation of product was normal.

Under the safety pressure S_s :

Max. deformation under the test: 63 mm; permanent deformation: 3 mm

The sample was not broken and not exited from the guide rails.

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Appendix A: Sample Received Photo

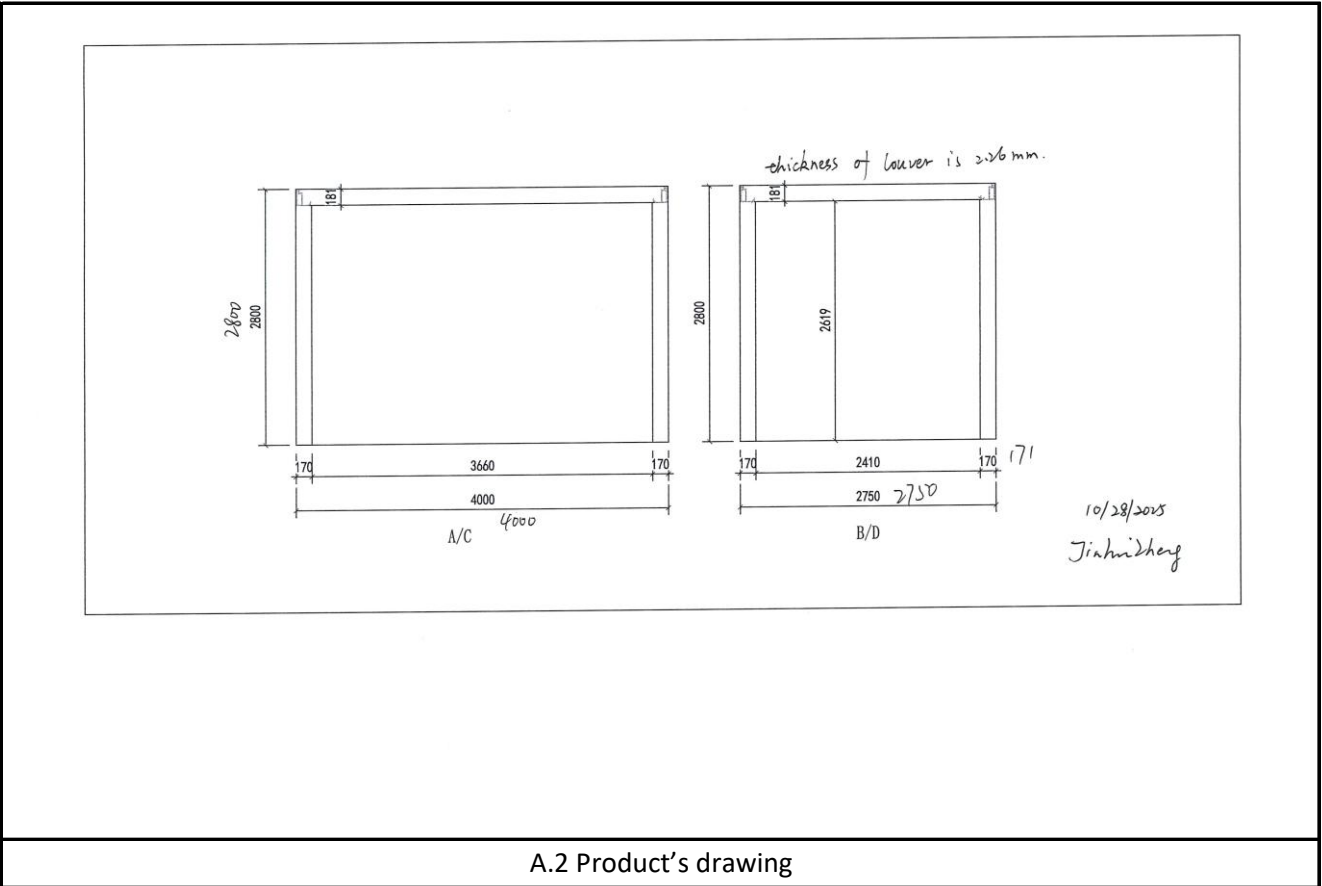


A.1 Overall view of product

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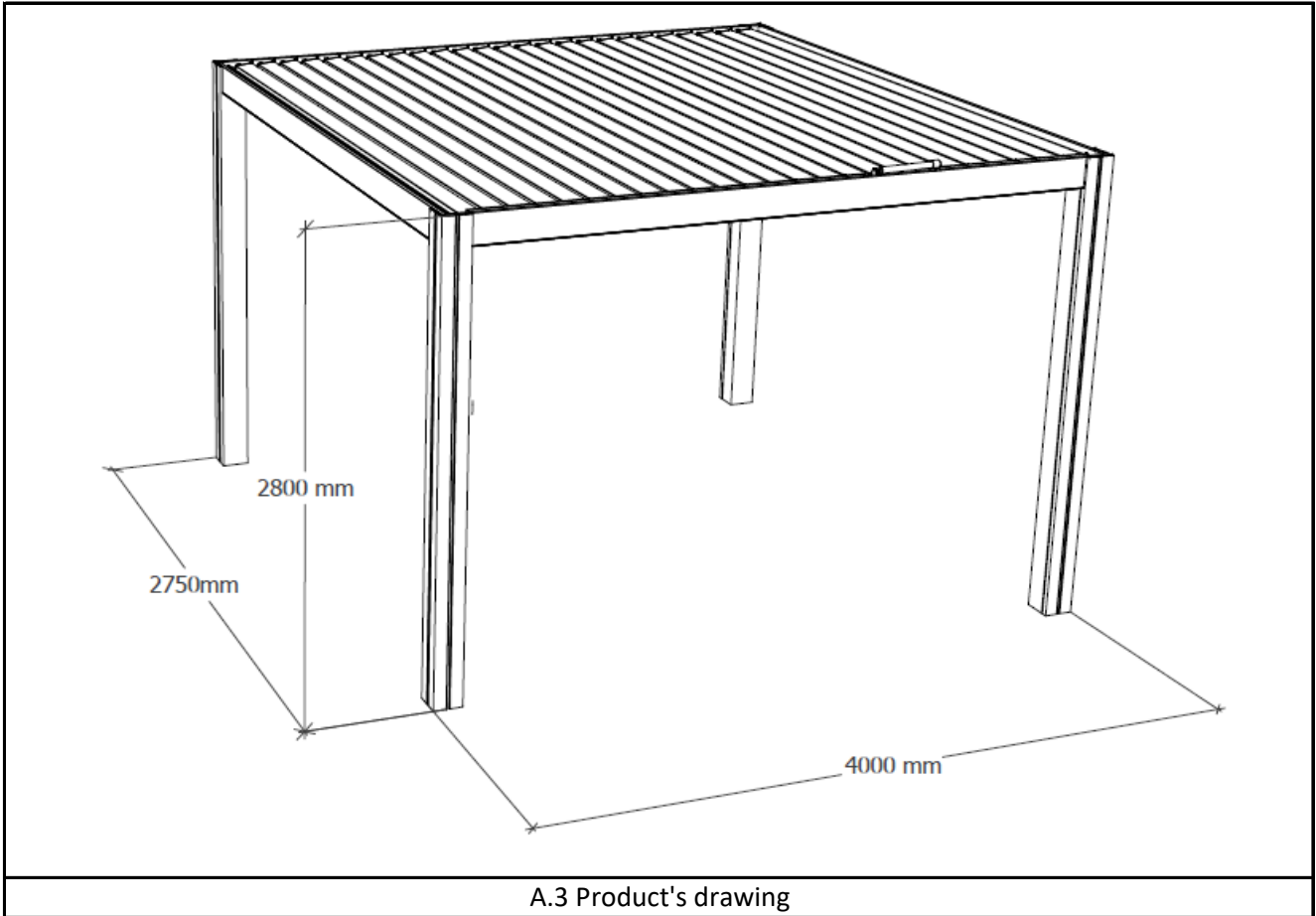


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Revision:

Revision No.	Date	REVISION	Reviser	Reviewer
R0	11/17/2025	Original Report Issue	Jinhui Zheng	Jeff Deng

*****End of Report*****