

Hanstar Hardware International Ltd

3F, North Wing, Building 14, JUDA Innovation Industry Park ,
644 Shibei Industrial Road, Panyu, Guangzhou,China.

The following sample(s) was/were submitted and identified on behalf of HANSTAR as:

Sample Description : Φ35 One-Way Clip-On Soft-Close Hinge W/Plate

Customer No.: /

Item No.: 01370101

Test Performing Date: 2025/11/23 - 2025/11/28

Test Result Summary

NO.	Test(s) Requested	Result(s)	Comments
1	Clause 17.6 of ANSI/BIFMA X5.5-2021	Pass	/
2	ASTM B 117-19:standard Practice for Operating Salt Spray (Fog) Apparatus	Pass	/
For further details, please refer to the following page(s)			

Signed for and on behalf of

HANSTAR

Bruce Xian

Jack Huang

Quality Manager

Test Conducted: as below I and II

General Test Condition:

Hinge durability test with reference to clause 16.6 of ANSI/BIFMA X5.5-2014

The following test program was conducted in a laboratory environment maintained at 15℃ to 25℃ and 50%±5RH.

The sample was individually tested after conditioning in the test environment for at least 24 hours prior to conducting the test.

I. Clause 17.6 of ANSI/BIFMA X5.5-2021

No. of Sample:

2 pieces. For more sample information and pictures, please refer to the following page.

Clause	Test Methods& Requirements	Test Results
17.6	Wear and Fatigue Test for Hinged, Horizontally Sliding, and Tambour Doors. Cycle the testing door for a total of 30,000 cycles as specified. The cyclic rate shall be 12±4 cycles per minute unless the rate is controlled by the door operating mechanisms. After test, there shall be no loss of serviceability to the hinges.	PASS

Remark:

1. Testing door size: 500mm W x 600mm H x 18mm T;
2. Weight of testing door: 3.5 kg;
3. The cyclic number of 30,000 cycles is specified by applicant.

II. Test Conducted: ASTM B 117-19-Standard Practice for Operating Neutral Salt Spray (fog) Apparatus (Mod.)

General Test Condition:

- Test Method: Neutral Salt Spray
- Concentration of NaCl Solution: 5 Parts by mass of Sodium Chloride Dissolve in 95 parts of Water
- pH of Salt Solution: 6.5~7.2
- Measure of the salt fog fall: 1.5 ± 0.5 (ml/80cm²/h)
- Test Duration: 24 hours
- Test Temperature: 35 ± 2 °C

Test Information:


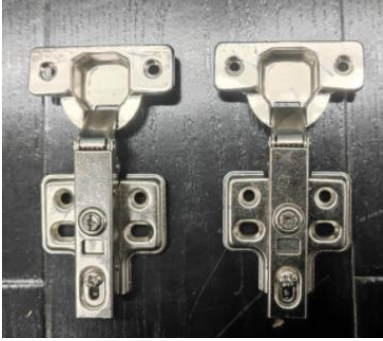
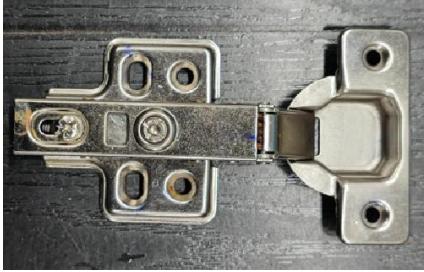
Observation Rating (Evaluating based on ASTM D 610-08 (R2019))Test conditions:

1. The observation rating is based on ASTM D 610-08 (R2019) which is just method standard. Pass and Fail criteria will depend on buyer's acceptable specifications. 2. The observation rating is based on the 11-step scale of 0 to 10, where 0 is bad and 10 is good.	Rating	Surface Corrosion Percentage of Tested Sample	
	Grade 10	A≤0.01%	
	Grade 9	0.01<A≤0.03%	
	Grade 8	0.03<A≤0.1%	
	Grade 7	0.1<A≤0.3%	
	Grade 6	0.3<A≤1.0%	
	Grade 5	1.0<A≤3.0%	
	Grade 4	3.0<A≤10.0%	
	Grade 3	10.0<A≤16.0%	
	Grade 2	16.0<A≤33.0%	
	Grade 1	33.0<A≤50.0%	
	Grade 0	A>50%	
Test Results			
Specimen No.	Observation Rating	Requirement	Result(s)
#1	Grade 7	Grade 7 or above	Pass

Remark:

For the sample information and pictures, please refer to the following page.

Photo Appendix:

		
Before testing	After testing	Neutral Salt Spray test

*** End of Report ***