

WENCHEN FURNITURE LIMITED  
5,GEGAO GONGYELU, LONGJIANG, SHUNDE, FOSHAN, CHINA

Sample Description : MESH CHAIR  
Item No. : M3142  
Manufacturer : WENCHEN FURNITURE LIMITED  
Country of Origin : CHINA

As above test item and its relevant information regarding to the submission are provided and confirmed by the applicant. SGS is not liable to either the test item or its relevant information, in terms of the accuracy, suitability, reliability or/and integrity accordingly.

\*\*\*\*\*

Sample Receiving Date : May 13, 2021  
Test Performing Date : May 15, 2021 to Jun 15, 2021  
Test Performed : Selected test(s) as requested by applicant

**Test Result Summary**

No.	Test(s) Requested	Result(s)	Comments
1	AS/NZS 4438:1997 R2016, Section 4 & 5. Level 5.	PASS	Excluding Section 5.4
For further details, please refer to the following page(s)			

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch



Bill Wang  
Authorized Signatory

scan to see the report



SDHL2105008053FT



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.  
Shunde Branch Harbin

1/F, 1<sup>st</sup> Building, European Industrial Park, No.1 Shunhe South Road, Wusha Section, Daliang Town, Shunde, Foshan, Guangdong, China 528333 t (86-757)22805888 f (86-757)22805858 www.sgs.com.cn  
中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号楼首层 邮编: 528333 t (86-757)22805888 f (86-757)22805858 e sgs.china@sgs.com

TESTS AND RESULTS

**Test Conducted:**

AS/NZS 4438:1997 R2016 – Height Adjustable Swivel Chair – Section 4 & 5.

**General Test Condition:**

The following test program was conducted in a laboratory environment maintained at 15°C to 25°C and 50%±5 RH. The sample was individually tested after conditioning in the test environment for at least 24 hours prior to conducting the test.

The complete detailed procedures may be found in the referenced specification and are only summarized herein. Unless otherwise specified, the tests are carried out in the following order on the same sample.

**No. of Sample:**

1 piece (Sample #1). For more sample information and pictures, please refer to the following page.

**Type of Chair:** Type 4. For the functional classification, please refer to Annex A in this report.

**Test Severity:** Level 5. For the application of service durability levels, please refer to Annex B in this report.

**Section 4: Strength and Durability Requirements**

Test	Test Description and Requirements	Test Results
4.3.1	<b>Seat Static Load Test</b> Apply the downward force of 2000 N at the seat loading position for a total 10 times. Then move to a position 100mm back from the front edge of the seat and apply the same force 10 times. The chair seat shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.	PASS
4.3.2	<b>Back Static Load Test With Flexibility Assessment</b> Load the seat with 2000 N on the seat loading position. Apply the back force of 760 N perpendicular to the back and carry out 10 cycles. The chair back shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.	PASS Flexibility quotient: 238 mm
4.3.3	<b>Arm Sideways Static Load Test</b> Simultaneously apply the outward force of 500 N to the point along each arm most likely to cause failure. Repeat above operation for 10 times. The arm of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.	PASS
4.3.4	<b>Arm Downwards Static Load Test</b> Apply the vertical force of 1000 N to the point along one arm most likely to cause failure for 10 times. If the chair overbalances, apply a load on the side of the seat opposite to the arm tested to prevent the chair from overbalancing. The arms of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.	PASS



Test	Test Description and Requirements	Test Results
4.3.5	<p><b>Seat and Back Fatigue Test</b> Apply the downward force of 950 N at the seat loading position. With the downward force maintained, apply the back force of 330 N at back loading position. Remove the back load and then the seat load. Repeat above operation for 200000 cycles. The chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.</p>	PASS
4.3.6	<p><b>Seat Impact Test</b> Set the chair height to the maximum. Allow the seat impactor to fall freely from the height of 300 mm onto the seat loading position for 5 times and then using the same drop height, allow the impactor to fall onto a point as near the front edge of the seat as possible for a further 5 times.. Set the chair height to the minimum and repeat above procedure for both impact points. The seat of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.</p>	PASS
4.3.7	<p><b>Back Impact Test</b> Using stops, restrain the front feet of the chair from moving forward. Allow the impact hammer to fall through the vertical height of 620 mm or angle of 68° and strike the top of the outer chair back in the center 10 times with the pendulum arm vertical. The seat of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.</p>	PASS
4.3.8	<p><b>Arm Impact Test</b> Place stops against the feet of the chair on the opposite side of the chair to the arm being tested. Using the impact hammer swung through the vertical height of 620 mm or angle of 68° and strike the outside face of the arm in an inward direction with the pendulum arm vertical at the position most likely to cause failure for a total of 10 times. The arms of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.</p>	PASS
4.3.9	<p><b>Drop Test</b> Support the chair so that the base plane is at 10 degree to the horizontal. Lift the chair to a height of 450 mm. Drop the chair onto the floor 10 times on the selected leg. The seat of the chair shall remain intact and the chair shall be free of defects that will cause either injury to the user or loss of serviceability of the chair.</p>	PASS
4.3.10	<p><b>Swiveling Test</b> Using the small loading pad, apply the vertical downward force of 950 N on the seat loading position. Rotate the seat of the chair through an angle of 45 degree relative to the base for the number of 100000 cycles. The swiveling mechanism shall remain in working order.</p>	PASS



Section 5: Stability Requirements

Test	Test Description and Requirements	Test Results
5.2.1	<p><b>Rearwards Overturning (All Chairs)</b> Set the chair to the maximum height position. Position the chair so that two feet are against the stops or for a circular based chair, so that its edge is against the stop in a position most likely to cause instability. Apply a vertical force of 600N to the seat at the SLP and apply the overturning force of horizontally to the back of the chair either at a height of 300mm above the unloaded seat or at the top edge of the backrest whichever is the lower. The chair shall not overturn.</p>	<p>PASS  Height: 478 mm Force: 149 N</p>
5.2.2	<p><b>Rearwards Overturning of Tilting or Reclining Chair</b> Set the chair to the maximum height position. Place the 11 discs on the chair seat firmly settled against the contours of the back of the chair. If the discs stacked on top of each other exceed the height of the chair back, use a light stick or other means of support, to stop the upper discs from sliding off. The chair shall not overturn.</p>	<p>PASS</p>
5.2.3	<p><b>Accidental Rearward Overturning</b> Set the chair to the maximum height position. Prevent rearwards movement of the chair then tilt the chair rearwards on its rear feet so that the front edge of the seat moves through a horizontal distance of 100mm. Allow the chair to fall freely. Check whether the chair overturns. The chair shall not overturn.</p>	<p>PASS</p>
5.4	<p><b>Rolling Stability Performance Requirement</b> Attach soft-tyred castors to the chair. Place an unloaded chair on the piece of flat steel. Attach a force measuring device at a height of up to 250mm above the test surface. Apply a force sufficient to allow the chair to move at 50 mm/s across the floor. Record the value of the force. The unloaded chair shall have a rolling resistance of a least 12N on a hard floor surface.</p>	<p>N/R</p>



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Shunde Branch Technical Services Co., Ltd. | 1/F, 1<sup>st</sup> Building, European Industrial Park, No.1 Shunhe South Road, Wusha Section, Daliang Town, Shunde, Foshan, Guangdong, China 528333 t (86-757)22805888 f (86-757)22805858 www.sgs.com.cn  
 中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号楼首层 邮编: 528333 t (86-757)22805888 f (86-757)22805858 e sgs.china@sgs.com

**Table 2.1: Functional Classification**

Classification	Functional category	Typical end use
Type 1	Both the lumbar support height and seat depth are adjustable	Dedicated keyboard operator chairs and multitask chairs
Type 2	Only the seat depth is adjustable, the lumbar support height is fixed	General purpose office chairs
Type 3	Neither the lumbar support height nor the seat depth are adjustable	Visitors' chairs
Type 4	Incorporates other design features and combinations of the above	Other chairs

**Table 2.2: Application of Service Durability Levels**

Durability level	Application
Levels 1 and 2	Not applicable to chairs covered by this Standard
Level 3	Chairs for domestic use
Level 4	Chairs for office, general keyboard and executive use
Level 5	Chairs for heavy duty office, industrial and similar applications
Level 6	Chairs for extremely severe conditions of use such as police stations, military installations, control rooms and heavy industrial

**Remark:**

1. N/A – Not applicable; N/R – Not requested; N/P – Not provided.
2. For the sample information and pictures, please refer to the following page.



**SAMPLE INFORMATION AND PICTURES**

**Weight:** 11.50 kg

**Overall Dimensions:** 690 mm L x 680 mm W x (940~1020) mm H

**Other Dimensions:** /

**Sample as Received**



View 1



View 2



View 3



View 4

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



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com