



## Test Report

No.: SHHG1310039930FT

Date: NOV.20,2013

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HAWORTH FURNITURE (SHANGHAI) CO., LTD.

360 XI YA ROAD, WAI GAO QIAO FREE TRADE ZONE, SHANGHAI 200131 CHINA

The following sample(s) was/were submitted and identified by the client as:

Sample Description : AUDIENCE EXECUTIVE DESK 2400\*2230 1PC  
Sample Receiving Date : OCT.24,2013  
Testing Period : OCT.24,2013 TO NOV.20,2013  
Test Performed : SELECTED TEST(S) AS REQUESTED BY APPLICANT  
Test Requested : ANSI/BIFMA X5.5-2008:DESK/TABLE PRODUCTS-  
TESTS – AMERICAN NATIONAL STANDARD FOR  
OFFICE FURNITURE (CLAUSE 4.3, 5.2, 5.3, 5.4, 5.5, 6, 7,  
8, 10.2, 11, 12, 14.2, 14.3, 14.4, 17.2, 17.3, 17.6, 17.12)  
Test Result(s) : FOR FURTHER DETAILS, PLEASE REFER TO THE  
FOLLOWING PAGE(S)  
Conclusion : THE SUBMITTED SAMPLE MET THE TEST  
REQUIREMENT.

\*\*\*\*\*

Signed for and on behalf of  
SGS-CSTC Ltd.

Oliva Kou  
Operation Manager

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## Test Conducted:

ANSI/BIFMA X5.5-2008: Desk/Table Products-Tests– American National Standard For Office Furniture

Testing Condition : All the physical test is carry out in indoor ambient.

Nos. of Specimen : 1 pc.

Categories of the Specimen : Categories I

Test Result : Pass.

Tests Item	Test method and Requirements	Results-Remark	Rating
<b>4 Stability Test</b>			
4.3 Stability Under Vertical Load Test	Place a 305mm (12in.) diameter disk so that its center is 178mm (7in.) from the edge of the top at the least stable location. If the center of the disk is greater than 305mm (12in.) from a corner of the top, move the disk such that its center is 305mm (12in.) from the corner keeping the edges of the disk equidistant from both sides of the top. If, at the least stable position, the top has a depth less than 356mm (14in.), center the loading disk across the depth at that position Then place a 57kg (125lb.) static load on the disk, the unit shall not tip over.	Keep stable	Pass
<b>5 Unit Strength Test</b>			
5.2 Concentrated Functional Load Test	Apply the specified concentrated load to the primary surface per Table 1 through a 305mm (12in.) diameter disk so that its center is 178mm (7in.) from the unit's edge at its apparent weakest point. For units with lengths greater than 1829 mm (72 in.), two concentrated loads are required Loads shall be allowed to remain for 60 minutes and then remove the concentrated loads. There shall be no loss of serviceability. Upon completion of the test, the force to pull the extendible member shall not exceed 50 N (11.2 lbf.).	Primary surface 1: Length: 2400mm Two loads of 91kg  Primary surface 2: Length: 1120mm 91kg load	Pass

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<p>5.3 Distributed Functional Load Test</p>	<p>Apply the specified distributed loads per Table 1. All extendible elements shall be loaded per Table 1 and fully opened for the duration of the test. Loads shall be allowed to remain for 60minutes and then remove. There shall be no loss of serviceability. Upon completion of the test, the force to pull the extendible member shall not exceed 50 N (11.2 lbf.).</p>	<p>Primary surface 1: Perimeter:7000mm Load: 189kg  Primary surface 2: Perimeter:3140mm Load: 85kg</p>	<p>Pass</p>
<p>5.4 Concentrated Proof Load Test</p>	<p>The setup shall be performed per Section 5.2.1 with the appropriate concentrated proof load per Table 1, except for the extendible elements, which shall remain loaded and fully extended with the functional loads. Loads shall be allowed to remain for 15 minutes and then removed. There shall be no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.</p>	<p>Primary surface 1: Length: 2400mm Two loads of 136kg  Primary surface 2: Length: 1120mm 136kg load</p>	<p>Pass</p>
<p>5.5 Distributed Proof Load Test</p>	<p>Using the appropriate distributed proof loads per Table 1, except for the extendible elements, which shall remain loaded and fully extended with the functional loads. Loads shall be allowed to remain for 15 minutes and then removed. There shall be no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.</p>	<p>Primary surface 1: Perimeter:7000mm Load: 287kg  Primary surface 2: Perimeter:3140mm Load: 129kg</p>	<p>Pass</p>

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<p>6 Top Load Ease Cycle Test</p>	<p>This test applies to units with tops less than or equal to 965 mm (38 in.) in height or height adjustable units that cannot be adjusted to 965mm (38in.)          All elements shall remain loaded with the functional load per Table 1 and then closed for the duration of the test.          A 91 kg weight applied by means of a 406 mm diameter bag shall be positioned on the unit top with the edge of the bag within 25 mm (1 in.) from the edge of the surface at the apparent weakest point.          The bag shall be raised until the entire weight is off the unit top and then eased (without impact) onto the surface so that it takes the entire weight without any support from the cycling device, for 10000 cycles, at rate of <math>14 \pm 6</math> cycles per minute. There shall be no loss of serviceability. Upon completion of the test, the force to pull the extendible member shall not exceed 50 N (11.2 lbf.).</p>	<p>Test frequency: 17cpm</p>	<p>Pass</p>
<p>7 Desk/ Table Unit Drop Test</p>	<p>This test does not apply to desk/table units with casters.          Determined the weight of the unloaded desk/table units to be test. Raise one end of the long axis of the unloaded units so that the bottom of the base is above the test platform at the height given in Table 3 or at the balance point, whichever is lower. The end of the unit being tested shall be released and allowed a free fall to the test platform. Repeat for the other end of the desk/table unit.          There shall be no loss of serviceability. Upon completion of the test, the force to pull the extendible member shall not exceed 50 N (11.2 lbf.).</p>	<p>Drop height: 120mm</p>	<p>Pass</p>

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<p>8 Leg Strength Test</p>	<p><b>Function Test</b> Attach a loading device to the support member to be loaded. Individually and separately apply the functional horizontal forces ("A" and "B") on 25mm (1in.) of the end of the support member/ glide assembly that makes contact with the floor. Repeat above step for each unique type supporting member on the desk/table product. There shall be no loss of serviceability. Upon completion of the test, the force to pull the extendible member shall not exceed 50 N (11.2 lbf.).</p> <p><b>Proof Test</b> Attach a loading device to the support member to be loaded. Individually and separately apply the functional horizontal forces ("A" and "B") on 25mm (1in.) of the end of the support member/ glide assembly that makes contact with the floor. Repeat above step for each unique type supporting member on the desk/table product. There shall be no sudden and major change in the structural integrity of the product. Loss of serviceability is acceptable.</p>	<p>Function Load: A: 445N B: 222.5N</p> <p>Proof Load: A: 668N B: 334N</p>	<p>Pass</p>
<p>10.2 Cycle Test for Extendible Elements Deeper than Wide</p>	<p>Extendible elements shall be uniformly loaded with the functional load per Table 1. The largest extendible element of each construction/mounting type shall be subjected to 50,000 cycles. There shall be no loss of serviceability. Before and after the cycle test, the extendible element(s) shall meet the pull force requirements of Section 19. After the cycle test, the extendible elements, if applicable shall meet the interlock test requirements of Section 13.</p>	<p>Test load: 9kg</p> <p>Test frequency: 14cpm</p> <p>Left side: 25000cycles</p> <p>Right side: 25000cycles</p>	<p>Pass</p>
<p>11 Extendible Element Retention Impact and Durability Test</p>	<p>No loss of serviceability after: 1. Hold the extendible element 38mm from closed position and release. Restrain the weight after the extendible element open 80% of its total extension. Impact the out stop for 5 times. 2. Move the extendible element 51mm toward the closed position and release. Impact the out stop for 15,000 cycles.</p>	<p>Test load: 4.3kg</p> <p>Test frequency: 16cpm</p>	<p>Pass</p>

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12 Rebound Test	Open the extendible member against the force gauge until the specified force is reached; release the extendible member allowing the force exerted by the force gauge to close the extendible member. Repeat the test for five times. The rebound position of the extendible member shall not exceed 38 mm (1.5 in.) from its closed position after each of the five closings.	Test load: 9kg	Pass
<b>14 Lock Tests</b>			
14.2 Force Test for Extendible Element Locks	Close and lock all loaded extendible elements. A horizontal outward force of 222 N (50 lbf.) and an outward and upward force (30° from horizontal) of 222 N (50 lbf.) shall be applied once at each of the applicable locations. The extendible elements shall remain in the normal locked position during application of the forces. There shall be no loss of serviceability of the locking mechanism.	/	Pass
14.3 Force Test for Door Locks	Close and lock all doors. Apply a force of 222 N (50 lbf) in the direction of initial door travel. After the test, the doors shall remain in the normal locked position during application of the forces, and there shall be no loss of serviceability of the locking mechanism.	/	Pass
14.4 Locking Mechanism Cycle Test	There shall be no loss of serviceability of the locking mechanism after cycling it through its full range of motion for 5000 cycles. Each cycle shall consist of a complete locking and unlocking of the mechanism.	Test frequency: 18cpm	Pass
<b>17 Door Tests</b>			
17.2 Strength Test for Vertically Hinged, Bi-Fold Doors and Vertically Receding Doors	Attach the specified load per the Table 8. Cycle the door 10 times from a position 45 degrees from fully closed to a position 10 degrees from fully open (but not more than 135 degrees) and return. After the test, there shall be no loss of serviceability.	Door height: 41cm Test load: 10kg	Pass
17.3 Hinge Override Test for Vertically Hinged Doors	No loss of serviceability to the storage unit or its components when apply an 60 N horizontal force perpendicular to the plane of the door on its horizontal centerline 100 mm from the edge farthest from the hinge.	/	Pass
17.6 Wear and Fatigue Test for Hinged Doors and Horizontally Sliding Doors	Cycle the door from a position 10 degrees from fully closed to a position 10 degrees from fully open and return, not to exceed a maximum swing angle of 90 degrees. There shall be no loss of serviceability after cycling the door for a total of 20000 cycles.	Test frequency: 13cpm	Pass

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17.12 Slam Test for Doors which Free Fall Open or Closed	Allow the door to fall open/close freely. Repeat for a total of 50 cycles in each direction (if applicable). There shall be no loss of serviceability to the storage unit or its components.	Isn't slide door or roll door	Not applicable
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### Sample Photo:

Received sample



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

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