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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 : Φ 35 two-way slide-on hinge

Customer No.: 140, 158
Item No.: 01119
Test Performing Date: 2021/5/10

Test Result Summary

NO.	Test(s)Requested	Result(s)	Comments	
1	Clause 17.6 of ANSI/BIFMA X5.5-2014	Pass	/	
2	ASTM B 117 standard Practice for Operating Neutral Salt Spray (Fog) Apparatus	Grade9	/	
For further details, please refer to the following page(s)				

Signed for and on behalf of
HANSTAR

Jeffrey Yao
Quality Manager

Hanstar Hardware International Ltd

3F North Wing, Building 14, JUDA Industry Park 644 Shibei Industrial Road, Panyu, Guangzhou, China T(+86-20) 31037908 F(+86-20) 31037979

PC: 511430 www.hanstar.com

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Test Conducted: as below I and II

General Test Condition:

The following test program was conducted in a laboratory environment maintained at 15 $^{\circ}$ C to 25 $^{\circ}$ C and 50%±5RH.

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

The results obtained for each of the applicable tests are presented in their respective section describing the procedures below.

The tests were carried out in the following order on the same sample.

I. Clause 17.6 of ANSI/BIFMA X5.5-2014

Clause	Test Methods & Requirements	Test Results	
	Wear and Fatigue Test for Hinged, Horizontally Sliding, and Tambour Doors.		
47.C -f ANICI/DIENAA	Cycle the testing door for a total of 50,000 cycles as specified. The cyclic rate		
17.6 of ANSI/BIFMA	shall be 12±4 cycles per minute unless the rate is controlled by the door	PASS	
X5.5-2014	operating mechanisms.		
	After test, there shall be no loss of serviceability to the hinges.		

Remark:

1: When testing, the hinge was mounted onto a testing door, the weight of which is 3.5 kg and the size of door is 750 mm in height and 368 mm in width;

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

Test Information:

Number of test sample: 1 PCS

Test method item: Neutral salt spray

Test conditions:

Concentration of sodium chloride (collected solution) : 5%

Chamber temperature : $(35\pm2)C^{\circ}$

Average collection rate for a horizontal collecting area of 80cm^2 : $1.5 \pm 0.5 \text{ml/h}$

PH of collected solution at 25° C±2° C : 6.5-7.2

Exposure period : : 24h

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Photo Appendix (I Fatigue test)



Sample as received



Sample after test

Test result(s):

Sample #1 Area of defects, A(%) $0.01 < A \le 0.03\%$

Appearance rating 9

Photo Appendix (II Neutral Salt Spray test)



Sample as received



Sample after test

*** End of Report ***

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